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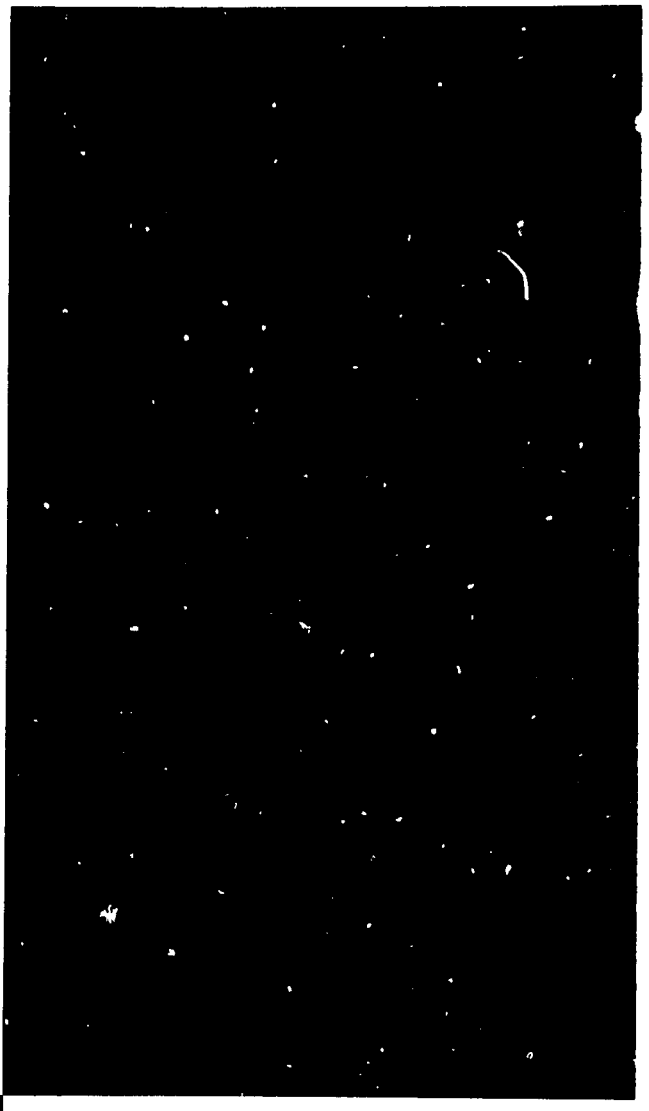

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Cooperation of nursery collaborators at the locations where the second High Protein-High Lysine Wheat Observation Nursery was grown is gratefully acknowledged. This cooperative nursery would not be possible without the information and data provided by these individuals. Their responsibility for nursery management, data recording, harvesting, and return of 10-gram wheat samples to Nebraska for quality analysis is an essential component of such a program.

The assistance of personnel in the Plant Production and Protection Division, Food and Agriculture Organization of the United Nations in making nursery seed shipments to some of the testing sites is acknowledged. We acknowledge also the continued assistance and cooperation of wheat personnel of the International Maize and Wheat Improvement Center, Mexico, D.F.

The efforts of Joyce Kovar and the personnel of the Wheat Quality Laboratory of the University of Nebraska is acknowledged. We also gratefully acknowledge the long hours of work by Regina Hogendorn in typing the data tables for this report.

LIST OF TABLES

SUMMARY

The second high protein-high lysine (HP-HL) observation nursery was divided into two sections based upon growth habit of the entries. The division was made so that cooperators could evaluate spring wheats and/or winter wheats in separate nurseries.

Spring Wheat

The spring wheat observation nursery consisted of 120 experimental lines along with three check varieties which were repeated several times giving a total of 130 entries. The nursery was distributed to 16 locations in 12 countries in the fall of 1975. Thirteen locations were in the Northern Hemisphere; three were in South America.

Data on grain protein, lysine (% of protein), and adjusted lysine (% of protein) from seven sites are reported. Agronomic data, when provided by cooperators, also are reported.

Averaged over five sites, protein values for the check varieties were 17.1, 14.7, and 14.4% for Nap Hal, INIA 66, and Era, respectively. Protein values, overall, ranged from 21.1 to 12.3%. The top five protein values were made by lines from the cross Nap Hal/Atlas 66. These lines, however, ranked very low in yield in a replicated nursery at Yuma, Arizona.

Eight of the 10 entries with the lowest protein values were lines of Nap Hal/CI 13449. These lines were relatively productive in the Arizona replicated experiment, and are generally characterized by a very high lysine (% of protein) content. Six of the nine entries that possess the best combinations of protein, lysine, and yield potential were lines of Nap Hal/CI 13449.

Yield values from the replicated nursery at Yuma, Arizona ranged from 60.6 q/ha to 27.0 q/ha. INIA 66 averaged 56.3 q/ha compared with 44.8 and 36.0 q/ha for Era and Nap Hal, respectively.

Overall, there was a highly significant negative correlation ($r = -.73^{**}$) between grain protein and lysine (% of protein).

Winter Wheat

The winter wheat observation nursery consisted of 382 experimental lines along with four check varieties which were repeated five times for a total of 402 entries. The nursery was distributed to 26 sites in 17 countries in the fall of 1975. Nineteen sites were in the Northern Hemisphere and 7 sites were in the Southern Hemisphere.

Data on grain protein, lysine (% of protein), and adjusted lysine (% of protein) from 17 sites are reported. Agronomic data, when available, also are reported.

Averaged over nine sites, protein values ranged from 18.1 to 11.9%. The grand mean was 14.9%. Lancota, Bezostaya 1, Centurk, and CI 13449 had average protein values of 14.4, 13.9, 13.1, and 12.4%, respectively.

The lysine (% of protein) ranged from 3.3 to 2.6% and averaged 2.9%. Lysine values for the four check varieties also averaged 2.9%. The mean adjusted lysine (% of protein) value was 3.0%.

Of the entries harvested at Yuma, Arizona, entry 14 (CI 13449/ Centurk) was the most productive. The yield of this line was 59.3 q/ha. The nursery mean was 41.3 q/ha. The yield mean of the four check varieties was 45.1 q/ha. Centurk was the highest yielding check variety.

Among the entries in the winter wheat observation nursery, the pedigrees (Favorit/5/Cirpiz/4/Jang Kwang//Atl 66/Cmn/3/Velvet), (Jang Kwang//Atl 66/Cmn), (Jinkwang//Atl 66/Cmn), and (Sava// Purdue 4930/NB 69655) were shown to possess good combinations of protein, lysine, and yield potential.

Results of the Second High Protein–High Lysine Wheat Observation Nursery Grown in 1976

S. L. Kuhr, K. D. Wilhelmi, V. A. Johnson and P. J. Mattern[1]

This is the second report of results from a high protein-high lysine (HP-HL) observation nursery organized in 1974 by the Nebraska Agricultural Experiment Station and the Science and Education Administration, U. S. Department of Agriculture, under a contract with the Agency for International Development, U. S. Department of State. Primary objectives of this nursery are to:

1. Systematically provide breeders and cooperators with superior genetic germplasm for elevated levels of protein and/or lysine.
2. Test the degree of expression of the high protein and high lysine traits in a diverse array of environments.

Funding from USAID has permitted the Nebraska wheat program to establish breeding nurseries at Lincoln, Nebraska, for evaluation of winter genotypes and at Yuma, Arizona, for both spring and winter wheats. Advanced experimental lines distributed to breeders and cooperators in the 2nd HP-HL nursery were selected from numerous hybrid combinations of both spring and winter types. All exhibited elevated protein and/or elevated lysine in nursery trials at Nebraska and Arizona. The lines were screened for growth habit at Nebraska, and were assigned to the designated spring or winter sections of the 2nd HP-HL nursery.

PROCEDURES

Nursery seed for planting was provided to each cooperator in 10-gram amounts of each entry. Since the seed of the entries in the nursery was either from the Yuma, Arizona, or Lincoln, Nebraska, breeding nurseries, which were harvested during May-July, 1975, distribution of the nurseries was delayed until September. Each

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Cooperative investigations of the Nebraska Agricultural Experiment Station and Science and Education Administration, U. S. Department of Agriculture, Lincoln, Nebraska, under Contract No. AID/ta-C-1093 with the Agency for International Development, U. S. Department of State.

cooperator was encouraged to manage the nursery in a manner consistent with local variety testing procedures.

A list of pedigrees describing the entries was distributed to each cooperator along with the seed for planting. Field books were not provided since cooperators were not required to collect field data. However, field data reported by cooperators have been included in this report. Cooperators were requested to return to the University of Nebraska a 10-gram seed sample from each harvested plot. Protein and lysine analyses were completed at the University of Nebraska Wheat Quality Laboratory.

The HP-HL nursery was grown in a diverse array of environments and climatic conditions. It was anticipated that not all entries would perform well at all locations. Each cooperator was encouraged to identify and harvest seed from the agronomically best lines at his location and to utilize these lines in crosses and for further local evaluation.

Experimental Lines

The experimental lines comprising the second HP-HL observation nursery resulted from hybrid combinations involving relatively diverse germplasm. Since genes for high protein and/or lysine in wheat are present both in spring and winter growth-habit types, numerous spring × winter crosses were made to accumulate these genes in lines of each growth habit type. All lines were classified for growth habit at Lincoln, Nebraska, and were assigned either to the spring wheat or winter wheat section of the nursery. Experimental lines selected for inclusion in this nursery possess elevated levels of grain protein, lysine/protein, or combinations of both traits based on preliminary laboratory evaluation at Lincoln, Nebraska. Some selection pressure was applied as well for yield potential, short straw, and improved head type.

The spring wheat section consisted of 120 experimental lines, identified in Table 1. Three check varieties were used in the nursery. Nap Hal was included as a high protein and high lysine check. INIA 66 served as a high yielding check, and Era served as a late maturing, average-protein check. There were a total of 130 entries in the spring wheat section. Entries 111-129 are high protein selections from spring wheats derived from the CIMMYT-Mexico program.

The winter wheat section of the HP-HL nursery consisted of 382 experimental lines. In addition, four check varieties were replicated five times, giving a total of 402 entries. These entries are listed along with their respective pedigrees in Table 2. Centurk was chosen as a check variety because it is winterhardy and has high yield potential. Lancota was included because of its elevated grain protein. CI 13449 produces an elevated level of lysine in its grain. Bezostaya 1 has excellent yield potential and broad adaptation.

Table 1. Pedigrees of entries tested in the second high protein-high lysine spring wheat observation nursery in 1976.

Entry	Variety or Pedigree	Entry	Variety or Pedigree
1	INIA 66	48	"
2	Era	49	"
3	Nap Hal	50	"
4	Nap Hal/CI13449	51	INIA 66
5	"	52	Era
6	"	53	Nap Hal
7	"	54	Nap Hal/CI13449
8	"	55	"
9	"	56	"
10	"	57	"
11	"	58	"
12	"	59	Nap Hal/CR8156
13	"	60	"
14	"	61	"
15	"	62	"
16	"	63	"
17	"	64	"
18	"	65	"
19	"	66	"
20	"	67	"
21	"	68	"
22	"	69	"
23	"	70	"
24	"	71	"
25	"	72	"
26	Nap Hal/Atlas 66	73	"
27	"	74	"
28	"	75	"
29	"	76	"
30	"	77	"
31	"	78	"
32	"	79	"
33	"	80	"
34	"	81	"
35	"	82	"
36	"	83	"
37	"	84	"
38	Nap Hal/CI13449	85	"
39	"	86	"
40	"	87	Nap Hal/CB113
41	"	88	"
42	"	89	Nap Hal/Pitic 62
43	"	90	"
44	"	91	"
45	"	92	"
46	Nap Hal/CI13449	93	"
47	"	94	"

Table 1. Pedigrees of entries tested in the second high protein-high lysine spring wheat observation nursery in 1976. Concluded.

Entry	Variety or Pedigree
95	Nap Hal/Pitic 62
96	"
97	"
98	"
99	"
100	"
101	INIA 66
102	Era
103	Nap Hal
104	Nap Hal/CB113
105	"
106	Nap Hal/Pitic 62
107	"
108	"
109	"
110	"
111	CNO-7 CERROS/No. 66-Tiba
112	Tob-CNO "s"/Tob-8156Bb (18m) CM5403-8py-2pb
113	(Cal/ce-8156/CNO"s")Cal-Sar CM-5756-7py-1pb
114	" "
115	" "
116	" "
117	Tob-Turpin/No 66 CM5214-A-1py-1pb
118	" "
119	" "
120	Bb-Cno//Cno/LR64^{2}-SR64)RN-CM5437-19py-8pb
121	CNO-Chris/CNO//HD832/3/NO. 66 Bb-CM5530-3py-12pb
122	Cal/CC-8156/CNO"s"//Bb-Nor 67//Cm5535-H-1py-7pb
123	(Cal/CC-8156 x Cno"s")CNO"S"-8156 CM5534-3py-1pb
124	(Cal/CC-8156 x Cho"S")CNO"S"-8156 CM5534-3py-9pb
125	" "
126	CC-Inia/CNO-7 Cerros
127	Meng//Cno"s"-No 66
128	Toropi/CNO-INIA"s"//CNO-Inia "s"^{2}CM5920-10-6-18KB
129	CNO-7Cerros/CNO-Pj62//Tob - Cfn-Bb
130	INIA 66

Table 2. Pedigrees of entries tested in the second high protein-high lysine winter wheat observation nursery in 1976.

Entry	Variety or Pedigree
1	Centurk
2	Lancota
3	CI13449
4	Bezostaya 1
5	CI13449//At66/Cmn
6	CI13449/3/At66/Cmn/2/Wrr
7	NB69633/4/At66/Cmn/2/Wrr/3/NB69655
8	Ctk/3/Aiv/CI1385/2/CI13447
9	NB69633/4/Suwon 85/3/At66/Cmn/2/Hume
10	" "
11	Jang Kwang//At66/Cmn (NB66569)
12	Jang Kwang//At66/Cmn (NB66574)
13	" "
14	CI13449/Centurk
15	"
16	"
17	CI13447/3/At66/Cmn/2/Hume
18	"
19	CI13447/3/Lcr/2/At66/Cmn
20	"
21	"
22	CI13447/3/At66/Cmn/2/Wrr
23	CI13447//At66/Cmn
24	At66/Cmn//NB69690
25	At66/Cmn//NB69655
26	At66/Cmn/Centurk
27	At66/Cmn//CI13449
28	NB69566/CI13449
29	NB69566//Fert. F_3 3367 (3547)/CI13857
30	Nap Hal/CI13449
31	"
32	"
33	"
34	"
35	Timwin/NB68646
36	Tx1682/3/Sel. 14-53/2/At66/Cmn
37	" "
38	" "
39	Tx1682/NB Rest. 3547
40	Ctk/3/Aiv/CI1385/2/Sel. 14-53
41	" "
42	" "
43	NB68709/3/Cmn/Ot/2/At66/Cmn
44	" "
45	NB68713/3/Cmn/Ot/2/At66/Cmn
46	" "
47	NB68437/3/At66/Cmn/2/NB69689
48	" "
49	" "
50	NB69581/3/At66/Cmn/2/Sel. 14-5003
51	" "
52	Lcr//At66/Cmn
53	"
54	Bez. 4//Purd. 4930 A6-28-2-1/NB69655
55	

Table 2. Pedigrees of entries tested in the second high protein-high lysine winter wheat observation nursery in 1976. Continued.

Entry	Variety or Pedigree
56	Bez. 4//Purd. 4930 A6-28-2-1/NB69655
57	" "
58	Bez. 4'3/At66/Cmn/2/Wrr
59	At66/Cmn//Neb. Rest. 3547
60	Sel. 14-53/3/Cmn/Ot/2/At66/Cmn
61	Manella/3/At66/Cmn/2/Wrr
62	At66/Cmn//?
63	"
64	"
65	Bez. 1/Argelato F_3//NB69655
66	NB69566/4/Suwon 85/3/At66/Cmn/2/Hume
67	" "
68	" "
69	" "
70	" "
71	NB69633/4/Suwon 85/3/At66/Cmn/2/Hume
72	NB69633/4/At66/Cmn/2/Wrr/3/NB69655
73	" "
74	" "
75	" "
76	Nrn 16/CI12500//Ban/3/NB66547
77	Jinkwang//At66/Cmn (NB66569)
78	Jang Kwang//At66/Cmn (NB66569)
79	" "
80	Jang Kwang//At66/Cmn (NB66574)
81	" "
82	" "
83	" "
84	" "
85	Sel. 14-50-3/NB66403
86	CI13447//At66/Cmn
87	"
88	Suwon 85//At66/Wi
89	"
90	"
91	"
92	Ctk/3/Fart. F_3 3240 (3524)/2/Tmp/CI12406
93	" "
94	Wrr/2/At66/Cmn/3/Lcr/4/NB69652
95	" "
96	" "
97	At66/Cmn//NB69655
98	"
99	"
100	"
101	Centurk
102	Lancota
103	CI13449
104	Bezostaya 1
105	At66/Cmn//NB69655
106	At66/Wi//NB69689
107	"
108	"
109	"
110	"

Table 2. Pedigrees of entries tested in the second high protein-high lysine winter wheat observation nursery in 1976. Continued.

Entry	Variety or Pedigree
111	At66/W17/NB69689
112	Fert. F_3 3367 (3547)/2/CI13857/At66/Cmn
113	NB69565/NB69555
114	NB69566/CI13449
115	At66/Cmn//Centurk
116	"
117	Lancota/K-43920-Mironovskaya 808-Akrian
118	" "
119	"
120	"
121	NE701134/Aurora
122	NE701136/Bb
123	"
124	"
125	"
126	NE701139/Dacia
127	NE70654/3/Manella/2/At66/Cmn
128	" "
129	NB68513/NS974
130	"
131	Morin 16/3/CI12500/4/Ban/6/NB68437/5/At66/Cmn/2/NB61982
132	" " "
133	Sava/2/Purd. 4930 Ab-28-2-1/Fert. F_3 3547-CI13857/3/ID0032
134	" " "
135	NB69559/5/At66/4/Wrr/2/(Ky58-Nth)/(C-T-M-H)^2/3/Pkr
136	At66/Cmn/2/Nebr. Rest. 3547/3/Aurora
137	NE701136/Centurk
138	"
139	"
140	"
141	MV69-05/5/Cmn/Ot/3/At66/2/Cmn/4/NB68437
142	" "
143	" "
144	" "
145	" "
146	" "
147	" "
148	" "
149	" "
150	NE701152/Sort 315-16
151	"
152	Lancota
153	NE701152/Sort 315-16
154	"
155	NE68713/3/At66/Cmn/2/CI13447/4/Stepnaia
156	NE701154/Skorospelka
157	"
158	"
159	"
160	NE701154/Jubileinaia
161	"
162	NB69559/Dacia
163	"
164	NB68437/Nebr. Rest. 3584/2/Ban. 1
165	" "

Table 2. Pedigrees of entries tested in the second high protein-high lysine winter wheat observation nursery in 1976. Continued.

Entry	Variety or Pedigree
166	NB68437/Nebr. Rest. 3584/2/Bez. 1
167	" "
168	NB69559/NE701134
169	"
170	NB68513/Zg. 1501-69
171	Excelsior/3/At66/Cmn/2/Tx2607-6
172	" "
173	" "
174	" "
175	Ctk/3/At66/Cmn/2/Tx2607-6
176	"
177	NB69559/Ctk
178	Moldova/7/At66/Cmn/5/Fert. F_3 3547/3/CI13857/9/Zg. 5994-66/8/Aiv/2/CI13857/6/Fert. F_3 3547/4/CI13857
179	Rousalka/NE701154
180	"
181	At66/NB69457//Bezostaya 1
182	Bezostaya 1/Hyslop
183	NE701136/Zg. 976-69
184	"
185	"
186	"
187	"
188	"
189	"
190	"
191	Backa/5/At66/Cmn/4/Fert. F_3 3518/3/Cmn/2/Ot
192	NB66403/5/NB69581/4/NB69565/3/Jinkwang/2/At66/Cmn
193	" "
194	Lancota/Dacia
195	"
196	NE701152/Kavkaz
197	"
198	Rannaya/Lovrin 13
199	"
200	"
201	Centurk
202	Lancota
203	CI13449
204	Bezostaya 1
205	Rannaya/Lovrin 13
206	"
207	Ftn/Cmn 54H 1768/2/Lcr/4/NB68713/3/Nap Hal
208	" "
209	NE701136/Sort 11-32-1145
210	"
211	NE701152/Dacia
212	"
213	"
214	"
215	NB68570/P226-68
216	"
217	"
218	"
219	"
220	NB68513/Moldova

Table 2. Pedigrees of entries tested in the second high protein-high lysine winter wheat observation nursery in 1976. Continued.

Entry	Variety or Pedigree
221	NB68513/Moldova
222	"
223	NB68437/Bezostaya 1
224	"
225	"
226	Aurora/NE701154
227	"
228	"
229	Rannaya/NE701136
230	"
231	"
232	"
233	"
234	NB68570/Bolal
235	"
236	"
237	"
238	Aurora/NB69566
239	"
240	"
241	"
242	NB68513/Dwarf Bezostaya
243	"
244	Hyslop/NE701136
245	NS9841/NE701136
246	NE701134/F226-68
247	NE701136/4/Hokusi/3/Lcr/2/At66/Cmn
248	" " "
249	NB68513/3/Moldova/2/At66/Wi
250	"
251	"
252	Tx1682/3/NB68437/2/NB66573/CI13449
253	" " "
254	NB68513//Nebr. Rest. 3899/NB69457
255	NB69559/3/NB69565/2/NB65671/NB69655
256	Tx1682//Bezostaya 4/NB69595
257	"
258	Rannaya 12//Bezostaya 4
259	"
260	"
261	"
262	"
263	"
264	"
265	"
266	Rannaya//NB68437/CI13449
267	"
268	NB65672/Nebr. Rest. 3547//Aurora
269	" "
270	" "
271	Likafen/4/Tx2607-6/3/NB66575/2/Nebr. Rest. 3527/Bez. 1
272	" " "
273	Bez. 1//Nord. Despres/2*Sel. 101 Cor. 63-130-66-5
274	MV69-05//NB69753/NB68437
275	"

Table 2. Pedigrees of entries tested in the second high protein-high lysine winter wheat observation nursery in 1976. Continued.

Entry	Variety or Pedigree
276	MV69-05//NB69753/NB68437
277	"
278	"
279	"
280	"
281	Tx1682/4/Suwon 90/3/CI13449/2/At66/Cmn
282	Sava/4/At66/Cmn/3/Fert. F_3 3547/2/CI13857/5/Bez. 1
283	NB68437/4/Bez. 4/3/At66/Cmn/2/Arr
284	" "
285	
286	Bez. 1/3/Sava/2/Purd. 4920A6-28-2-1/NB69655
287	NB68437/Nebr. Res. 3954/NE7C1134
288	" "
289	" "
290	" "
291	" "
292	Dwarf Bezostaya//NB68437/NB68266
293	" "
294	" "
295	" "
296	Ctk/3/At66/Cmn/2/Tx2607-6
297	"
298	"
299	"
300	"
301	Centurk
302	Lancota
303	CI13449
304	Bezostaya 1
305	Ctk/3/At66/Cmn/2/Tx2607-6
306	"
307	"
308	"
309	NB69753/4/Tx2607-6/5/Zg. 5994-66/3/At66/Cmn/2/NB69655
310	ID. 0033/Purd. 4930 A6-28-2-1//Moldova
311	" "
312	" "
313	" "
314	NB66403/3/NB69581/4/NB69565/3/Jingkwang/2/At66/Cmn
315	" "
316	" "
317	Favorit/5/Cirpiz/4/Jang Kwang/2/At66/Cmn/3/Velvet
318	" "
319	" "
320	" "
321	" "
322	" "
323	" "
324	NB69655/4/Suwon 85/3/At66/Cmn/2/Hume
325	" "
326	Mura/3/At66/Cmn/2/NB69655
327	Zg. 5994-66/3/At66/Cmn/2/NB69655
328	" "
329	CI13449//At66/Cmn
330	San Pastore//Ardito-38MA/Bb

Table 2. Pedigrees of entries tested in the second high protein-high lysine winter wheat observation nursery in 1976. Continued.

Entry	Variety or Pedigree
331	San Pastore//Ardito-38MA/Bb
332	Backa/4/NB69566/3/Fert. F_3 3524/2/Tmp/CI12406
333	" "
334	" "
335	" "
336	Nap Hal/Lancer
337	"
338	"
339	"
340	Nb542437//At66/Cmn
341	PI168714//NB61660/NB542437
342	"
343	NB542437/PI168714//NB61660
344	"
345	Backa/4/At66/Cmn/3/Fert. F_3 3547//CI13857
346	" "
347	" "
348	Backa//Suwon 85/Purd. 4930A6-28-2-1
349	" "
350	" "
351	" "
352	Backa/4/Cmn/2/Ot/3/At66/Cmn
353	Sava/3/At66/Cmn/2/NB69655
354	"
355	Mura/5/Aiv/2/CI13857/4/Jinkwang/3/At66/Cmn
356	" "
357	Zg. 5994-66/4/Aiv/CI13857/3/Fert. F_3 3547/2/CI13857
358	" " "
359	" " "
360	" " "
361	" " "
362	" " "
363	" " "
364	Strampelli/4/Aiv/CI13857/3/Fert. F_3 3547/2/CI13857
365	Favorit/5/Cirpiz/4/Jang Kwang/2/At66/Cmn/3/Velvet
366	" " "
367	" " "
368	" " "
369	" " "
370	" " "
371	" " "
372	" " "
373	" " "
374	" " "
375	" " "
376	" " "
377	" " "
378	" " "
379	" " "
380	" " "
381	" " "
382	" " "
383	" " "
384	" " "
385	" " "

Table 2. Pedigrees of entries tested in the second high protein-high lysine winter wheat observation nursery in 1976. Concluded.

Entry	Variety or Pedigree
386	Favorit/5/Cirpiz/4/Jang Kwang/2/At66/Cmn/3/Velvet
387	Sava//Purd. 4930A6-28-2-1/NB69655
388	" "
389	Excelsior/4/Suwon 85/3/At66/NB69655
390	" "
391	" "
392	Jinkwang//At66/Cmn
393	"
394	"
395	"
396	"
397	"
398	"
399	Centurk
400	Lancota
401	CI13449
402	Bezostaya 1

Nursery Sites

The spring wheat section was distributed to 16 locations in 12 countries (Table 3). Thirteen locations were in the Northern Hemisphere while three locations were in the Southern Hemisphere (all in South America). Ten-gram wheat samples for quality analyses were received from seven locations.

The winter wheat section was distributed to 26 sites in 17 countries (Table 4). Nineteen sites were in the Northern Hemisphere and 7 sites were in the Southern Hemisphere. Quality analyses were performed on seed samples returned from 17 locations. Nine sites harvested all 402 entries for quality analyses.

DATA SUMMARIZATION AND STATISTICAL TREATMENT

The University of Nebraska Wheat Laboratory performed whole-grain quality analyses as follows:

Protein: Measured by the Kjeldahl method and reported on a dry weight moisture basis of the whole grain. Unit of measurement = percent.

Lysine/Protein: Measured on a Beckman 120C amino acid analyzer. Unit of measurement = percent (% of protein).

Adjusted Lysine/Protein: Lysine/protein values adjusted to population mean protein levels using regression procedures. Unit of measurement = percent.

Yield of Grain: Reported by cooperators as grams per plot; reported for the replicated nursery at Yuma, Arizona, as quintals per hectare.

Table 3. Nursery sites and cooperators of the second high protein-high lysine spring wheat observation nursery in 1976.a/

Country	Station	Cooperator(s)
Afghanistan	Kabul	Food and Agriculture Officer
Afghanistan	Kunduz	Food and Agriculture Officer
Algeria	Algiers	Mr. R. Nezzal
Brazil	Passo Fundo	Dr. Augusto C. Baier
Brazil	Pelotas	Mr. Milton B. Rocha
Chile	Santiago	Dr. Ignacio Ramirez
India	New Delhi	Dr. M. V. Rao
Iran	Ahway	Dr. H. Kaveh
Iran	Gorgan	Dr. H. Kaveh
Italy	Rieti	Dr. G. Zitelli
Jordan	Amman	Mr. Zulkifl Ghosheh
Lebanon	Beirut	Dr. J. P. Srivastava
Pakistan	Islamabad	Dr. Armando Campos
Spain	Madrid	Ing. E. Sanchez-Monge
USA	Arizona	Dr. V. A. Johnson
USA	California	Dr. Cal Qualset

a/ Seed was distributed to 16 locations in 12 countries.

Seed Grade: Seed for quality analyses were inspected for shriveling and sprout damage. Unit of measurement = 1-9 scale: 1 = excellent, 9 = very poor.

Disease and other agronomic data collected by cooperators are reported in individual site tables together with protein and lysine data.

Individual site values and ranks for protein and lysine data for entries in the second HP-HL observation nursery spring wheat section appear in Tables 5-11. Simple correlation coefficients between the grain quality traits also are shown. Data for the check cultivars from each test site were subjected to analyses of variance procedures as a randomized complete block design to obtain estimates of experi-

Table 4. Nursery sites and cooperators of the second high protein-high lysine winter wheat observation nursery in 1976.a/

Country	Station	Cooperator(s)
Afghanistan	Kabul	Food and Agriculture Officer
Afghanistan	Kunduz	Food and Agriculture Officer
Argentina	Balcarce	Ing. R. Bedogni
Argentina	Bordenave	Ing. S. Garbini
Brazil	Passo Fundo	Dr. Augusto C. Baier
Chile	Temuco	Dr. Juan Acevedo
Ecuador	Quito	Ing. Mario Lalama Hidalgo
Hungary	Martonvasar	Dr. L. Balla
India	Shalimar	Dr. M. V. Rao
India	Simla	Dr. M. K. Upadhyay
Iran	Hamadan	Dr. H. Kaveh
Iran	Karaj	Dr. H. Kaveh
Jordan	Amman	Dr. Zulkifl Ghosheh
Korea	Suwon	Dr. Hyun Ok Choi
Lebanon	Beirut	Dr. J. P. Srivastava
Mexico	Toluca	Dr. N. Borlaug
Peru	Lima	Dr. M. Romero
Republic of South Africa	Pretoria	Mr. T. C. Nel
Spain	Logrono	Dr. P. de la Hera
Turkey	Ankara	Dr. Art Klatt
Turkey	Erzurum	Dr. Fahrettin Tosun
Turkey	Eskisehir	Director of the Experiment Station
USA	Arizona	Dr. V. A. Johnson
USA	Nebraska	Dr. V. A. Johnson
USA	Oklahoma	Dr. E. L. Smith
USA	Oregon	Dr. W. Kronstad

a/ Seed was distributed to 26 sites in 17 countries.

mental error. Least significant differences (L.S.D.), coefficients of variation (C.V.), and means of the check varieties are shown in the tables.

Table 12 contains the means and rankings of protein and lysine of the 130 entries in the spring wheat nursery, averaged over five sites. Yield data from the replicated nursery at Yuma, Arizona, also are included. An analysis of variance over entries was performed, using locations as replications. The overall means, L.S.D.'s, and C.V.'s for the traits are shown. Similarly, an analysis of variance was performed

on the check varieties over locations.

Individual site values and ranks for protein and lysine data for entries in the second HP-HL observation nursery winter wheat section are shown in Tables 13-30. Treatment of the data for the winter wheats was the same as for the spring wheats described above. Table 31 contains the means and rankings of protein and lysine of the 402 entries in the winter wheat nursery, averaged over nine sites. Yield data from Yuma, Arizona, are included, although not all of the entries were harvested at Yuma. Analyses of variance were performed as for the spring wheat nursery described above.

RESULTS AND DISCUSSION

Spring Wheat

Mean protein and lysine values for spring wheat entries averaged over locations are reported in Table 12. Protein values ranged from 21.1 to 12.3%, with an overall average of 15.5%. Protein means of the check varieties were 17.1, 14.7, and 14.4%, for Nap Hal, INIA 66, and Era, respectively. Only 20 of the experimental lines equaled or surpassed the protein mean of Nap Hal.

Most of the lines having very high protein were lines of Nap Hal/Atlas 66. These lines tended to be non-productive at Yuma, Arizona, as the yield rankings indicate.

Pedigree	Entry no.	Protein %	Lysine/Protein %	Yield* q/ha	Yield* rank
Nap Hal/Atlas 66	29	21.1	2.9	27.0	130
"	33	19.7	2.8	34.9	123
"	32	19.6	2.8	36.7	120
"	31	19.0	2.9	37.4	116
"	27	18.9	2.9	32.3	128
"	35	18.9	2.9	31.8	129
"	34	18.1	3.1	33.1	127
Check varieties					
Nap Hal		17.1	3.1	36.0	
INIA 66		14.7	2.9	56.3	
Era		14.4	3.0	44.8	

*From a replicated nursery at Yuma, Arizona.

The Nap Hal parent can contribute little to productivity, but the cross (Nap Hal/Atlas 66) consistently maintains high levels of grain protein across environments.

Lines selected from the spring nursery which exhibited the best combinations of high protein, lysine, and yield are listed on the next page.

These lines, although not as high in protein as Nap Hal, do have protein values of 1-2% more than INIA 66. They are relatively prod-

Pedigree	Entry no.	Protein %	Lysine/ protein %	Adjusted lysine/protein %	Yield[a] q/ha
Nap Hal/CI 13449	54	16.7	3.3	3.4	49.5
"	55	16.7	3.3	3.5	48.8
Nap Hal/CR 8156	80	16.7	3.1	3.3	47.3
"	82	16.6	3.2	3.3	50.2
Nap Hal/CI 13449	49	16.3	3.3	3.4	47.6
"	58	16.2	3.2	3.4	52.9
Toropi/CNO-1N1A"S" //CNO-1N1A"S"[2]	128	16.1	3.0	3.2	53.1
Nap Hal/CI 13449	38	16.0	3.3	3.5	56.7
"	45	15.9	3.5	3.6	48.5
Nap Hal		17.1	3.1	3.3	36.0
INIA 66		14.7	2.9	3.0	56.3
Era		14.4	3.0	3.2	44.8

[a]From a replicated nursery at Yuma, Arizona.

uctive when compared with INIA 66, and have lysine levels as high as or higher than Nap Hal.

Forty of the 130 entries in the spring wheat nursery were lines from Nap Hal/CI 13449. Of these 40, the protein values ranged from 17.7% (entry 42) to 12.3%. The mean protein value for these lines was 14.7%, equal to that of INIA 66. However, the lysine/protein and adjusted lysine mean values of these lines averaged 3.3. and 3.4%, respectively. These lysine values exceeded those of INIA 66 by 0.4%, which is approximately 13% higher than the average lysine level of INIA 66.

The yield levels of the Nap Hal/CI 13449 lines ranged from 56.7 q/ha to 38.8 q/ha, and averaged 48.1 q/ha. The yield advantage of INIA 66 was 17% above the average yield of the Nap Hal/CI 13449 lines. The protein, lysine, and yield means of all these lines were above the values for the check variety, Era.

Winter Wheat

Mean protein and lysine values for the winter wheats averaged over nine locations are reported in Table 31. Protein values ranged from 18.1 to 11.9%, and averaged 14.9%. Lancota, Bezostaya 1, Centurk, and CI 13449 had average protein values of 14.4, 13.9, 13.1, and 12.4%, respectively.

NE 7060, (Favorit/5/Cirpiz/4/Jang Kwang//Atlas 66/Cmn/3/ Velvet), is a promising winter wheat combination which displays high protein in conjunction with excellent grain quality and agronomic characteristics. There were 29 selections of this cross in the 2nd HP-HL nursery. Twenty-eight of them were harvested at Yuma, Arizona. Data from Table 31 comparing the NE 7060 lines to the

Variety	Entry no.	Protein %	Lysine/ protein %	Adjusted Lysine/protein %	Yield q/ha
NE 7060	365	16.7	2.8	3.0	37.1
"	368	16.6	2.7	2.9	41.8
"	380	16.6	2.7	2.9	47.1
"	370	16.6	2.8	3.0	42.1
"	369	16.6	2.7	3.0	15.2
"	367	16.5	2.7	3.0	41.9
"	320	16.5	2.8	3.0	44.8
"	378	16.5	2.8	3.1	35.4
"	383	16.4	2.7	3.0	39.4
"	384	16.4	2.8	3.0	35.3
"	321	16.4	2.7	3.0	43.7
"	375	16.4	2.7	3.0	41.8
"	323	16.4	2.8	3.0	36.5
"	385	16.4	2.7	3.0	40.8
"	386	16.3	2.9	3.1	40.2
"	376	16.3	2.7	3.0	44.4
"	372	16.3	2.7	3.0	42.6
"	318	16.3	2.8	3.1	40.6
"	382	16.3	2.8	3.0	44.6
"	317	16.3	2.8	3.0	39.8
"	322	16.2	2.8	3.0	47.5
"	366	16.2	2.8	3.0	37.9
"	374	16.2	2.7	2.9	41.1
"	373	16.2	2.8	3.0	42.5
"	319	16.2	2.8	3.0	43.4
"	379	16.2	2.8	3.0	42.6
"	377	16.1	2.8	3.0	38.3
"	381	16.1	2.8	3.0	43.7
NE 7060 ($\bar{x}$)		16.4	2.8	3.0	41.5
Lancota		14.4	2.8	2.9	43.5
Bezostaya 1		13.9	2.8	3.0	46.6
Centurk		13.1	3.0	3.1	47.5
CI 13449		12.4	3.2	3.2	42.9

*From a replicated nursery at Yuma, Arizona.

check varieties are shown above.

All of the lines averaged higher than 16% protein computed over nine locations. The overall protein mean of the NE 7060 lines was 16.4%. This is 2.0 percentage points higher than the protein check, Lancota. The lines averaged 14, 18, 25, and 32% higher in protein than Lancota, Bezostaya 1, Centurk, and CI 13449, respectively.

The 28 lines made an average yield of 41.5 q/ha at Yuma, Arizona, which was 3, 5, 12, and 14% below the average yields of CI 13449, Lancota, Bezostaya 1, and Centurk, respectively. However, eight of the lines equaled or surpassed the average yield of Lancota.

Both CI 13449 and Centurk exhibited an advantage over NE 7060

in lysine/protein, but Lancota and Bezostaya 1 were only equal to NE 7060 in lysine/protein, despite their lower protein values.

Other combinations of elevated protein and lysine with good productivity occurred in the pedigrees (Sava//Purdue 4930A6-28-2-1/NB 69655), (Jang Kwang//Atl 66/Cmn), and (Jinkwang//Atl 66/Cmn). Data for these and other lines taken from Table 31 are shown below.

Pedigree	Entry no.	Protein %	Lysine/ protein %	Adjusted Lysine protein %	Yuma, AZ yield q/ha
Sava//Purdue 4930A6-28-2-1/ NB 69655	388	16.3	3.0	3.2	46.2
Jang Kwang//Atl 66/Cmn (NB 66574)	13	16.2	2.9	3.1	44.7
Sava//Purdue 4930A6-28-2-1/ NB 69655	387	16.0	3.1	3.3	40.4
Jinkwang//Atl 66/Cmn	394	15.8	2.9	3.1	43.2
ID 0033/Purdue 4930A6-28-2-1// Moldova	311	15.8	2.8	3.1	46.8
Jang Kwang//Atl 66/Cmn (NB 66574)	12	15.5	2.9	3.1	45.4
Atl 66/Cmn//?	62	15.4	2.9	3.0	44.5
Jang Kwang//Atl 66/Cmn (NB 66574)	83	15.3	3.0	3.2	42.6
Jinkwang//Atl 66/Cmn	396	15.2	2.9	3.1	42.3
"	397	15.2	2.9	3.1	44.5
Backa//Suwon 85/Purdue 4930 A6-28-2-1	349	15.1	2.9	3.1	44.4
Jang Kwang//Atl 66/Cmn (NB 66574)	82	15.0	2.9	3.1	54.5
NS 9841/NE 701136	245	14.9	2.9	3.1	50.7
MV 69-05//NB 69753/NB 68437	280	14.8	2.9	3.0	47.4
NB 68437/3/Atl 66/Cmn/2/ NB 69689	48	14.7	2.9	3.1	44.9
NB 69559/Dacia	162	14.7	2.9	3.1	49.3
Jinkwang//Atl 66/Cmn	395	14.6	2.9	3.1	46.7
NB 68713/3/Cmn/Ot/2/Atl 66/Cmn	46	14.4	2.9	3.1	45.1
"	45	14.4	3.0	3.2	49.1
MV 69-05//NB 69753/NB 68437	279	14.4	3.0	3.1	49.0
Nap Hal/CI 13449	33	14.1	3.2	3.3	40.8
Check varieties					
Lancota		14.4	2.8	2.9	43.5
Bezostaya 1		13.9	2.8	3.0	46.6
Centurk		13.1	3.0	3.1	47.5
CI 13449		12.4	3.2	3.2	42.9

Entries 387 and 388 (Sava//Purdue 4930/NB 69655) averaged 12% higher protein than Lancota. They also had adjusted lysine/protein values as high or higher than CI 13449. Additionally, they were relatively productive at Yuma, Arizona, averaging the same in yield as Lancota.

Jang Kwang//Atl 66/Cmn (entries 12, 13, 82 and 83) averaged 46.8 q/ha which was slightly higher than the average yield of Centurk. Together with this productivity, these lines averaged 15.5% protein, 2.9% lysine/protein, and 3.1% adjusted lysine.

Jinkwang//Atl 66/Cmn (entries 394, 395, 396, and 397) averaged 44.2 q/ha at Yuma, Arizona. The protein mean of these four lines was 15.0%. Their lysine/protein and adjusted lysine/protein values averaged 2.9% and 3.1%, respectively. The performance of the lines is summarized below for easy comparison.

Pedigree	Protein %	Lysine/protein %	Adjusted lysine/protein %	Yuma, AZ yield q/ha
NE 7060 ($\bar{x}$ of 28 lines)	16.4	2.8	3.0	41.5
Sava//Purdue 4930/NB 69655 ($\bar{x}$ of 2 lines)	16.2	3.1	3.3	43.3
Jang Kwang//Atl 66/Cmn ($\bar{x}$ of 4 lines)	15.5	2.9	3.1	46.8
Jinkwang//Atl 66/Cmn ($\bar{x}$ of 4 lines)	15.0	2.9	3.1	44.2
Check varieties				
Lancota	14.4	2.8	2.9	43.5
Bezostaya 1	13.9	2.8	3.0	46.6
Centurk	13.1	3.0	3.1	47.5
CI 13449	12.4	3.2	3.2	42.9

Individual Location Data and Analyses

Other data provided by cooperators such as plant height, maturity, and disease readings are reported in the individual location tables beginning on page 25.

Table 5. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine spring wheat observation nursery grown at Santiago, Chile in 1976.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade 1-9	Yield 1/ g	Stripe rust		Stem rust	
	%	rank	%	rank	%	rank			sev. %	resp.	sev. %	resp.
INIA 66	15.0	50	2.7	123	2.9	126	1	275	50	MS	80	S
Era	14.7	58	2.8	114	3.1	98	3	175	5	MR	0	
Nap Hal	19.9	1	3.0	80	3.2	77	8	110	50	S	80	S
4	16.0	28	3.3	31	3.5	26	9	25	60	S	90	S
5	12.6	118	3.4	23	3.5	26	9	45	90	S	90	S
6	11.8	127	3.3	31	3.3	54	9	60	50	S	90	S
7	16.4	21	3.3	31	3.5	26	9	45	90	S	90	S
8	16.4	21	3.3	31	3.6	17	9	10	90	S	90	S
9	15.3	44	3.5	14	3.7	9	9	5	90	S	90	S
10	13.9	87	3.3	31	3.4	36	9	40	80	S	90	S
11	13.8	91	3.2	44	3.4	36	9	65	40	S	90	S
12	12.7	116	3.9	1	4.0	1	9	55	50	S	90	S
13	14.0	83	3.6	5	3.7	9	9	30	70	S	90	S
14	14.3	72	3.6	5	3.8	4	9	30	70	S	90	S
15	13.3	102	3.5	14	3.7	9	9	50	60	S	90	S
16	11.5	129	3.9	1	3.9	2	9	20	60	S	90	S
17	13.1	108	3.6	5	3.7	9	9	45	60	S	90	S
18	13.9	87	3.2	44	3.4	36	5	65	60	S	90	S
19	14.4	69	3.5	14	3.7	9	9	40	60	S	90	S
20	13.2	105	3.5	14	3.6	17	9	100	50	S	90	S
21	13.2	105	3.5	14	3.6	17	9	65	50	S	90	S
22	13.5	98	3.6	5	3.7	9	9	20	70	S	90	S
23	13.5	98	3.2	44	3.4	36	9	185	80	S	90	S
24	14.8	55	3.4	23	3.6	17	9	20	60	S	90	S
25	14.0	83	3.6	5	3.8	4	9	10	70	S	80	S
26	14.1	80	3.2	44	3.4	36	9	140	5	MS	90	S
27	15.4	40	3.1	60	3.3	54	9	65	5	S	90	S
28	14.5	63	3.1	60	3.3	54	9	130	40	S	80	S
29	15.9	30	3.1	60	3.3	54	8	130	90	S	70	S
30	14.8	55	3.2	44	3.4	36	9	45	90	S	80	S
31	16.6	18	3.0	80	3.3	54	9	80	5	MR	90	S
32	18.2	4	2.9	100	3.2	77	9	90	70	S	90	S
33	19.3	2	2.8	114	3.1	98	9	60	70	S	90	S
34	19.2	3	3.1	60	3.4	36	9	20	60	S	90	S
35	17.3	10	3.0	80	3.2	77	9	35	60	S	90	S
36	17.1	12	3.2	44	3.4	36	9	45	80	S	90	S
37	15.9	30	3.0	80	3.3	54	9	120	5	MS	90	S
38	16.7	15	3.5	14	3.7	9	9	5	90	S	5	S
39	12.6	118	3.2	44	3.3	54	9	45	50	S	90	S
40	12.1	124	3.6	5	3.6	17	9	45	70	S	90	S
41	12.8	113	3.4	23	3.5	26	9	70	70	S	90	S
42	15.5	36	3.0	80	3.2	77	9	60	80	S	90	S
43	15.3	44	3.0	80	3.3	54	9	80	80	S	90	S
44	13.8	91	3.4	23	3.5	26	9	35	80	S	90	S
45	14.4	69	3.5	14	3.7	9	9	35	80	S	90	S
46	13.1	108	3.5	14	3.6	17	9	65	70	S	90	S
47	13.8	91	3.3	31	3.4	36	9	30	70	S	90	S
48	15.5	36	3.5	14	3.8	4	9	15	70	S	90	S
49	16.7	15	3.3	31	3.6	17	9	10	70	S	90	S
50	15.4	40	3.3	31	3.5	26	9	30	70	S	90	S

1/ The area harvested for yield was not reported.

Table 5. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine spring wheat observation nursery grown at Santiago, Chile in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Shed grade 1-9	Yield g	Stripe rust sev. %	Stripe rust resp.	Stem rust sev. %	Stem rust resp.
INIA 66	16.1	27	2.6	128	2.9	126	1	340	70	S	5	S
Era	14.1	80	2.9	100	3.0	116	1	250	1	R	0	
Nap Hal	18.0	7	2.9	100	3.2	77	8	185	50	MS	90	S
54	18.2	4	3.2	44	3.5	26	9	10	90	S	90	S
55	15.4	40	3.4	23	3.6	17	9	15	90	S	90	S
56	12.8	113	3.5	14	3.5	26	9	110	70	S	90	S
57	12.2	122	3.5	14	3.5	26	9	70	70	S	60	S
58	13.5	98	3.3	31	3.5	26	9	30	90	S	90	S
59	12.2	122	3.2	44	3.2	77	9	150	90	S	90	S
60	14.2	77	3.1	60	3.3	54	8	60	90	S	80	S
61	15.4	40	2.9	100	3.1	98	9	130	90	S	70	S
62	14.2	77	3.0	80	3.2	77	8	350	20	MS	80	S
63	12.5	120	3.2	44	3.2	77	8	195	50	MS	80	S
64	13.4	101	3.0	80	3.2	77	8	180	90	S	70	S
65	12.8	113	3.2	44	3.3	54	8	150	20	S	80	S
66	14.3	72	2.9	100	3.1	98	9	160	70	S	80	S
67	16.2	25	3.1	60	3.3	54	8	95	70	S	80	S
68	15.4	40	2.8	114	3.0	116	4	380	10	S	80	S
69	14.0	83	3.2	44	3.3	54	4	175	80	S	80	S
70	14.5	63	2.9	100	3.1	98	4	220	90	S	70	S
71	14.8	55	3.0	80	3.2	77	4	270	80	S	70	S
72	14.7	58	3.1	60	3.3	54	4	225	1	MR	60	S
73	12.8	113	3.0	80	3.1	98	5	160	50	S	80	S
74	12.6	118	3.1	60	3.1	98	7	290	90	S	80	S
75	12.2	122	3.0	80	3.0	116	5	175	40	S	80	S
76	13.9	87	3.1	60	3.3	54	5	250	30	MS	60	S
77	14.3	72	2.8	114	3.0	116	4	230	20	S	30	S
78	14.9	52	2.9	100	3.1	98	5	330	5	MR	30	S
79	14.5	63	2.8	114	3.0	116	5	245	20	S	30	S
80	14.4	69	3.2	44	3.3	54	6	305	70	S	20	S
81	15.3	44	3.1	60	3.3	54	6	240	5	MS	50	S
82	15.0	50	3.1	60	3.3	54	6	200	50	S	50	S
83	15.8	32	2.9	100	3.2	77	6	215	70	S	50	S
84	14.5	63	3.1	60	3.3	54	5	250	60	S	70	S
85	14.2	77	2.9	100	3.1	98	8	135	0		80	S
86	12.8	113	3.1	60	3.2	77	8	140	70	S	90	S
87	14.2	77	2.9	100	3.1	98	8	120	80	S	80	S
88	16.6	18	2.9	100	3.1	98	8	115	5	S	20	S
89	13.8	91	3.0	80	3.2	77	5	215	0		90	S
90	14.2	77	2.9	100	3.1	98	5	225	90	S	80	S
91	13.6	96	3.0	80	3.1	98	6	290	90	S	90	S
92	13.7	94	3.1	60	3.2	77	6	200	70	S	90	S
93	14.5	63	3.0	80	3.2	77	6	235	70	S	90	S
94	15.1	48	2.9	100	3.1	98	7	160	80	S	70	S
95	16.7	15	3.0	80	3.2	77	9	70	90	S	30	S
96	14.0	83	3.0	80	3.2	77	8	90	70	S	80	S
97	15.2	47	3.1	60	3.3	54	9	115	70	S	80	S
98	14.5	63	3.1	60	3.3	54	9	135	80	S	80	S
99	15.3	44	3.0	80	3.3	54	9	140	70	S	80	S
100	14.5	63	3.0	80	3.2	77	9	50	90	S	80	S

Table 5. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine spring wheat observation nursery grown at Santiago, Chile in 1974. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Stripe rust sev. %	Stripe rust resp.	Stem rust sev. %	Stem rust resp.
INIA 66	15.8	32	2.8	114	3.0	116	1	340	70	S	70	S
Era	15.1	48	2.9	100	3.2	77	2	185	1	MR	1	MR
Nap Hal	14.7	58	2.9	100	3.1	98	3	185	5	S	80	S
104	13.8	91	2.8	114	3.0	116	6	160	80	S	70	S
105	11.7	128	3.1	60	3.1	98	6	105	80	S	90	S
106	13.5	98	3.2	44	3.3	54	7	70	90	S	90	S
107	13.7	94	3.2	44	3.3	54	9	130	90	S	90	S
108	13.3	102	3.1	60	3.2	77	9	100	90	S	90	S
109	12.1	124	3.3	31	3.3	54	8	250	70	S	90	S
110	12.0	126	3.3	31	3.3	54	9	205	70	S	90	S
111	15.7	34	2.7	123	2.9	126	6	355	0		1	MR
112	16.4	21	2.5	130	2.8	129	5	235	0		10	S
113	16.7	15	2.8	114	3.0	116	2	235	0		10	S
114	17.0	13	2.7	123	3.0	116	2	230	5	S	5	S
115	17.6	9	2.7	123	2.9	126	2	345	5	MS	1	MS
116	18.1	6	2.7	123	3.0	116	2	340	5	MS	5	S
117	14.3	72	3.0	80	3.1	98	2	380	1	MR	20	S
118	13.1	108	2.9	100	3.0	116	2	360	0		5	MS
119	14.5	63	2.9	100	3.1	98	2	175	1	MR	5	MS
120	13.2	105	3.0	80	3.1	98	2	195	0		0	
121	10.6	130	3.5	14	3.4	36	2	330	90	S	5	S
122	13.1	108	2.9	100	3.0	116	1	170	5	R	1	MR
123	15.5	36	2.8	114	3.1	98	2	285	1	R	1	MS
124	17.5	10	2.6	128	2.8	129	2	300	1	MR	1	MS
125	17.7	8	2.8	114	3.0	116	2	290	1	MR	5	MR
126	16.2	25	2.7	123	3.0	116	3	410	0		20	S
127	16.3	23	2.9	100	3.1	98	2	245	1	MR	10	S
128	14.9	52	3.0	80	3.3	54	2	245	0		10	S
129	16.2	25	2.6	128	2.9	126	3	250	5	MR	5	S
130	16.0	28	2.7	123	3.0	116	2	290	30	MS	50	S
Overall mean	14.7		3.11		3.28		6.8	223.1	52.1		133.8	

Correlation Coefficients

Protein	- .48**	- .25**
Lysine/protein		.95**

** Significant at the P = .01 level.

Means of the check varieties

Era	14.6	2.87	3.10
INIA 66	15.6	2.70	2.93
Nap Hal	17.5	2.93	3.17
Check means	15.9	2.83	3.07
$LSD_{.05}$ of check means	4.0	0.19	0.19
Coefficient of variation %	11.0	2.88	2.66

Table 6. Protein and lysine values together with agronomic data for the entries in the second high protein-high lysine spring wheat observation nursery grown at Ahwaz, Iran in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Septoria 0-9	Rust Leaf sev. %	Rust Leaf resp.	Rust Stem sev. %	Rust Stem resp.
INIA 66	10.5	103	3.2	79	3.0	102	5	190	103	0	0		0	
Kra	13.2	47	3.2	79	3.4	47	4	140	127	0	0		0	
Nap Hal	15.1	15	3.3	60	3.5	28	5	55	128	0	0		0	
4	14.5	21	3.3	60	3.5	28	6	90	127	7	40	S	40	S
5	12.5	56	3.3	60	3.3	65	6	130	126	0	40	S	50	S
6	12.1	67	3.5	28	3.5	28	6	135	127	0	0		70	S
7	13.7	32	3.5	28	3.6	12	5	90	131	0	0		80	S
8	11.5	79	3.6	14	3.6	12	6	130	132	0	0		30	S
9	11.8	74	3.6	14	3.6	12	6	110	134	0	30	S	40	S
10	12.1	67	3.5	28	3.5	28	6	105	132	0	70	S	0	
11	15.2	13	3.6	14	3.8	4	5	70	130	0	40	S	0	
12	11.3	87	3.4	42	3.3	65	5	175	130	0	30	S	0	
13	11.5	79	3.6	14	3.6	12	5	110	130	7	50	S	0	
14	10.8	99	3.6	14	3.5	28	5	85	130	0	40	S	0	
15	11.2	90	3.7	5	3.6	12	5	100	130	0	30	S	0	
16	10.8	99	3.6	14	3.4	47	5	85	130	0	30	S	0	
17	12.5	56	3.4	42	3.4	47	5	90	130	7	40	S	0	
18	13.6	34	3.6	14	3.7	6	6	75	134	0	30	S	20	S
19	14.1	27	3.8	1	3.9	1	5	45	134	0	20	S	30	S
20	12.3	62	3.4	42	3.4	47	5	75	130	0	30	S	0	
21	12.0	70	3.5	28	3.5	28	5	80	130	0	20	S	0	
22	11.5	79	3.6	14	3.6	12	5	75	131	0	30	S	0	
23	11.0	92	3.6	14	3.5	28	6	100	109	0	30	S	0	
24	13.8	30	3.7	5	3.9	1	5	55	133	0	30	S	0	
25	12.7	53	3.7	5	3.7	6	5	125	131	5	30	S	0	
26	15.8	7	3.2	79	3.4	47	5	50	132	0	30	S	0	
27	17.1	3	3.0	107	3.3	65	4	40	127	0	40	S	0	
28	16.2	5	3.2	79	3.4	47	5	75	126	0	30	S	0	
29	17.4	1	3.1	95	3.3	65	5	55	127	0	40	S	0	
30	14.3	23	3.0	107	3.2	81	4	120	129	0	50	S	0	
31	16.0	6	3.1	95	3.3	65	5	85	127	0	40	S	0	
32	15.3	11	3.0	107	3.2	81	5	85	127	0	50	S	0	
33	14.9	18	3.0	107	3.2	81	5	85	127	0	70	S	0	
34	14.9	18	3.2	79	3.5	28	4	70	134	0	40	S	0	
36	14.2	25	3.3	60	3.5	28	4	90	131	0	30	S	40	S
37	15.1	15	3.3	60	3.5	28	5	90	132	0	0		30	S
38	11.3	87	3.5	28	3.4	47	5	150	130	0	0		40	S
39	11.4	83	3.4	42	3.3	65	5	65	131	0	30	S	50	S
40	12.2	65	3.4	42	3.4	47	5	160	130	0	0		30	S
41	12.4	59	3.6	14	3.6	12	5	80	131	0	30	S	0	
42	12.4	59	3.6	14	3.6	12	5	105	131	7	30	S	20	S
43	11.4	83	3.5	28	3.4	47	5	80	130	0	40	S	0	
44	11.2	90	3.6	14	3.5	28	5	70	133	0	0		20	S
45	12.1	67	3.8	1	3.8	4	5	90	135	0	0		20	S
47	12.1	67	3.4	42	3.5	28	4	80	132	0	40	S	0	
48	10.9	95	3.5	28	3.4	47	4	150	131	0	30	S	0	
49	12.3	62	3.7	5	3.8	4	4	125	131	0	60	S	0	
50	13.8	30	3.0	107	3.2	81	5	120	131	0	70	S	0	
INIA 66	16.9	4	2.9	115	3.1	91	2	240	103	0	0		0	
Kra	17.3	2	2.8	120	3.1	91	3	140	128	0	0		0	

Table 6. Protein and lysine values together with agronomic data for the entries in the second high protein-high lysine spring wheat observation nursery grown at Ahwaz, Iran in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Septoria 0-9	Rust Leaf sev. %	Rust Leaf resp.	Rust Stem sev. %	Rust Stem resp.
Nap Hal	14.0	28	3.3	60	3.5	28	4	120	128	0	0		30	S
54	12.4	59	3.5	28	3.5	28	5	100	130	0	30	S	20	S
55	11.7	75	3.5	28	3.4	47	4	170	133	7	30	S	0	
56	11.9	72	3.3	60	3.3	65	5	150	127	0	60	S	0	
57	13.4	40	3.2	79	3.3	65	5	85	132	0	70	S	50	S
58	13.2	47	3.2	79	3.3	65	4	105	132	7	70	S	0	
59	10.9	95	3.3	60	3.2	81	5	170	117	0	30	S	70	S
60	11.4	83	3.5	28	3.5	28	5	200	127	0	50	S	40	S
61	13.2	47	3.1	95	3.2	81	3	150	105	0	0		0	
62	9.5	119	3.3	60	3.0	102	4	70	140	0	0		0	
63	12.9	50	2.9	115	3.0	102	4	80	134	0	0		0	
64	10.4	105	3.1	95	2.9	115	4	100	109	0	30	S	0	
65	13.4	40	3.2	79	3.3	65	5	70	134	0	70	S	0	
66	14.2	25	3.3	60	3.5	28	6	60	130	0	30	S	30	S
67	15.8	7	3.1	95	3.3	65	7	50	131	0	20	MS	0	
68	10.7	101	3.1	95	2.9	115	5	85	112	7	30	S	0	
69	11.4	83	3.1	95	3.0	102	5	95	112	5	40	S	0	
70	9.8	113	3.1	95	2.9	115	5	100	110	0	0		0	
71	9.5	119	3.2	79	2.9	115	5	90	110	0	0		0	
72	14.0	28	3.3	60	3.5	28	7	35	130	0	50	S	0	
73	13.6	34	3.2	79	3.3	65	6	55	130	0	90	S	0	
74	9.5	119	3.3	60	2.9	115	5	75	109	0	0		0	
75	9.5	119	3.3	60	2.9	115	5	10	115	0	0		0	
76	11.2	90	3.6	14	3.5	28	7	35	117	0	0		0	
77	11.0	92	3.3	60	3.2	81	5	85	117	0	0		0	
78	11.3	87	3.5	28	3.4	47	5	60	117	0	0		0	
79	15.2	13	3.2	79	3.4	47	7	39	130	0	30	S	40	S
80	13.5	37	3.5	28	3.6	12	7	50	131	0	0		60	S
81	13.3	43	3.3	60	3.5	28	6	35	145	7	80	S	30	S
82	13.3	43	3.4	42	3.6	12	6	25	133	0	30	S	40	S
83	13.2	47	3.2	79	3.3	65	6	40	133	0	0		40	S
84	12.3	62	3.3	60	3.3	65	6	80	131	0	80	S	50	S
85	12.9	50	2.9	115	3.0	102	6	50	132	0	30	S	0	
86	13.2	47	3.4	42	3.5	28	7	50	127	7	0		0	
87	13.5	37	3.2	79	3.3	65	7	25	127	7	0		0	
88	15.5	9	3.0	107	3.3	65	7	15	131	7	0		0	
89	9.7	116	3.3	60	3.0	102	2	60	112	0	0		40	S
90	9.3	122	3.4	42	3.0	102	3	60	110	0	0		30	S
91	9.7	116	3.2	79	2.9	115	3	35	110	0	0		0	
92	10.3	108	3.6	14	3.4	47	3	50	110	0	0		0	
93	10.4	105	3.4	42	3.2	81	3	75	109	0	0		0	
94	12.0	70	3.1	95	3.1	91	4	45	118	0	0		0	
95	9.9	112	3.4	42	3.1	91	4	75	109	0	0		0	
96	10.4	105	3.4	42	3.2	81	4	60	117	0	0		40	S
99	10.9	93	3.3	60	3.2	81	3	60	130	0	0		0	
100	10.8	99	3.2	79	3.0	102	3	25	119	0	0		0	
LTIA 66	9.7	116	3.1	95	2.8	122	3	20	100	0	0		0	
Nap Hal	14.6	20	3.2	79	3.3	65	6	15	133	5	0		0	
104	14.3	23	3.0	107	3.2	81	6	30	134	7	0		0	
105	12.6	54	3.3	60	3.3	65	5	60	129	7	0		0	

Table 6. Protein and lysine values together with agronomic data for the entries in the second high protein-high lysine spring wheat observation nursery grown at Ahwaz, Iran in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted Lysine/protein %	Adjusted Lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Septoria 0-9	Rust Leaf sev. %	Rust Leaf resp.	Rust Stem sev. %	Rust Stem resp.
106	10.3	108	3.7	5	3.5	28	6	35	113	0	0		0	
107	10.4	105	3.5	28	3.3	65	5	60	113	0	0		40	S
108	11.4	83	3.4	42	3.4	47	5	65	111	0	0		50	S
109	12.6	54	3.4	42	3.5	28	5	50	111	0	0		0	
111	11.6	76	3.4	42	3.3	65	4	35	107	0	0		0	
112	13.4	40	2.9	115	3.0	102	2	35	105	0	0		0	
114	12.3	62	3.1	95	3.2	81	2	45	105	0	0		0	
115	11.9	72	3.4	42	3.4	47	3	45	105	0	0		0	
116	12.8	52	3.0	107	3.1	91	3	55	105	0	0		0	
117	11.6	76	3.1	95	3.1	91	2	70	110	0	0		0	
118	10.6	102	3.2	79	3.0	102	3	65	110	0	0		0	
119	10.2	110	3.2	79	3.0	102	2	60	109	0	0		0	
120	10.9	95	3.1	95	3.0	102	2	40	109	0	0		0	
121	9.2	123	3.3	60	2.9	115	2	55	108	0	0		0	
122	9.8	113	3.1	95	2.8	122	2	35	107	0	0		0	
123	15.3	43	2.9	115	3.1	91	2	40	107	0	0		0	
124	13.6	34	2.9	115	3.0	102	3	35	107	0	0		0	
125	15.2	13	2.7	122	2.9	115	2	55	107	0	0		0	
126	15.0	17	2.7	122	2.9	115	2	45	107	0	0		0	
127	13.6	34	2.9	115	3.0	102	2	55	107	0	0		0	
128	15.5	9	2.9	115	3.1	91	3	50	127	0	0		0	
129	14.4	22	2.8	120	2.9	115	3	30	109	0	0		0	
130	10.2	110	3.0	107	2.8	122	2	30	108	0	0		0	
Mean	12.5		3.3		3.3		4.5	78.2	122.7	0.9	19.3		10.7	

Correlation Coefficients

Protein	- .38**	.27**
Lysine/protein		.76**

** Significant at the .01 level.

Means of the check varieties[1/]

INIA 66	13.7	3.1	3.1	215.0	103.0
Era	15.3	3.0	3.3	140.0	127.5
Nap Hal	14.6	3.3	3.5	87.5	128.0
Check means	14.5	3.1	3.3	147.5	119.5

1/ Means of check varieties based upon 2 replications only.

Table 7. Protein and lysine values together with agronomic data for the entries in the second high protein-high lysine spring wheat observation nursery grown at Gorgan, Iran in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Mildew 0-9
INIA 66	15.7	124	2.7	119	2.9	125	3	580	132	85	6
Kra	17.3	93	2.8	104	3.0	113	6	340	152	84	1
Nap Hal	21.6	14	2.9	82	3.1	95	6	330	149	110	6
4	19.2	37	3.2	12	3.4	22	8	160	153	75	4
5	15.0	127	3.2	12	3.5	8	8	110	154	76	8
6	14.9	128	3.2	12	3.4	22	8	100	151	75	8
7	16.7	113	3.3	4	3.6	3	8	70	151	65	8
8	17.2	97	3.0	55	3.3	43	8	110	153	82	6
9	17.0	104	3.0	55	3.3	43	8	90	155	63	8
10	18.6	54	3.1	32	3.3	43	8	200	155	65	6
11	19.0	43	3.2	12	3.4	22	7	190	154	85	6
12	17.8	84	3.2	12	3.5	8	7	110	154	70	8
13	18.0	75	3.0	55	3.3	43	6	100	153	74	6
14	17.3	93	3.1	32	3.4	22	6	160	159	65	8
15	18.3	66	3.1	32	3.4	22	7	160	156	84	4
16	17.0	104	3.2	12	3.4	22	7	110	156	53	6
17	19.3	34	3.1	32	3.3	43	8	190	150	65	8
18	19.8	22	3.1	32	3.3	43	7	160	152	72	7
19	19.5	26	3.2	12	3.5	8	7	200	152	85	7
20	19.4	30	3.1	32	3.4	22	7	200	151	80	5
21	19.9	20	3.0	55	3.2	69	8	300	151	82	6
22	20.4	17	3.1	32	3.3	43	8	100	151	95	5
23	19.9	20	2.9	82	3.2	69	8	350	138	75	7
24	20.2	18	3.0	55	3.3	43	8	190	153	80	8
25	19.1	40	3.1	32	3.3	43	8	110	153	85	7
26	24.9	4	2.7	119	2.9	125	8	270	147	105	7
27	24.6	5	2.7	119	3.0	113	7	270	147	120	8
28	24.5	6	2.7	119	2.9	125	7	380	147	102	7
29	25.0	3	2.7	119	3.0	113	7	290	148	100	7
30	13.0	130	3.0	55	3.1	95	7	170	150	105	2
31	23.0	9	2.7	119	2.9	125	6	240	149	104	1
32	25.1	2	2.7	119	3.0	113	6	270	143	95	6
33	26.0	1	2.7	119	2.9	125	6	250	149	110	7
34	24.4	7	2.9	82	3.1	95	6	180	154	105	3
35	23.9	8	2.7	119	2.9	125	6	170	156	102	6
36	22.8	10	3.0	55	3.2	69	7	190	153	100	0
37	22.7	11	2.9	82	3.1	95	6	210	154	115	2
38	18.2	69	3.1	32	3.3	43	7	90	153	55	9
39	18.3	66	3.1	32	3.4	22	8	170	153	95	6
40	19.0	43	3.2	12	3.5	8	8	60	153	92	9
41	19.1	40	3.2	12	3.4	22	8	150	153	93	6
42	20.5	16	3.4	2	3.6	3	8	55	153	99	6
43	19.3	34	3.1	32	3.4	22	8	80	154	95	7
44	17.2	97	3.2	12	3.5	8	8	50	156	80	7
45	17.3	93	3.5	1	3.7	1	8	50	156	85	8
46	17.8	84	3.4	2	3.7	1	8	60	154	85	8
47	19.7	24	3.2	12	3.5	8	8	60	155	66	6
48	17.1	101	3.1	32	3.3	43	8	215	154	84	7
49	18.7	50	3.2	12	3.5	8	7	150	154	60	7
50	17.9	80	3.2	12	3.4	22	7	100	156	70	5
INIA 66	15.9	123	2.8	104	3.1	95	5	800	135	71	8
Kra	16.4	117	2.9	82	3.1	95	6	270	151	85	3
Nap Hal	22.3	12	3.1	32	3.3	43	7	300	149	60	4
54	18.8	46	3.2	12	3.4	22	7	110	153	85	8
55	18.5	58	3.0	55	3.3	43	8	200	152	80	4

Table 7. Protein and lysine values together with agronomic data for the entries in the second high protein-high lysine spring wheat observation nursery grown at Gorgan, Iran in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Mildew 0-9
56	18.7	50	3.1	32	3.4	22	8	200	149	82	7
57	16.8	110	3.1	32	3.4	22	8	170	153	80	8
58	16.8	110	3.2	12	3.5	8	8	50	153	82	8
59	16.2	120	2.9	82	3.2	69	7	350	143	85	7
60	18.3	66	2.9	82	3.2	69	7	260	149	102	7
61	18.8	46	2.9	82	3.2	69	5	550	135	84	8
62	16.7	113	2.9	82	3.2	69	5	610	143	75	7
63	18.0	75	3.1	32	3.4	22	6	160	154	80	8
64	17.5	89	2.9	82	3.1	95	7	500	136	90	7
65	17.7	87	2.9	82	3.2	69	7	140	156	75	8
66	18.5	58	2.9	82	3.1	95	8	300	147	84	7
67	19.2	37	3.0	55	3.2	69	8	100	153	90	7
68	17.0	104	2.9	82	3.1	95	6	360	143	75	8
69	16.9	107	2.9	82	3.1	95	8	420	143	80	6
70	16.9	107	2.8	104	3.0	113	6	545	142	92	5
71	18.1	72	2.9	82	3.2	69	6	330	143	72	1
72	18.6	54	3.0	55	3.2	69	7	140	143	115	2
73	16.1	121	2.9	82	3.2	69	7	240	153	90	7
74	16.6	115	2.9	82	3.2	69	6	340	138	84	8
75	17.8	84	2.9	82	3.2	69	6	320	143	92	7
76	16.8	110	2.9	82	3.2	69	6	490	143	95	2
77	17.2	97	2.8	104	3.1	95	6	540	143	90	5
78	17.1	101	3.0	55	3.2	69	7	250	143	91	0
79	18.7	50	2.9	82	3.2	69	8	150	149	85	1
80	17.9	80	3.1	32	3.3	43	8	150	149	86	6
81	18.5	58	3.1	32	3.3	43	6	200	153	95	5
82	18.1	72	3.0	55	3.2	69	6	110	153	100	6
83	18.5	58	2.9	82	3.2	69	7	200	149	90	7
84	17.5	89	2.9	82	3.2	69	7	200	150	100	8
85	18.4	62	3.0	55	3.2	69	7	110	149	85	4
86	18.3	66	2.9	82	3.2	69	7	270	146	92	6
87	19.0	43	2.9	82	3.1	95	8	250	143	82	5
88	17.5	89	3.0	55	3.3	43	7	340	143	100	6
89	14.7	129	3.0	55	3.2	69	4	560	137	105	1
90	16.7	113	2.8	104	3.1	95	4	640	133	85	1
91	16.5	116	2.9	82	3.2	69	5	720	133	85	0
92	17.1	101	3.0	55	3.3	43	5	550	136	90	2
93	17.2	97	3.0	55	3.2	69	5	465	135	95	3
94	15.5	125	3.0	55	3.2	69	4	740	137	96	8
95	16.3	119	3.1	32	3.4	22	4	440	138	100	8
96	17.3	93	3.0	55	3.2	69	6	420	143	102	5
97	19.4	30	3.1	32	3.3	43	7	450	143	100	4
98	17.8	84	3.1	32	3.4	22	7	490	137	90	7
99	19.4	30	3.0	55	3.2	69	7	400	146	93	4
100	18.6	34	2.9	82	3.2	69	7	420	141	95	7
INIA 66	16.1	121	2.8	104	3.0	113	4	900	162	104	9
Kra	16.4	117	2.9	82	3.1	95	6	200	143	100	4
Nap Hal	21.7	13	2.9	82	3.1	93	6	350	149	115	6
104	19.1	40	2.8	104	3.1	95	6	—	—	—	—
105	18.3	66	3.0	55	3.3	43	6	380	143	102	4
106	18.2	69	3.2	12	3.4	22	7	340	138	73	2
107	18.1	72	3.0	55	3.3	43	7	350	138	100	8
108	17.9	80	3.1	32	3.3	43	7	430	136	92	9
109	18.7	50	3.1	32	3.4	22	6	470	135	85	9
110	17.9	80	3.1	32	3.4	22	6	630	134	83	9

Table 7. Protein and lysine values together with agronomic data for the entries in the second high protein-high lysine wheat observation nursery grown at Gorgan, Iran in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Mildew 0-9
111	18.0	75	2.7	119	3.0	113	6	770	135	92	4
112	19.2	37	2.6	129	2.9	125	5	530	134	70	9
113	18.5	58	2.6	129	2.9	125	3	850	135	93	8
114	18.8	46	2.6	129	2.9	125	3	905	134	80	8
115	18.5	58	2.9	82	3.2	69	3	660	135	85	8
116	19.6	25	2.7	119	3.0	113	3	840	135	90	7
117	21.0	15	2.7	119	2.9	125	3	550	135	104	9
118	19.4	30	2.7	119	3.0	113	3	680	135	93	9
119	19.9	20	2.8	104	3.0	113	4	610	134	90	8
120	18.4	62	2.8	104	3.0	113	5	600	137	105	7
121	16.9	107	2.8	104	3.0	113	6	760	135	80	9
122	17.5	89	2.8	104	3.1	95	4	750	134	90	9
123	18.0	75	2.8	104	3.1	95	4	820	136	95	8
124	18.8	46	2.8	104	3.1	95	4	660	134	105	8
125	19.5	26	2.7	119	3.0	113	6	600	135	90	8
126	19.8	22	2.7	119	3.0	113	4	640	136	105	6
127	19.3	34	2.9	82	3.2	69	4	610	136	104	4
128	19.4	30	2.8	104	3.1	95	4	580	143	80	2
129	17.9	80	2.7	119	3.0	113	4	540	136	82	8
130	15.4	126	2.9	82	3.2	69	4	820	130	90	8
Mean	18.6		3.0		3.2		6.4	341.4	145.8	88.0	6.1

Correlation Coefficients

Protein	- .28**	- .31**
Lysine/protein		.96**

** Significant at the .01 level.

Means of the check varieties

INIA 66	15.9	2.8	3.0	760.0	143.0	86.7
Era	16.7	2.9	3.1	270.0	148.7	89.7
Nap Hal	21.9	3.0	3.2	326.7	149.0	95.0
Check means	18.2	2.9	3.1	452.2	146.9	90.4
$LSD_{.05}$ of the check means	1.1	0.1	0.1	273.1	24.5	31.3
Coefficient of variation %	2.6	2.0	1.7	21.7	7.3	15.3

Table 8. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine spring wheat observation nursery grown at Amman, (Wady Jabis) Jordan in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm	Leaf rust sev. %	Leaf rust resp.
INIA 66	18.8	47	2.7	118	2.9	121	3	95	100	5	R
Era	15.9	87	3.1	54	3.3	55	2	125	100	0	
Nap Hal	15.8	88	3.0	76	3.2	76	3	131	120	70	S
4	15.5	91	3.1	54	3.3	55	8	132	105	90	S
5	13.0	112	3.3	23	3.4	32	6	132	95	70	S
6	12.6	115	3.4	14	3.4	32	7	135	85	90	S
7	13.8	105	3.5	7	3.7	2	9	135	80	40	MS
8	11.2	121	3.6	3	3.5	13	8	135	95	45	MS
9	11.1	123	3.5	7	3.4	32	8	135	90	35	MS
10	11.2	121	3.5	7	3.4	32	8	135	88	60	MS
11	10.1	127	4.0	1	3.8	1	5	135	95	25	MR
12	9.9	129	3.4	14	3.1	96	7	135	100	15	MR
13	10.5	125	3.4	14	3.2	76	7	135	85	60	MS
14	9.4	130	3.5	7	3.1	96	6	135	88	40	MS
15	10.1	127	3.7	2	3.4	32	5	135	85	20	MR
16	10.1	127	3.4	14	3.2	76	5	135	75	25	MR
17	13.2	109	3.4	14	3.5	13	7	133	70	40	MS
18	11.8	118	3.6	3	3.6	5	6	135	70	25	MR
19	12.4	117	3.5	7	3.5	13	4	135	70	25	MR
20	14.1	102	3.2	35	3.3	55	3	133	70	20	MR
21	13.3	92	3.2	35	3.4	32	5	131	90	85	S
22	11.4	120	3.4	14	3.3	55	6	130	105	95	S
23	12.9	113	3.4	14	3.5	13	8	96	90	95	S
24	18.4	52	3.1	54	3.4	32	9	132	100	95	S
25	15.6	89	3.4	14	3.6	5	8	135	110	95	S
26	20.2	29	3.1	54	3.4	32	8	133	130	80	S
27	22.0	17	2.9	93	3.1	96	8	135	135	75	S
28	22.1	16	2.8	107	3.0	111	9	135	130	75	S
29	23.4	4	2.8	107	3.1	96	9	135	120	85	S
30	19.9	34	3.0	76	3.3	55	8	135	128	80	S
31	19.8	37	2.9	93	3.1	96	7	133	125	90	S
32	20.1	31	2.7	118	2.9	121	8	126	125	95	S
33	18.0	58	2.9	93	3.2	76	8	126	135	95	S
34	18.4	52	2.9	93	3.2	76	7	136	135	80	S
35	17.9	61	2.8	107	3.1	96	3	133	130	0	
36	16.3	83	3.1	54	3.4	32	5	133	125	80	S
37	17.9	61	3.0	76	3.3	55	4	135	130	85	S
38	18.2	55	3.3	23	3.6	5	8	132	98	95	S
39	20.2	29	2.8	107	3.1	96	8	132	95	70	S
40	17.3	73	3.2	35	3.5	13	7	132	95	100	V-S
41	24.3	6	3.1	54	3.4	32	9	135	90	15	MR
42	27.6	1	3.1	54	3.4	32	9	136	88	20	MR
43	26.4	2	2.9	93	3.2	76	9	135	100	20	MR
44	24.3	6	2.8	107	3.0	111	8	136	88	10	MR
45	24.5	5	3.2	35	3.4	32	9	136	95	10	MR
46	23.0	10	3.2	35	3.4	32	9	133	105	15	MR
47	23.6	3	3.1	54	3.3	55	9	135	63	35	MS
48	21.1	22	3.1	54	3.4	32	9	135	110	80	S
49	22.4	13	3.2	35	3.4	32	9	135	100	85	S
50	22.9	11	3.5	23	3.5	13	9	136	95	85	S

Table 8. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine spring wheat observation nursery grown at Amman, (Wady Jebis) Jordan in 1976. Continued.

Entry No.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm	Leaf rust sev. %	Leaf rust resp.
INIA 66	16.9	77	2.7	118	3.0	111	1	91	110	10	MR
Era	18.0	58	3.0	76	3.2	76	4	131	110	0	
Nap Nal	20.3	28	3.0	76	3.2	76	6	133	115	80	S
54	20.9	25	3.4	14	3.6	5	8	133	110	75	S
55	22.8	12	3.2	35	3.5	13	9	132	95	25	MR
56	17.3	73	3.1	54	3.4	32	8	140	93	75	S
57	19.7	40	3.1	54	3.3	55	8	126	98	85	S
58	22.4	13	3.0	76	3.3	55	9	129	90	90	S
59	14.5	98	3.1	54	3.3	55	7	111	110	60	MS
60	20.4	27	2.9	93	3.2	76	6	135	115	90	S
61	17.1	76	3.0	76	3.2	76	5	97	110	95	VS
62	14.7	97	3.2	35	3.4	32	5	105	100	90	S
63	18.3	54	3.1	54	3.3	55	7	136	100	90	S
64	14.3	100	3.1	54	3.3	55	6	133	120	85	S
65	19.8	37	3.1	54	3.4	32	7	136	105	95	VS
66	18.7	48	3.0	76	3.2	76	8	126	105	95	VS
67	21.9	18	3.0	76	3.2	76	8	130	100	90	S
68	16.3	83	3.0	76	3.2	76	6	136	100	70	S
69	17.5	69	3.0	76	3.3	55	7	136	95	45	MS
70	16.9	77	2.7	118	3.0	111	6	135	105	35	MS
71	16.0	85	3.1	54	3.4	32	4	103	98	25	MR
72	23.9	8	2.8	107	3.0	111	5	135	105	30	MS
73	18.1	56	3.1	54	3.4	32	9	126	98	60	MS
74	16.0	85	3.0	76	3.2	76	5	98	100	40	MS
75	17.8	64	3.0	76	3.2	76	5	136	110	30	MS
76	19.9	34	2.8	107	3.1	96	6	112	100	25	MR
77	17.9	61	2.9	93	3.2	76	6	112	110	25	MR
78	16.4	81	2.9	93	3.1	96	6	110	115	10	MR
79	22.3	15	3.0	76	3.3	55	7	126	100	60	MS
80	21.1	22	2.9	93	3.1	96	7	135	100	70	S
81	21.8	19	3.1	54	3.3	55	7	132	90	100	VS
82	23.2	9	3.3	23	3.5	13	7	136	100	100	VS
83	21.0	24	3.1	54	3.3	55	7	133	100	100	VS
84	21.1	22	3.1	54	3.3	55	7	133	95	100	VS
85	19.8	37	2.9	93	3.1	96	7	132	100	75	S
86	14.4	99	3.3	23	3.5	13	6	116	98	70	S
87	15.2	94	3.2	35	3.4	32	5	116	95	30	MS
88	16.3	83	3.1	54	3.4	32	4	115	105	15	MR
89	12.8	114	3.2	35	3.2	76	2	96	115	25	MR
90	13.4	108	2.9	93	3.0	111	4	97	120	25	MR
91	13.6	107	3.1	54	3.3	55	2	96	115	25	MR
92	14.8	96	3.0	76	3.2	76	3	97	98	40	MS
93	13.1	110	3.0	76	3.2	76	3	96	105	10	MR
94	11.0	124	3.2	35	3.1	96	5	103	110	15	MR
95	11.7	119	2.9	93	2.9	121	4	97	105	25	MR
96	12.6	115	3.3	23	3.3	55	5	107	105	60	MS
97	16.6	80	3.2	35	3.5	13	7	123	95	60	MS
98	13.9	104	3.2	35	3.4	32	4	98	105	60	MS
99	19.0	45	3.3	23	3.6	5	7	123	108	25	MR
100	14.1	102	3.2	35	3.3	55	6	110	110	45	MS

Table 8. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine spring wheat observation nursery grown at Ammon, (Wady Jabis) Jordan in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm	Leaf rust sev. %	Leaf rust resp.
INIA 66	15.6	89	2.7	118	3.0	111	1	90	110	5	R
Era	15.3	92	3.0	76	3.2	76	3	132	110	0	
Nap Hal	17.8	64	3.1	54	3.4	32	2	135	120	40	MS
104	17.9	61	2.8	107	3.0	111	3	133	105	25	MR
105	15.1	95	3.3	23	3.5	13	2	133	105	45	MS
106	17.5	69	2.8	107	3.1	96	2	133	95	60	MS
107	17.3	75	3.0	76	3.3	55	6	136	100	85	MS
108	14.3	100	3.2	35	3.4	32	5	132	95	90	S
109	13.7	106	3.1	54	3.2	76	5	132	100	75	S
110	13.1	110	3.4	14	3.5	13	3	97	105	75	S
111	18.7	48	2.8	107	3.0	111	3	90	100	25	MR
112	19.5	41	2.5	129	2.8	128	2	91	88	0	
113	19.1	44	2.6	125	2.8	128	2	90	95	0	
114	20.1	31	2.5	129	2.8	128	2	90	85	0	
115	18.5	50	2.7	118	2.9	121	2	91	90	tr	R
116	18.9	46	2.6	125	2.9	121	1	91	100	0	
117	17.5	69	2.7	118	2.9	121	1	98	95	tr	R
118	17.3	73	2.8	107	3.1	96	1	96	100	5	R
119	17.7	66	2.8	107	3.1	96	1	96	100	5	R
120	19.9	34	2.7	118	3.0	111	1	95	105	15	MR
121	17.6	67	2.9	93	3.1	96	1	95	110	5	R
122	18.1	56	2.9	93	3.1	96	1	96	115	5	R
123	20.6	26	2.6	125	2.8	128	2	97	98	0	
124	21.3	20	2.6	125	2.9	121	2	91	108	0	
125	19.8	37	2.6	125	2.9	121	1	95	108	0	
126	19.2	42	2.5	129	2.8	128	2	96	128	0	
127	18.4	52	2.8	107	3.0	111	2	96	130	15	MR
128	19.2	42	3.0	76	3.2	76	4	136	95	0	
129	16.8	79	2.9	93	3.1	96	1	102	100	0	
130	17.4	71	2.7	118	2.9	121	3	90	115	15	MR
Overall mean	17.5		3.05		3.24		5.4	121.2	102.6	47.5	

Correlation Coefficients

Protein	- .52**	- .20*
Lysine/protein		.86**

*,** Significant at the .05 and .01 levels, respectively.

Means of the check varieties

Era	16.4	3.03	3.23
INIA 66	17.1	2.70	2.97
Nap Hal	18.0	3.03	3.27
Check mean	17.2	2.92	3.16
$LSD_{.05}$ of check means	3.9	0.12	0.20
Coefficient of variation %	10.0	1.80	2.79

Table 9. Protein and lysine values together with seed grades for entries in the second high protein-high lysine spring wheat observation nursery grown at Logrono, Spain in 1976.

Entry 1/ no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade
	%	rank	%	rank	%	rank	1-9
INIA 66	16.8	48	2.7	83	3.0	81	1
Era	13.5	96	3.1	31	3.2	57	1
Nap Hal	17.6	31	2.9	65	3.2	57	3
4	17.4	35	3.0	51	3.3	40	5
5	15.3	82	3.1	31	3.4	20	4
6	14.7	91	3.0	51	3.2	57	4
7	15.9	66	3.1	31	3.4	20	4
8	16.4	52	3.0	51	3.3	40	4
9	16.3	56	3.1	31	3.3	40	5
10	16.5	50	3.0	51	3.2	57	5
11	15.8	70	3.2	11	3.4	20	4
12	15.9	66	3.1	31	3.3	40	5
13	15.4	81	3.1	31	3.3	40	5
14	16.4	52	3.0	51	3.3	40	5
15	17.4	35	3.1	31	3.3	40	5
16	16.0	63	3.1	31	3.4	20	6
17	16.0	63	2.9	65	3.2	57	5
18	16.3	56	3.3	3	3.5	6	5
19	15.6	78	3.1	31	3.3	40	5
20	15.8	70	3.1	31	3.4	20	5
21	15.7	75	3.2	11	3.4	20	5
22	15.8	70	3.2	11	3.4	20	5
23	17.2	41	3.1	31	3.3	40	6
24	16.9	45	3.1	31	3.4	20	6
25	16.1	60	3.2	11	3.5	6	5
26	19.7	14	2.9	65	3.2	57	5
27	21.6	6	2.8	76	3.1	71	5
28	20.3	10	2.7	83	2.9	88	5
29	21.4	8	2.8	76	3.1	71	5
30	18.0	26	2.8	76	3.0	81	4
31	20.1	13	2.9	65	3.1	71	4
32	21.3	9	2.6	90	2.9	88	4
33	21.8	4	2.6	90	2.8	93	4
34	18.3	25	2.9	65	3.2	57	4
35	21.7	5	2.6	90	2.9	88	5
36	22.0	3	2.9	65	3.1	71	5
37	20.2	11	2.9	65	3.1	71	6
38	16.3	56	3.1	31	3.3	40	5
39	15.7	75	3.0	51	3.2	57	5
40	16.3	56	3.1	31	3.4	20	6
41	15.1	88	2.9	65	3.1	71	6
42	15.5	79	3.3	3	3.5	6	6
43	15.1	88	3.1	31	3.3	40	5
44	15.8	70	3.0	51	3.2	57	5
45	15.7	75	3.2	11	3.4	20	5
46	16.3	56	3.3	3	3.6	1	6
47	15.8	70	3.1	31	3.4	20	6
48	14.3	93	3.2	11	3.4	20	6
49	15.2	85	3.2	11	3.5	6	6
50	15.2	85	3.1	31	3.3	40	6
INIA 66	17.5	33	2.6	90	2.9	88	1
Era	13.7	94	2.9	65	3.0	81	1
Nap Hal	17.5	33	3.1	31	3.4	20	3
54	15.1	88	3.1	31	3.4	20	5
55	17.9	27	3.1	31	3.4	20	5

1/ Missing entries include 78, 81-83, 86, 89-95, 98-105, 107, 112, 113, 116-122, 126-128, and 130.

Table 9. Protein and lysine values together with seed grades for entries in the second high protein-high lysine spring wheat observation nursery grown at Logrono, Spain in 1976. Concluded.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade 1-9
	%	rank	%	rank	%	rank	
56	14.6	92	3.2	11	3.4	20	5
57	15.2	85	3.1	31	3.3	40	5
58	14.8	90	3.2	11	3.4	20	5
59	18.9	20	2.7	83	3.0	81	4
60	13.7	94	3.0	51	3.2	57	4
61	20.2	11	2.9	65	3.1	71	4
62	15.7	75	3.0	51	3.3	40	4
63	15.7	75	3.1	31	3.5	40	5
64	18.7	23	2.7	83	3.0	81	4
65	16.0	63	3.1	31	3.3	40	4
66	17.3	38	2.8	76	3.1	71	5
67	19.5	17	2.9	65	3.2	57	5
68	19.2	19	2.7	83	2.9	88	3
69	17.7	30	2.9	65	3.1	71	3
70	16.9	45	2.8	76	3.0	81	3
71	16.6	49	3.0	51	3.3	40	3
72	18.9	20	3.2	11	3.5	6	5
73	19.6	15	2.8	76	3.1	71	5
74	17.2	41	3.1	31	3.4	20	5
75	15.3	82	3.0	51	3.3	40	5
76	17.8	29	3.1	31	3.4	20	6
77	17.2	41	2.9	65	3.2	57	5
79	17.9	27	2.9	65	3.2	57	5
80	17.5	33	3.3	3	3.5	6	4
84	16.2	59	3.0	51	3.3	40	4
85	18.8	22	2.7	83	3.0	81	3
87	17.3	38	2.8	76	3.1	71	5
88	17.3	38	2.8	76	3.1	71	5
96	16.9	45	3.2	11	3.5	6	3
97	16.9	45	3.0	51	3.2	57	2
106	15.5	79	3.2	11	3.5	6	3
108	15.9	66	3.1	31	3.3	40	3
109	16.9	45	3.3	3	3.6	1	2
110	16.4	52	3.1	31	3.4	20	1
111	16.1	60	2.9	65	3.1	71	2
114	19.4	18	2.5	95	2.7	95	1
115	19.6	15	2.6	90	2.9	88	1
123	22.2	2	2.6	90	2.8	93	1
124	23.2	1	2.6	90	2.8	93	2
125	21.6	6	2.5	95	2.7	95	2
129	18.6	24	2.6	90	2.9	88	1
Overall mean	17.2		2.97		3.22		4.2

Correlation Coefficients

Protein		- .64**
Lysine/protein	- .69**	.95**

** Indicates significance at the P = .01 level.

Means of the check varieties

Era	13.6	3.00	3.10
INIA 66	17.2	2.65	2.95
Nap Hal	17.6	3.00	3.30
Check mean	16.1	2.88	3.12
LSD .05 of check means	1.2	0.63	0.63
Coefficient of variation %	1.8	5.11	4.72

Table 10. Protein and lysine mean values together with yield and plant height readings for entries in the second high protein-high lysine spring wheat observation nursery grown in four replications at Yuma, Arizona in 1976.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield		Plant height
	%	rank	%	rank	%	rank	q/ha	rank	cm
INIA 66	14.5	36	3.0	91	3.1	91	53.2	18	93
Era	13.0	100	3.2	59	3.2	71	52.4	26	105
Nap Hal	15.3	25	3.1	73	3.3	59	34.0	125	126
4	13.4	81	3.2	61	3.3	62	43.3	93	101
5	12.6	111	3.4	26	3.4	34	56.3	7	94
6	12.6	109	3.4	27	3.4	30	49.5	39	98
7	13.5	71	3.2	53	3.3	56	39.3	108	92
8	12.6	110	3.3	40	3.3	54	45.6	72	99
9	11.9	124	3.4	17	3.4	24	47.4	60	97
10	13.4	84	3.3	38	3.4	39	44.2	83	98
11	12.9	102	3.5	3	3.6	1	45.4	74	98
12	12.2	120	3.5	10	3.5	12	49.8	37	98
13	12.3	118	3.4	18	3.4	20	54.9	12	99
14	11.7	129	3.5	6	3.4	17	53.7	15	101
15	11.8	127	3.5	9	3.4	17	51.2	30	103
16	12.5	114	3.3	29	3.4	39	54.8	13	103
17	13.0	98	3.2	67	3.2	76	43.9	86	99
18	13.0	96	3.5	2	3.6	2	44.8	80	98
19	13.0	95	3.5	8	3.5	3	47.7	55	101
20	13.4	78	3.3	41	3.3	44	44.8	81	96
21	13.3	88	3.3	32	3.4	26	47.0	66	95
22	11.9	124	3.5	4	3.5	12	52.2	28	105
23	12.0	123	3.4	28	3.3	52	50.4	33	98
24	13.4	81	3.5	3	3.5	4	46.7	69	99
25	13.1	91	3.3	34	3.4	35	47.9	54	110
26	16.3	16	3.0	89	3.2	75	37.7	115	135
27	17.6	6	2.8	115	3.0	112	32.3	128	131
28	17.3	7	2.9	109	3.1	98	36.3	121	127
29	18.4	1	2.9	106	3.1	93	27.0	130	121
30	14.7	33	3.0	100	3.1	97	39.0	109	127
31	16.7	13	3.0	97	3.2	87	37.4	116	119
32	17.2	9	2.8	124	3.0	118	36.7	120	127
33	17.7	5	2.8	121	3.0	116	34.9	123	124
34	14.8	31	3.2	48	3.4	25	33.1	127	126
35	17.3	8	3.0	94	3.2	81	31.8	129	130
36	16.6	14	3.0	90	3.2	74	36.2	122	122
37	15.7	22	3.2	63	3.4	30	37.0	117	128
38	13.5	74	3.3	35	3.4	30	56.7	5	95
39	11.8	127	3.2	50	3.2	88	50.7	31	94
40	14.3	41	3.2	67	3.3	56	47.3	62	107
41	12.6	113	3.5	7	3.5	7	42.5	99	97
42	13.5	72	3.3	36	3.4	26	41.2	103	97
43	14.2	47	3.2	65	3.3	58	43.0	96	100
44	13.3	88	3.2	56	3.3	61	44.6	82	99
45	13.0	98	3.5	12	3.5	5	48.5	51	113
46	12.3	118	3.5	5	3.5	8	49.8	37	109
47	13.1	94	3.4	20	3.5	14	38.8	111	89
48	11.5	130	3.6	1	3.5	11	53.7	14	114
49	12.1	121	3.5	14	3.4	16	47.6	57	104
50	12.8	104	3.5	15	3.5	9	45.3	76	106

Table 10. Protein and lysine mean values together with yield and plant height readings for entries in the second high protein-high lysine spring wheat observation nursery grown in four replications at Yuma, Arizona in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield		Plant height
	%	rank	%	rank	%	rank	q/ha	rank	cm
INIA 66	14.0	53	2.9	113	3.0	118	57.2	4	94
Era	13.8	66	3.2	58	3.3	56	38.6	112	104
Nap Hal	15.4	23	3.1	79	3.3	59	33.3	126	127
54	12.5	114	3.5	10	3.5	9	49.5	41	107
55	12.5	116	3.4	24	3.4	32	48.8	47	101
56	12.1	122	3.4	22	3.3	42	55.2	11	99
57	12.6	111	3.4	19	3.4	19	49.1	45	107
58	13.4	78	3.4	16	3.5	5	52.9	21	101
59	12.8	104	3.2	56	3.2	71	55.7	9	99
60	11.9	126	3.4	21	3.3	47	53.5	17	112
61	16.8	12	2.9	110	3.1	100	36.8	119	97
62	13.9	57	3.1	70	3.2	67	47.6	58	96
63	13.9	55	3.3	45	3.4	38	57.9	3	104
64	14.3	43	3.0	92	3.1	94	39.6	107	100
65	13.9	60	3.2	53	3.3	50	55.4	10	100
66	14.1	48	3.1	76	3.2	73	43.1	95	103
67	14.9	29	2.9	105	3.1	104	43.7	88	105
68	15.1	28	2.9	108	3.1	108	43.5	90	91
69	14.1	51	3.1	84	3.2	78	46.9	67	100
70	14.0	53	3.0	98	3.1	103	52.5	24	97
71	14.1	48	3.1	86	3.2	85	42.0	101	97
72	12.8	107	3.4	25	3.4	22	38.9	110	117
73	13.4	81	3.2	64	3.3	66	45.9	71	102
74	13.3	85	3.2	62	3.3	64	45.2	78	81
75	13.1	91	3.1	71	3.2	84	45.3	77	104
76	12.8	106	3.2	47	3.3	63	44.0	85	111
77	13.5	74	3.1	79	3.2	86	46.8	68	111
78	13.2	90	3.1	81	3.2	89	49.9	36	114
79	12.3	117	3.3	31	3.3	51	43.4	91	106
80	13.3	88	3.4	23	3.4	15	47.3	63	100
81	14.0	52	3.2	49	3.3	42	44.1	84	103
82	13.5	74	3.3	38	3.4	32	50.2	35	112
83	14.4	40	3.2	59	3.3	45	43.2	94	100
84	13.3	85	3.3	44	3.3	46	47.6	56	97
85	15.2	26	2.9	102	3.1	101	42.3	100	103
86	13.7	68	3.0	88	3.1	92	48.7	49	100
87	14.3	43	2.9	104	3.0	109	38.6	113	96
88	14.5	35	3.1	72	3.3	64	45.2	79	99
89	12.7	108	3.1	81	3.1	93	53.5	16	100
90	13.9	60	2.9	101	3.0	109	48.7	48	92
91	13.6	70	3.0	92	3.1	101	49.5	39	91
92	13.0	96	3.3	42	3.3	53	45.3	75	92
93	13.8	65	3.1	76	3.2	76	49.2	43	90
94	13.9	55	3.0	96	3.1	98	45.6	73	92
95	13.7	68	3.1	78	3.2	80	56.1	8	98
96	12.9	101	3.2	56	3.3	67	47.6	58	101
97	13.8	66	3.3	46	3.3	42	47.4	61	98
98	13.9	60	3.2	52	3.3	48	47.0	65	98
99	13.8	63	3.3	37	3.4	23	43.7	87	102
100	12.9	102	3.1	76	3.2	89	52.6	23	100

Table 10. Protein and lysine mean values together with yield and plant height readings for entries in the second high protein-high lysine spring wheat observation nursery grown in four replications at Yuma, Arizona in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield q/ha	Yield rank	Plant height cm
INIA 66	13.8	63	2.8	114	2.9	114	58.5	2	95
Era	14.3	41	3.1	73	3.2	70	43.4	92	107
Nap Hal	14.8	32	3.2	69	3.3	49	40.6	104	129
104	14.5	37	3.1	86	3.2	78	51.4	29	103
105	13.4	73	3.2	67	3.2	69	48.5	52	110
106	13.1	93	3.3	33	3.4	37	46.3	70	104
107	13.8	63	3.1	83	3.2	83	52.3	27	103
108	14.5	37	3.2	51	3.4	35	38.4	114	100
109	13.5	74	3.3	30	3.4	21	40.2	105	91
110	14.1	50	3.3	42	3.4	28	56.6	6	93
111	14.8	30	2.9	107	3.1	107	60.6	1	93
112	16.8	11	2.7	127	2.9	127	42.6	98	76
113	15.9	20	2.8	123	3.0	123	48.6	50	87
114	16.9	10	2.7	128	2.9	128	43.0	97	86
115	16.0	19	2.8	120	3.0	118	49.1	44	89
116	16.5	15	2.8	119	3.0	115	47.0	64	92
117	16.1	17	2.7	125	2.9	126	50.3	34	96
118	15.2	27	2.9	111	3.0	111	52.7	22	95
119	15.3	24	2.8	118	3.0	118	49.0	46	89
120	14.4	39	2.8	116	3.0	121	43.6	89	91
121	13.4	78	3.0	94	3.1	105	53.1	19	90
122	13.9	58	3.1	85	3.2	82	48.4	53	97
123	17.9	3	2.7	126	2.9	125	41.3	102	79
124	18.0	2	2.7	129	2.9	130	34.7	124	85
125	17.9	3	2.7	129	2.9	129	36.8	118	89
126	15.8	21	2.8	117	3.0	113	40.1	106	110
127	16.1	18	2.8	121	3.0	122	49.3	42	108
128	14.2	45	2.9	102	3.1	106	53.1	20	102
129	14.6	34	3.0	99	3.1	96	52.4	25	87
INIA 66	14.2	46	2.9	112	3.0	114	50.6	32	92
Mean	14.0		3.1		3.2		46.2		101.9
$LSD_{.05}$ of the means	1.0		0.2		0.2		10.0		6.2
Coefficient of variation %	5.2		3.9		3.1		15.5		4.4

Correlation Coefficients

Protein		-.79**	-.63**	-.47**	.14**
Unadjusted lysine			.96**	.26**	.11*

*, ** Significant at the P = .05, .01 level, respectively.

Means of the check varieties

INIA 66	14.1	2.9	3.0	56.3	94
Era	13.7	3.2	3.2	44.8	105
Nap Hal	15.2	3.1	3.4	41.4	121

Table 11. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine spring wheat observation nursery grown at Davis, California, USA in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to maturity from Jan. 1	Plant height cm	Shattering %	Stripe rust sev. %	Stripe rust resp.
INIA 66	12.1	86	3.1	94	3.1	112	2	195	110	10	10	R
Kra	11.7	98	3.2	76	3.2	91	5	212	110	5	15	R
Nap Hal	14.4	28	3.2	76	3.3	65	5	202	120	95	5	S
4	12.8	58	3.3	54	3.4	34	5	213	110	20	30	R
5	12.8	58	3.2	76	3.3	65	4	213	109	20	50	
6	11.3	101	3.4	34	3.3	65	4	213	105	0	50	
7	12.6	69	3.4	34	3.4	34	6	214	100	10	90	S
8	11.0	108	3.5	18	3.4	34	7	215	95	15	90	S
9	10.5	118	3.7	2	3.6	2	6	220	92	2	90	S
10	12.5	74	3.4	34	3.5	11	6	219	100	10	90	S
11	12.0	91	3.3	54	3.3	65	3	216	108	30	2	MR
12	10.6	115	3.6	7	3.5	11	4	215	107	15	5	R
13	11.1	105	3.5	18	3.4	34	3	215	102	2	20	MR
14	10.7	112	3.5	18	3.4	34	5	217	104	2	10	MR
15	10.5	118	3.6	7	3.4	34	5	214	106	10	5	R
16	10.1	125	3.6	7	3.4	34	4	214	105	5	10	MR
17	12.8	58	3.3	54	3.4	34	6	212	110	5	20	MR
18	11.3	101	3.4	34	3.3	65	4	213	106	10	0	
19	11.0	108	3.5	18	3.4	34	3	215	104	30	2	R
20	12.0	91	3.3	54	3.3	65	4	212	107	40	2	R
21	12.2	80	3.3	54	3.3	65	3	212	98	50	2	R
22	10.1	125	3.4	34	3.2	91	4	214	111	30	30	MR
23	9.4	129	3.7	2	3.4	34	4	210	100	5	40	MS
24	12.5	74	3.3	54	3.4	34	3	212	108	20	2	R
25	11.2	103	3.4	34	3.4	34	3	213	106	30	10	MR
26	15.2	22	3.1	94	3.3	65	7	213	136	80	5	MS
27	17.0	9	3.0	106	3.2	91	7	203	133	90	30	S
28	9.3	130	3.5	18	3.1	112	4	203	141	80	10	MR
29	20.1	1	2.8	124	3.1	112	7	206	137	70	40	MS
30	17.7	5	2.8	124	3.1	112	7	213	135	60	50	S
31	18.7	2	2.9	116	3.2	91	5	213	140	50	10	MR
32	17.6	6	3.0	106	3.3	65	5	212	142	80	50	S
33	17.9	4	2.9	116	3.2	91	6	212	134	80	30	MS
34	12.8	58	3.3	54	3.4	34	5	213	140	60	40	MS
35	16.3	13	2.9	116	3.2	91	5	209	140	80	5	R
36	15.6	18	3.1	94	3.3	65	5	207	140	70	15	MR
37	12.8	58	3.2	76	3.3	65	3	211	135	30	2	R
38	12.2	80	3.4	34	3.3	11	4	217	85	10	100	S
39	10.3	122	3.4	34	3.2	91	4	212	100	15	60	R
40	11.1	103	3.3	54	3.2	91	4	213	115	20	30	R
41	10.6	115	3.6	7	3.4	34	5	212	102	15	30	R
42	11.0	108	3.6	7	3.5	11	5	213	104	25	60	S
43	10.2	124	3.5	18	3.3	65	4	210	103	20	80	S
44	9.8	127	3.5	18	3.2	91	4	214	101	10	60	S
45	10.3	122	3.8	1	3.6	2	4	213	115	2	80	MS
46	9.8	127	3.6	7	3.3	65	3	214	115	8	40	MS
47	13.4	48	3.3	54	3.4	34	5	215	82	15	40	MS
48	10.4	120	3.5	18	3.4	34	4	215	120	25	20	R
49	12.2	80	3.4	34	3.4	34	5	213	110	5	10	MS
50	11.8	97	3.4	34	3.4	34	5	213	112	30	20	MR

Table 11. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine spring wheat observation nursery grown at Davis, California, USA in 1976. Continued.

Entry No.	Protein %	Protein %	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to maturity from Jan. 1	Plant height cm	Shattering %	Stripe rust sev. %	Stripe rust resp.
INIA 66	11.4	100	3.1	94	3.0	126	3	195	113	15	10	MR
Yra	12.6	69	3.1	94	3.1	122	4	212	111	30	20	MR
Nap Hal	13.5	44	3.1	94	3.3	65	4	203	118	80	30	MR
54	14.1	31	3.0	106	3.2	91	6	213	107	55	30	MR
55	14.3	29	3.3	54	3.5	11	5	213	98	10	90	S
56	14.5	26	3.2	76	3.4	34	5	209	98	15	10	R
57	13.8	37	3.2	76	3.3	65	6	214	110	20	10	R
58	16.2	15	2.9	116	3.1	112	6	214	90	2	100	S
59	12.2	80	3.3	54	3.3	65	4	203	120	70	10	R
60	10.3	122	3.2	76	3.0	126	4	206	111	15	90	S
61	16.1	16	2.8	124	3.0	126	2	198	113	10	60	S
62	12.2	80	3.2	76	3.3	65	3	200	105	30	5	MR
63	12.6	69	3.3	54	3.3	65	3	213	116	40	20	S
64	12.0	91	3.3	54	3.3	65	2	198	107	10	10	MS
65	10.7	112	3.5	18	3.4	94	3	214	109	15	40	S
66	11.9	95	3.3	54	3.3	65	3	211	113	5	10	R
67	12.6	69	3.3	54	3.3	65	4	212	115	30	5	MR
68	12.8	58	3.0	106	3.1	112	3	204	106	20	5	R
69	12.5	74	3.2	76	3.2	91	3	210	112	20	20	MS
70	12.3	77	3.2	76	3.2	91	3	206	114	5	5	MS
71	13.1	51	3.2	76	3.3	65	4	205	111	15	5	MS
72	14.1	31	3.3	54	3.5	11	5	211	115	70	2	R
73	15.5	19	3.1	94	3.4	34	6	212	115	40	2	MR
74	12.7	64	3.3	54	3.4	34	4	208	104	50	10	MS
75	12.6	69	3.4	34	3.5	11	4	207	118	5	10	MS
76	14.9	23	3.2	76	3.4	34	5	207	121	90	5	R
77	14.5	26	3.1	94	3.2	91	5	211	119	80	10	MR
78	13.5	44	3.2	76	3.3	65	5	210	117	85	20	MR
79	14.2	30	3.2	76	3.4	34	3	208	110	50	5	R
80	16.9	10	3.1	94	3.4	34	6	211	103	35	2	R
81	16.0	17	3.0	106	3.2	91	4	214	104	1	2	R
82	13.9	34	3.2	76	3.4	34	2	213	106	25	5	R
83	13.2	49	3.3	54	3.4	34	3	213	114	15	2	R
84	11.6	99	3.4	34	3.3	65	3	212	112	2	2	R
85	13.8	37	2.9	116	3.1	112	3	209	118	20	0	
86	12.4	76	3.2	76	3.2	91	4	205	109	5	2	S
87	13.1	51	3.2	76	3.3	65	4	207	106	5	5	S
88	12.8	58	3.3	54	3.3	65	3	205	111	2	0	
89	10.6	115	3.4	34	3.2	91	2	205	121	5	0	
90	12.7	64	3.1	94	3.2	91	2	201	118	15	10	S
91	13.1	51	3.0	106	3.1	112	3	201	114	10	20	S
92	13.1	51	3.2	76	3.3	65	3	205	106	2	5	MS
93	12.7	64	3.3	54	3.4	34	3	203	113	10	5	MS
94	12.0	91	3.4	34	3.4	34	3	203	116	15	60	S
95	10.8	111	3.5	18	3.3	65	3	203	120	10	90	S
96	12.0	91	3.4	34	3.4	34	4	200	119	15	2	MS
97	13.5	44	3.4	34	3.5	11	5	207	117	40	5	MS
98	13.7	40	3.2	76	3.4	34	5	207	109	30	40	S
99	13.5	44	3.5	18	3.6	2	6	209	114	20	10	MS
100	10.9	110	3.5	18	3.4	34	4	206	115	2	40	S

Table 11. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine spring wheat observation nursery grown at Davis, California, USA in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to maturity from Jan. 1	Plant height cm	Shattering %	Stripe rust sev. %	Stripe rust resp.
INIA 66	12.2	80	3.1	94	3.1	112	2	196	115	5	2	R
Era	11.2	103	3.3	54	3.2	91	3	213	120	15	10	R
Map Hal	13.7	40	3.3	54	3.5	11	3	207	122	80	5	MS
104	15.5	19	2.9	116	3.2	91	4	211	103	20	2	R
105	12.1	86	3.5	18	3.5	11	3	206	115	20	60	MS
106	12.0	91	3.5	18	3.5	11	4	209	108	2	60	S
107	12.1	86	3.3	54	3.4	34	4	204	109	10	0	
108	11.9	95	3.5	18	3.5	11	4	206	105	2	0	
109	12.1	86	3.6	7	3.6	2	2	204	107	2	2	R
110	13.5	44	3.4	34	3.5	11	3	201	105	10	2	MR
111	12.8	58	3.0	106	3.1	112	3	202	105	30	0	
112	17.6	6	2.7	129	2.9	130	3	198	100	2	0	
113	13.7	40	3.0	106	3.2	91	2	201	110	5	0	
114	14.9	23	2.8	124	3.0	126	3	195	105	2	0	
115	13.9	34	3.0	106	3.1	112	1	195	108	2	0	
116	15.3	21	2.9	116	3.2	91	1	195	112	2	0	
117	14.6	25	2.9	116	3.1	112	1	197	118	5	5	MR
118	12.6	69	3.1	94	3.1	112	1	197	115	2	10	MS
119	13.5	44	3.1	94	3.2	91	1	197	104	2	40	S
120	12.1	86	3.1	94	3.1	112	1	201	115	10	0	
121	10.5	118	3.3	54	3.1	112	1	201	115	25	0	
122	12.7	64	3.2	76	3.3	65	2	199	120	30	5	R
123	16.3	13	2.8	124	3.1	112	1	196	118	1	0	
124	16.6	11	2.9	116	3.1	112	2	196	110	2	0	
125	18.3	3	2.8	124	3.0	126	2	196	115	2	0	
126	14.0	33	2.9	116	3.1	112	1	201	125	45	0	
127	13.8	37	3.0	106	3.1	112	1	201	130	15	0	
128	13.0	54	3.1	94	3.2	91	2	212	105	10	0	
129	17.3	8	2.7	129	3.0	126	2	210	100	20	0	
130	16.5	12	2.7	129	3.0	126	2	196	110	2	2	MR
Overall mean	13.0		3.23		3.29		3.7	206.3	112.2	24.0	21.2	

Correlation Coefficients

Protein	- .82**	- .36**
Lysine/protein		.77**

** Significant at the P = .01 level.

Means of the check variation

Era	11.8	3.20	3.17
INIA 66	11.9	3.10	3.07
Map Hal	13.9	3.20	3.37
Check mean	12.5	3.17	3.20
$LSD_{.05}$ check means	1.4	0.13	0.13
Coefficient of variation %	5.1	1.82	1.80

Table 12. Means and ranks of protein, lysine/protein and adjusted lysine/protein for the entries in the second high protein-high lysine spring wheat observation nursery grown at 5 sites a/ in 1976 with yield data from Yuma, Arizona.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield	
	%	rank	%	rank	%	rank	q/ha	rank
29	21.1	1	2.9	110	3.1	98	27.0	130
33	19.7	2	2.8	116	3.1	107	34.9	123
32	19.6	3	2.8	116	3.1	103	36.7	120
31	19.0	4	2.9	104	3.1	94	37.4	116
27	18.9	5	2.9	97	3.2	90	32.3	128
35	18.9	6	2.9	106	3.1	98	31.8	129
125	18.8	7	2.7	127	2.9	127	36.8	118
124	18.7	8	2.7	127	2.9	124	34.7	124
34	18.1	9	3.1	76	3.3	54	33.1	127
Nap Hal	17.9	10	3.1	76	3.3	54	33.3	126
112	17.9	11	2.6	130	2.9	130	42.6	98
26	17.8	12	3.0	90	3.2	75	37.7	115
123	17.8	13	2.7	125	3.0	119	41.3	102
36	17.7	14	3.1	73	3.3	50	36.2	122
116	17.7	15	2.7	122	3.0	115	47.0	64
42	17.7	16	3.3	30	3.4	22	41.2	103
114	17.4	17	2.6	129	2.9	129	43.0	97
28	17.3	18	3.0	92	3.1	107	36.3	121
Nap Hal	17.2	19	3.1	76	3.2	67	34.0	125
47	17.2	20	3.3	36	3.4	22	38.8	111
126	17.1	21	2.7	126	3.0	124	40.1	106
37	17.1	22	3.1	76	3.3	54	37.0	117
43	17.0	23	3.1	57	3.3	54	43.0	96
81	16.9	24	3.1	57	3.3	50	44.1	84
67	16.8	25	3.1	73	3.2	75	43.7	88
115	16.8	25	2.8	116	3.0	115	49.1	44
72	16.8	27	3.1	65	3.3	63	38.9	110
113	16.7	28	2.7	122	3.0	124	48.6	50
54	16.7	29	3.3	30	3.4	16	49.5	41
80	16.7	29	3.1	57	3.3	54	47.3	63
117	16.7	29	2.8	113	3.0	112	49.3	42
55	16.7	32	3.3	30	3.5	8	48.8	47
61	16.6	33	2.9	101	3.1	94	36.8	119
82	16.6	34	3.2	49	3.3	43	50.2	35
117	16.4	35	2.8	116	3.0	122	50.3	34
129	16.4	35	2.8	121	3.0	115	52.4	25
79	16.4	37	3.0	87	3.2	67	43.4	91
83	16.4	37	3.1	57	3.3	47	43.2	94
49	16.3	39	3.3	24	3.4	16	47.6	57
Nap Hal	16.3	40	3.1	65	3.3	50	40.6	104
58	16.2	41	3.2	46	3.4	35	52.9	21
119	16.2	41	2.9	106	3.1	111	49.0	46
104	16.2	43	2.9	110	3.1	103	51.4	29
128	16.1	44	3.0	96	3.2	90	53.1	20
111	16.0	45	2.8	116	3.0	119	60.6	1
38	16.0	45	3.3	19	3.5	2	56.7	5
99	16.0	47	3.2	38	3.4	22	43.7	87
41	16.0	47	3.4	15	3.5	12	42.5	99
30	16.0	49	3.0	95	3.2	88	39.1	109
50	15.9	50	3.4	11	3.5	8	45.3	76

a/ Sites include: Amman, Jordan; Gorgan, Iran; Santiago, Chile; Davis, California, USA; and Yuma, Arizona, USA.

Table 12. Means and ranks of protein, lysine/protein and adjusted lysine/protein for the entries in the second high protein-high lysine spring wheat observation nursery grown at 5 sites in 1976 with yield data from Yuma, Arizona. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield	
	%	rank	%	rank	%	rank	q/ha	rank
43	15.9	51	3.5	1	3.6	1	48.5	51
83	15.9	52	2.9	97	3.1	98	42.3	100
130	15.8	53	2.7	122	3.0	122	50.6	32
24	15.8	54	3.2	38	3.4	16	48.7	69
120	15.5	55	2.9	106	3.0	115	43.6	89
44	15.5	55	3.2	38	3.3	30	44.6	82
76	15.5	57	3.1	76	3.2	67	44.0	85
118	15.5	57	2.9	110	3.0	112	52.7	22
66	15.4	59	3.1	76	3.2	81	43.1	95
97	15.4	59	3.2	38	3.4	31	47.4	61
84	15.3	61	3.2	49	3.3	54	47.6	56
88	15.3	61	3.1	65	3.3	54	45.2	79
4	15.3	63	3.2	37	3.4	35	43.3	93
46	15.2	64	3.4	7	3.5	4	49.8	37
68	15.2	64	2.9	101	3.1	103	43.5	90
77	15.2	64	2.9	104	3.1	107	46.8	68
122	15.2	67	2.9	97	3.1	98	48.4	53
71	15.1	68	3.1	76	3.2	67	42.0	101
48	15.0	69	3.4	15	3.5	12	53.7	14
73	15.0	70	3.1	76	3.3	63	45.9	71
70	15.0	71	2.9	101	3.1	107	52.5	24
INIA 66	14.9	72	2.8	113	3.0	124	53.2	18
69	14.9	72	3.1	76	3.2	81	46.9	67
57	14.9	74	3.3	30	3.4	31	49.1	45
63	14.9	74	3.2	46	3.3	47	57.9	3
56	14.9	74	3.3	24	3.4	22	55.2	11
107	14.9	74	3.1	57	3.3	54	52.3	27
87	14.9	78	3.1	76	3.2	81	38.6	113
60	14.9	78	3.1	57	3.2	81	53.5	17
78	14.9	78	3.0	90	3.2	90	49.9	36
Era	14.8	81	3.0	87	3.1	94	38.6	112
40	14.8	82	3.3	24	3.4	16	47.0	62
65	14.7	83	3.2	43	3.3	43	55.4	10
39	14.7	84	3.1	54	3.2	67	50.7	31
106	14.7	85	3.2	43	3.3	43	46.3	70
INIA 66	14.7	86	2.8	113	3.0	119	57.2	4
98	14.6	87	3.2	49	3.4	35	47.0	65
7	14.6	88	3.3	21	3.5	8	39.3	108
21	14.6	88	3.3	30	3.4	35	47.0	66
INIA 66	14.6	90	2.9	106	3.0	112	58.5	2
75	14.6	91	3.1	65	3.2	75	45.3	77
25	14.5	92	3.4	11	3.5	4	47.9	54
20	14.4	93	3.3	24	3.4	31	44.8	81
Era	14.3	94	3.0	92	3.1	94	52.4	26
92	14.3	95	3.1	65	3.2	67	45.3	75
108	14.3	96	3.2	43	3.3	43	38.4	114
17	14.2	97	3.3	21	3.4	22	43.9	86
62	14.2	98	3.1	65	3.3	63	47.6	58
74	14.1	99	3.1	57	3.2	67	45.2	78
86	14.1	99	3.1	65	3.2	75	48.7	49

Table 12. Means and ranks of protein, lysine/protein and adjusted lysine/protein for the entries in the second high protein-high lysine spring wheat observation nursery grown at 5 sites in 1976 with yield data from Yuma, Arizona. Concluded.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield	
	%	rank	%	rank	%	rank	q/ha	rank
Era	14.1	101	3.0	87	3.2	88	43.4	92
64	14.1	102	3.1	76	3.2	81	39.6	107
93	14.1	103	3.1	65	3.2	67	49.2	43
19	14.0	104	3.4	8	3.5	2	47.7	55
91	14.0	104	3.0	92	3.2	90	49.5	39
100	14.0	106	3.2	53	3.3	63	52.6	23
90	14.0	107	2.9	97	3.1	103	48.7	48
110	14.0	107	3.3	24	3.4	31	56.6	6
109	13.9	109	3.3	30	3.4	40	40.2	105
95	13.9	110	3.1	57	3.2	81	56.1	8
105	13.9	110	3.2	38	3.3	47	48.5	52
18	13.9	110	3.4	15	3.4	22	44.8	80
121	13.8	113	3.1	73	3.1	98	53.1	19
8	13.6	114	3.4	15	3.4	16	45.6	72
10	13.6	114	3.4	11	3.4	22	44.2	83
96	13.6	116	3.2	46	3.3	54	47.6	58
22	13.5	117	3.4	11	3.4	35	52.2	28
11	13.5	118	3.5	5	3.5	4	45.4	74
23	13.5	119	3.3	24	3.4	40	50.4	33
94	13.4	120	3.1	54	3.2	75	45.6	73
59	13.3	121	3.1	54	3.2	75	55.7	9
9	13.2	122	3.4	8	3.5	8	47.4	60
13	13.1	123	3.4	8	3.4	22	54.9	12
5	13.0	124	3.3	21	3.4	16	56.3	7
15	12.9	125	3.5	3	3.5	12	51.2	30
89	12.7	126	3.2	49	3.2	81	53.5	16
14	12.6	127	3.5	3	3.5	12	52.7	15
6	12.5	128	3.3	19	3.4	40	49.5	39
12	12.5	129	3.5	1	3.5	4	49.8	37
16	12.3	130	3.5	5	3.4	22	54.8	13
Mean	13.5		3.1		3.3		46.2	
$LSD_{.05}$ of the means	2.5		0.2		0.2		10.0	
Coefficient of variation %	13.2		4.7		4.0		15.5	
			Means of the check varieties					
INIA 66	14.7		2.9		3.0		56.3	
Era	14.4		3.0		3.2		44.8	
Nap Hal	17.1		3.1		3.3		36.0	
Check mean	15.4		3.0		3.1		45.7	
$LSD_{.05}$ of the check means	1.5		0.1		0.1		12.0	
Coefficient of variation %	7.6		2.3		2.3		11.6	

	Correlation Coefficients	
Protein	- .73**	- .95**
Lysine/protein		1.00**

** Significant at the .01 level.

Table 13. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Bordenave, Argentina in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield g	Days to flowering from Jan. 1	Seed grade 1-9	Plant height cm	Stripe rust %	Stem rust %
Centurk	11.9	351	3.2	26	3.2	30	584	318	4	112	80	40
Lancota	14.3	118	2.6	379	2.8	366	593	318	4	116	30	30
CI13449	11.4	376	3.4	10	3.3	13	57	327	6	78	30	80
Bezostaya 1 [1/]	13.9	161	2.7	328	2.9	299	291	316	3	96	20	70
5	12.6	303	3.2	26	3.3	13	243	319	5	102	30	80
6	11.6	367	3.2	26	3.2	30	350	319	5	94	50	70
7	13.4	215	3.1	49	3.2	30	221	314	5	90	90	30
8	11.5	372	3.1	49	3.1	82	446	305	4	98	60	60
9	12.2	333	3.5	4	3.5	2	357	305	5	96	90	60
10	12.8	285	3.2	26	3.3	13	277	305	5	90	90	30
11	15.3	42	2.7	328	2.9	299	233	325	5	97	50	40
12	14.1	139	2.8	249	3.0	189	414	318	4	97	50	70
13	14.1	139	2.7	328	2.9	299	381	314	5	94	80	70
14	9.8	399	3.4	10	3.1	82	388	314	4	103	60	80
15	11.2	382	3.1	49	3.0	189	523	314	4	108	10	70
16	11.0	387	2.9	164	2.8	366	311	314	4	110	60	70
17	13.8	174	2.6	379	2.7	395	423	314	4	108	10	60
18	11.2	382	3.2	26	3.1	82	289	318	3	97	20	70
19	12.9	272	3.3	15	3.4	5	197	322	6	86	70	40
20	13.9	161	3.0	92	3.2	30	264	318	5	94	70	5
21	13.2	237	3.2	26	3.3	13	161	318	5	101	70	5
22	12.0	345	3.1	49	3.1	82	150	318	4	97	30	20
23	10.9	390	3.1	49	3.0	189	271	318	4	89	70	30
24	11.6	367	3.4	10	3.4	5	339	316	4	103	80	0
25	14.5	99	2.9	164	3.1	82	370	298	4	92	80	5
26	10.9	390	3.2	26	3.1	82	223	314	4	108	80	30
27	11.3	379	3.1	49	3.1	82	184	318	4	112	70	5
28	10.2	396	3.3	15	3.1	82	370	318	4	104	30	50
29	12.1	339	3.0	92	3.0	189	514	300	4	105	20	5
30	12.2	333	3.5	4	3.5	2	181	318	6	76	60	70
31	10.6	393	3.5	4	3.3	13	191	316	7	87	20	70
32	11.6	367	3.2	26	3.2	30	362	316	7	82	5	60
33	11.5	372	3.4	10	3.3	13	137	316	7	86	80	40
34	10.3	395	3.4	10	3.2	30	263	314	5	75	30	70
35	13.0	260	3.2	26	3.3	13	179	318	5	87	50	10
36	13.0	260	3.0	92	3.1	82	143	316	6	88	90	20
37	12.6	303	3.0	92	3.0	189	133	316	4	86	80	10
38	12.5	313	3.0	92	3.0	189	167	316	4	102	80	30
39	13.9	161	2.9	164	3.0	189	301	310	4	99	30	40
40	12.3	327	2.8	249	2.8	366	359	303	4	96	40	20
41	10.7	392	3.1	49	3.0	189	359	307	4	98	50	50
42	11.7	363	3.0	92	2.9	299	376	307	4	90	10	50
43	14.1	139	2.8	249	3.0	189	288	318	5	105	20	40
44	15.2	52	2.8	249	3.0	189	399	318	4	111	5	40
45	13.0	260	3.3	15	3.4	5	325	316	4	100	80	20
46	13.1	248	2.9	164	3.0	189	335	316	4	103	80	20
47	12.2	333	3.0	92	3.0	189	339	316	4	109	80	20
48	12.8	285	2.9	164	3.0	189	325	309	4	104	80	30
49	13.0	260	3.0	92	3.1	82	245	309	5	98	50	20
50	12.2	333	3.0	92	3.0	189	265	318	5	89	60	40

1/ Bezostaya 1

Table 13. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Bordenave, Argentina in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield	Days to flowering from Jan. 1	Seed grade 1-9	Plant height cm	Stripe rust %	Stem rust %
	%	rank	%	rank	%	rank	g					
51	11.9	351	3.1	49	3.1	82	264	318	5	100	30	40
52	13.5	205	3.0	92	3.1	82	284	316	5	102	30	20
53	13.6	194	3.1	49	3.2	30	260	316	5	95	40	20
54	12.1	339	2.6	379	2.6	401	386	310	5	97	10	20
55	14.0	149	2.7	328	2.8	366	385	310	5	99	30	10
56	13.7	184	2.6	379	2.7	395	378	310	4	107	5	30
57	13.6	194	2.6	379	2.7	395	398	310	4	108	10	60
58	12.6	303	2.9	164	2.9	299	335	319	5	110	10	60
59	13.8	174	2.5	398	2.6	401	347	314	5	105	60	30
60	12.6	303	2.8	249	2.8	366	404	314	5	112	60	50
61	11.8	358	2.8	249	2.8	366	323	314	5	94	20	80
62	14.2	130	2.8	249	3.0	189	433	298	5	85	60	30
63	14.5	99	2.8	249	3.0	189	439	298	5	80	30	30
64	15.8	23	2.7	328	2.9	299	463	298	5	101	20	30
65	13.7	184	2.8	249	2.9	299	265	314	4	117	20	50
66	14.2	130	2.8	249	2.9	299	316	303	4	90	70	10
67	14.2	130	2.8	249	2.9	299	325	303	4	96	80	10
68	14.7	87	2.7	328	2.9	299	283	303	4	83	70	10
69	13.8	174	2.9	164	3.1	82	210	303	5	85	40	10
70	14.7	87	2.8	249	3.0	189	309	303	4	97	40	5
71	11.2	382	3.2	26	3.1	82	328	307	4	96	70	10
72	13.0	260	2.9	164	3.0	189	195	307	5	88	70	30
73	12.9	272	3.0	92	3.1	82	265	307	4	107	60	30
74	13.1	248	2.9	164	3.0	189	201	307	5	87	80	30
75	13.3	226	2.8	249	2.9	299	367	307	5	96	50	20
76	11.8	358	3.0	92	3.0	189	225	320	4	87	80	40
77	12.8	285	3.0	92	3.1	82	100	320	4	91	30	50
78	12.3	327	2.9	164	3.0	189	241	320	4	90	30	60
79	13.0	260	2.9	164	3.0	189	270	318	4	100	30	60
80	13.8	174	2.8	249	3.0	189	469	318	4	104	80	60
81	14.3	118	2.7	328	2.9	299	416	316	4	103	70	50
82	12.9	272	2.9	164	3.0	189	440	316	4	96	70	70
83	13.3	226	2.9	164	3.0	189	284	319	4	100	70	80
84	13.3	226	3.0	92	3.1	82	344	319	4	94	70	70
85	11.1	384	3.1	49	3.0	189	225	319	4	97	50	70
86	13.4	215	3.0	92	3.1	82	141	323	5	102	50	10
87	13.7	184	2.5	398	2.7	395	176	323	5	100	30	40
88	13.1	248	2.8	249	2.9	299	248	316	4	106	40	5
89	12.9	272	2.7	328	2.8	366	281	316	4	103	50	10
90	12.5	313	2.8	249	2.8	366	171	319	3	101	80	20
91	13.6	194	2.8	249	3.0	189	133	314	4	102	80	20
92	13.6	194	2.7	328	2.8	366	416	314	4	106	60	60
93	12.4	322	2.9	164	2.9	299	393	310	4	105	40	80
94	11.9	351	3.0	92	3.0	189	434	310	4	105	50	70
95	15.6	28	2.8	249	3.1	82	344	310	4	100	20	80
96	15.2	52	2.6	379	2.8	366	332	310	4	99	80	40
97	15.1	61	2.9	164	3.1	82	387	300	4	91	80	10
98	15.8	23	2.8	249	3.0	189	342	300	4	93	80	10
99	16.2	13	2.7	328	3.0	189	237	300	4	84	80	0
100	15.3	42	2.8	249	3.1	82	368	300	4	93	80	0
Centurk	12.1	339	3.1	49	3.1	82	365	312	3	97	70	60
Lancota	12.8	285	2.6	379	2.7	395	575	316	3	106	10	60
CI13449	10.0	398	3.5	4	3.3	13	157	321	8	79	20	90
Bezosta	15.2	237	2.9	164	3.0	189	217	316	5	86	20	80
105	11.0	387	3.1	49	3.0	189	460	314	4	102	50	70

Table 13. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Bordenave, Argentina in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield	Days to flowering from Jan. 1	Seed grade 1-9	Plant height cm	Stripe rust %	Stem rust %
	%	rank	%	rank	%	rank	g					
106	13.2	237	2.9	164	3.0	189	314		4	104	30	60
107	14.0	149	3.0	92	3.2	30	316	312	4	98	60	10
108	15.7	26	2.7	328	3.0	189	262	312	4	97	80	10
109	12.5	313	2.8	249	2.8	366	217	310	5	94	80	40
110	13.1	61	2.7	328	2.9	299	277	302	4	112	80	20
111	14.0	149	2.7	328	2.8	366	253	305	4	96	80	10
112	13.1	248	2.9	164	3.0	189	130	318	4	97	80	50
113	13.6	194	2.9	164	3.0	189	264	307	4	103	80	30
114	13.5	205	2.9	164	3.0	189	437	303	4	102	60	20
115	13.2	237	2.8	249	3.0	189	288	318	4	105	60	20
116	13.9	161	2.8	249	3.0	189	476	312	4	79	0	5
117	12.1	339	2.9	164	2.9	299	310	318	4	111	20	50
118	11.9	351	2.7	328	2.7	395	409	316	4	116	30	60
119	11.7	363	2.7	328	2.7	395	431	316	4	118	20	60
120	12.3	327	2.8	249	2.9	299	430	310	4	112	10	50
121	14.8	79	2.5	398	2.7	395	485	314	4	111	10	50
122	13.6	194	2.7	328	2.9	299	231	307	4	100	10	50
123	15.0	66	2.8	249	3.0	189	196	314	4	86	80	10
124	14.0	149	2.8	249	3.0	189	355	303	4	104	60	50
125	14.0	149	3.0	92	3.1	82	257	306	4	96	70	50
126	14.3	118	2.7	328	2.8	366	379	316	4	107	10	60
127	13.7	184	2.8	249	2.9	299	415	316	4	105	10	70
128	13.6	194	2.8	249	2.9	299	484	316	4	104	20	70
129	15.0	66	2.5	398	2.7	395	443	309	4	98	50	70
130	15.6	28	2.5	398	2.8	366	465	309	4	100	30	50
131	13.8	174	2.8	249	3.0	189	704	314	4	92	10	20
132	12.9	272	2.8	249	2.9	299	318	312	4	90	80	30
133	12.8	285	2.9	164	3.0	189	443	303	4	97	20	30
134	13.8	174	2.8	249	3.0	189	496	318	4	102	20	30
135	16.2	13	2.5	398	2.8	366	460	303	4	94	10	0
136	14.5	99	2.7	328	2.9	299	534	308	4	87	10	30
137	11.6	367	3.2	26	3.1	82	245	321	4	102	70	50
138	11.4	376	3.1	49	3.1	82	341	318	4	91	70	50
139	11.8	358	3.0	92	3.0	189	290	318	4	96	50	40
140	12.5	313	3.0	92	3.0	189	299	318	4	100	10	40
141	14.2	130	2.6	379	2.8	366	382	307	4	86	20	50
142	15.4	34	2.5	398	2.7	395	282	307	4	83	30	10
143	13.0	174	2.6	379	2.8	366	360	307	4	87	5	30
144	13.1	248	2.7	328	2.8	366	447	319	5	108	10	40
145	14.1	139	2.9	164	3.1	82	301	307	4	75	70	40
146	14.1	139	2.8	249	3.0	189	348	317	4	92	30	40
147	14.7	87	2.7	328	3.0	189	378	314	4	94	5	20
148	14.5	99	2.8	249	3.0	189	232	307	4	93	80	30
149	13.3	42	2.9	164	3.1	82	268	307	5	76	70	5
150	13.2	237	3.2	26	3.3	13	372	320	4	101	0	10
151	13.3	226	3.0	92	3.2	30	499	321	4	95	0	10
152	13.5	205	2.7	328	2.8	366	516	318	4	113	5	30
153	13.1	248	3.4	10	3.5	2	359	319	4	108	0	20
154	12.5	313	3.2	26	3.3	13	446	319	4	114	10	30
155	12.5	313	3.0	92	3.1	82	354	312	4	107	10	50
156	14.5	99	2.7	328	2.9	299	518	303	4	102	30	0
157	13.3	42	2.9	164	3.1	82	478	303	4	100	20	5
158	16.3	11	2.6	379	2.9	299	601	303	4	109	30	10
159	13.2	52	2.9	164	3.1	82	405	303	4	99	20	40
160	14.3	118	2.9	164	3.0	189	517	314	4	97	10	70

Table 13. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Bordenave, Argentina in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield g	Days to flowering from Jan. 1	Seed grade 1-9	Plant height cm	Stripe rust %	Stem rust %
161	14.0	149	2.8	249	3.0	189	329	312	3	96	30	60
162	14.4	106	2.7	328	2.9	299	516	316	3	102	5	80
163	13.9	161	2.8	249	3.0	189	328	314	4	92	80	70
164	14.8	79	3.0	92	3.2	30	394	321	4	121	5	60
165	13.0	260	2.8	249	2.9	299	342	310	4	93	40	70
166	14.5	99	2.7	328	2.9	299	613	316	4	111	10	60
167	12.4	322	3.0	92	3.0	189	417	314	4	92	70	60
168	12.7	295	3.0	92	3.1	82	412	316	4	96	70	50
169	14.3	118	2.7	328	2.9	299	571	316	4	108	30	60
170	15.5	30	2.6	379	2.9	299	367	300	4	76	60	20
171	16.1	15	2.7	328	2.9	299	526	300	4	87	20	40
172	15.4	34	2.7	328	2.9	299	500	300	4	83	30	40
173	14.3	118	2.7	328	2.9	299	591	303	3	102	5	50
174	13.8	174	2.9	164	3.0	189	552	312	3	100	10	70
175	14.7	87	2.8	249	3.0	189	588	309	4	107	60	10
176	13.6	194	2.9	164	3.0	189	264	318	4	104	90	20
177	15.3	42	2.7	328	3.0	189	325	303	4	90	20	0
178	15.0	66	2.9	164	3.1	82	420	307	4	97	20	20
179	15.8	23	2.8	249	3.0	189	303	312	4	88	20	60
180	13.9	161	2.8	249	3.0	189	398	303	4	93	60	60
181	15.2	52	2.7	328	2.9	299	429	308	4	86	10	50
182	13.1	248	2.9	164	3.0	189	476	316	4	92	5	60
183	12.5	313	2.9	164	3.0	189	330	318	4	95	80	10
184	13.0	260	2.9	164	3.0	189	234	318	4	94	80	10
185	12.8	285	2.9	164	3.0	189	271	318	4	96	80	10
186	13.1	248	2.9	164	3.0	189	274	318	4	97	80	0
187	12.3	327	2.9	164	2.9	299	284	318	4	97	80	10
188	12.9	272	2.9	164	3.0	189	212	318	4	98	80	0
189	12.5	313	3.0	92	3.0	189	271	318	4	96	80	0
190	12.6	303	2.9	164	3.0	189	255	318	4	101	80	0
191	14.7	87	2.6	379	2.8	366	420	316	4	98	10	30
192	13.3	226	2.9	164	3.0	189	477	318	4	111	10	30
193	14.3	118	2.8	249	3.0	189	423	318	4	103	30	40
194	14.3	118	2.7	328	2.9	299	491	320	4	107	10	80
195	13.0	260	2.7	328	2.8	366	496	320	4	109	5	60
196	13.0	260	3.0	92	3.1	82	382	314	4	97	5	20
197	13.6	194	3.0	92	3.1	82	385	310	4	89	5	30
198	13.4	215	2.8	249	2.9	299	355	310	3	91	20	30
199	12.8	285	3.0	92	3.1	82	403	312	4	96	0	0
200	13.0	260	3.0	92	3.1	82	429	312	4	88	5	0
Centurk	10.3	394	3.2	26	3.1	82	366	312	4	101	10	20
Lancota	11.9	351	2.8	249	2.7	395	455	316	4	100	0	30
CI13449	8.8	402	3.7	1	3.2	30	167	321	6	77	0	80
Nenoota	13.3	226	2.9	164	3.0	189	272	314	4	93	5	40
205	13.6	194	2.9	164	3.1	82	510	314	4	95	0	30
206	14.3	118	2.7	328	2.9	299	523	307	4	87	0	10
207	15.2	52	2.9	164	3.1	82	419	314	4	102	20	20
208	12.7	295	3.1	49	3.2	30	310	319	4	113	20	30
209	13.8	174	2.8	249	3.0	189	520	319	3	119	0	10
210	12.9	272	2.8	249	2.9	299	439	316	3	121	10	10
211	12.7	295	2.9	164	3.0	189	323	319	3	127	5	80
212	13.9	161	2.7	328	2.8	366	406	319	3	112	0	10
213	13.3	226	3.0	92	3.1	82	356	319	4	114	0	30
214	13.4	215	2.9	164	3.1	82	415	321	4	115	0	30
215	12.4	322	2.9	164	2.9	299	465	316	4	110	0	30

Table 13. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Bordenave, Argentina in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield g	Days to flowering from Jan. 1	Head grade 1-9	Plant height cm	Stripe rust %	Stem rust %
216	12.0	345	2.9	164	2.9	299	442	316	4	118	10	40
217	12.8	285	2.9	164	2.9	299	454	316	4	113	20	20
218	12.5	313	3.0	92	3.0	189	352	303	4	110	70	20
219	12.7	295	2.9	164	3.0	189	357	318	6	116	20	20
220	12.6	303	2.9	164	2.9	299	373	318	3	114	10	40
221	12.6	303	3.1	49	3.2	30	298	307	4	83	30	30
222	14.1	139	3.0	92	3.2	30	512	307	4	93	20	40
223	11.7	363	2.9	164	2.9	299	237	320	4	91	80	60
224	12.8	285	2.7	328	2.8	366	464	318	4	108	30	40
225	11.4	376	3.1	49	3.1	82	272	319	4	100	80	50
226	13.5	205	3.0	92	3.1	82	597	319	4	112	5	20
227	12.7	295	3.0	92	3.1	82	405	319	4	116	5	20
228	13.6	194	2.8	249	3.0	189	279	314	4	96	10	20
229	12.9	272	3.0	92	3.1	82	304	318	4	115	50	20
230	13.6	194	2.7	328	2.8	366	348	309	4	101	70	10
231	13.3	226	2.9	164	3.1	82	279	307	4	94	70	10
232	14.1	139	2.8	249	3.0	189	485	307	4	96	50	20
233	15.3	42	2.7	328	2.9	299	461	318	4	105	50	30
234	14.4	106	2.8	249	3.0	189	338	307	4	110	70	20
235	14.4	106	2.8	249	3.0	189	451	318	4	117	50	40
236	14.3	118	2.9	164	3.1	82	353	307	4	109	80	0
237	13.9	161	2.7	328	2.9	299	385	307	4	107	80	5
238	14.4	106	2.9	164	3.1	82	445	309	4	105	20	20
239	14.0	149	2.9	164	3.0	189	684	314	4	111	10	20
240	14.7	87	2.9	164	3.1	82	398	314	4	107	20	20
241	13.2	237	2.8	249	2.9	299	469	314	4	109	20	60
242	13.2	237	2.9	164	3.0	189	242	321	4	110	10	70
243	14.2	130	2.6	379	2.8	366	405	318	4	93	20	60
244	11.3	379	3.2	26	3.1	82	184	321	6	96	70	60
245	14.2	130	2.9	164	3.1	82	430	309	4	95	60	20
246	13.7	184	2.7	328	2.9	299	364	303	4	89	80	10
247	14.5	99	2.8	249	3.0	189	381	318	4	104	70	30
248	12.9	272	2.9	164	3.0	189	168	318	4	102	80	40
249	13.2	237	3.1	49	3.2	30	220	321	4	95	60	50
250	14.3	118	2.8	249	3.0	189	329	310	4	95	60	50
251	15.2	52	2.7	328	2.9	299	441	307	4	95	80	50
252	13.7	184	3.0	92	3.1	82	304	[illegible]	5	100	80	50
253	13.5	205	2.9	164	3.0	189	332	31[illegible]	4	103	80	40
254	14.3	118	2.8	249	3.0	189	174	314	4	92	80	70
255	15.8	23	2.6	379	2.8	366	240	310	4	94	80	30
256	13.7	184	2.9	164	3.0	189	234	318	4	107	50	60
257	13.9	161	2.7	328	2.8	366	356	309	4	101	70	30
258	14.9	72	2.6	379	2.8	366	503	310	4	92	30	50
259	14.1	139	2.7	328	2.9	299	554	310	4	98	20	70
260	15.1	61	2.6	379	2.8	366	394	310	4	89	20	40
261	14.3	118	2.6	379	2.8	366	542	310	4	90	30	50
262	14.3	118	2.7	328	2.9	299	419	307	4	91	40	30
263	13.5	205	2.7	328	2.9	299	389	310	4	102	60	50
264	14.8	79	2.6	379	2.8	366	412	307	4	96	60	40
265	14.1	139	2.7	328	2.9	299	490	310	4	107	70	30
266	12.9	272	2.9	164	2.9	299	349	307	4	102	80	30
267	13.0	260	2.9	164	3.0	189	360	303	4	113	70	30
268	14.4	106	2.8	249	3.0	189	503	319	4	118	30	30
269	14.3	118	2.7	328	2.9	299	522	310	4	109	10	10
270	14.4	106	2.6	379	2.8	366	392	314	4	101	5	20

Table 13. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Bordenave, Argentina in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield	Days to flowering from Jan. 1	Seed grade 1-9	Plant height	Stripe rust	Stem rust
	%	rank	%	rank	%	rank	g			cm	%	%
271	13.8	174	3.0	92	3.2	30	388	310	4	108	0	50
272	13.3	226	3.0	92	3.1	82	339	316	4	105	5	50
273	12.1	339	3.0	92	3.0	189	440	314	4	110	10	60
274	14.2	130	2.9	164	3.1	82	342	307	4	107	70	20
275	12.8	285	3.0	92	3.0	189	409	318	4	110	70	50
276	12.5	313	2.9	164	2.9	299	408	318	4	106	50	70
277	12.4	322	3.0	92	3.0	189	374	307	4	107	50	70
278	14.2	130	2.8	249	3.0	189	260	307	4	91	50	5
279	14.1	139	3.0	92	3.2	30	295	318	4	94	6	10
280	13.5	205	3.2	26	3.4	5	192	318	4	92	80	5
281	12.7	295	3.0	92	3.1	82	180	307	4	82	80	10
282	12.5	313	3.0	92	3.1	82	378	314	4	107	10	70
283	12.0	345	2.9	164	2.9	299	409	318	4	97	70	70
284	12.4	322	3.1	49	3.2	30	308	319	4	100	80	70
285	13.1	248	3.0	92	3.1	82	332	318	4	98	80	80
286	14.7	87	2.9	164	3.1	82	364	310	4	89	20	80
287	15.2	52	2.8	249	3.0	189	438	316	5	94	30	50
288	15.2	52	2.8	249	3.1	82	250	321	4	106	30	40
289	13.7	184	2.9	164	3.0	189	325	316	4	105	10	40
290	14.6	94	2.9	164	3.1	82	265	321	5	107	30	40
291	14.8	79	2.8	249	3.0	189	225	319	5	108	60	40
292	15.3	42	2.7	328	2.9	299	405	314	4	101	30	40
293	15.2	52	2.7	328	2.9	299	447	310	4	92	30	20
294	13.9	161	2.7	328	2.9	299	438	312	4	101	20	30
295	13.5	205	2.8	249	2.9	299	363	318	4	111	40	20
296	13.8	174	2.9	164	3.0	189	537	314	4	118	30	10
297	11.4	376	3.1	49	3.0	189	412	316	4	89	10	40
298	12.5	313	2.9	164	3.0	189	333	316	4	108	30	30
299	13.8	174	2.8	249	3.0	189	461	314	4	103	20	30
300	12.9	272	2.8	249	2.9	299	389	310	4	94	60	10
Centurk	11.1	384	3.1	49	3.0	189	405	314	4	97	70	40
Lancota	12.1	339	2.8	249	2.8	366	615	318	4	114	20	40
CI13449	9.5	400	3.6	2	3.3	13	164	323	7	88	5	90
Bezosta	13.4	215	2.6	379	2.8	366	387	314	4	99	30	70
303	12.0	345	3.0	92	3.0	189	408	314	6	97	50	60
306	12.8	285	2.8	249	2.9	299	547	312	4	116	20	20
307	13.9	161	2.6	379	2.8	366	487	312	4	114	30	20
308	12.4	322	2.9	164	3.0	189	368	316	4	88	60	60
309	12.2	333	3.1	49	3.1	82	371	307	4	97	80	60
310	15.1	61	2.7	328	2.9	299	219	307	4	93	80	5
311	14.9	72	2.7	328	2.9	299	488	307	4	92	10	70
312	17.4	1	2.6	379	2.9	299	313	307	4	104	20	40
313	15.4	34	2.8	249	3.0	189	244	307	4	91	80	5
314	17.1	3	2.6	379	2.8	366	489	314	4	97	10	20
315	16.8	6	2.9	164	3.1	82	408	314	4	96	10	20
316	16.3	11	2.9	164	3.1	82	406	314	4	90	5	20
317	15.9	19	2.6	379	2.9	299	485	314	4	90	5	30
318	15.9	19	2.7	328	2.9	299	471	314	4	92	10	5
319	15.3	42	2.8	249	3.1	82	468	314	4	91	10	10
320	15.9	19	2.7	328	3.0	189	439	312	4	89	10	20
321	16.0	16	2.7	328	2.9	299	498	314	4	94	20	10
322	15.9	19	2.7	328	2.9	299	467	314	4	93	10	20
323	16.0	16	2.7	328	2.9	299	449	314	4	99	10	20
324	14.7	87	2.8	249	3.0	189	244	303	4	94	70	20
325	13.1	248	3.0	92	3.1	82	233	303	4	96	80	10

Table 13. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Bordenave, Argentina in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield	Days to flowering from Jan. 1	Seed grade 1-9	Plant height cm	Stripe rust %	Stem rust %
	%	rank	%	rank	%	rank	g					
326	13.9	161	2.9	164	3.1	82	236	307	4	103	80	10
327	13.3	226	2.7	328	2.9	299	534	307	4	92	0	10
328	15.4	34	2.7	328	2.9	299	300	307	4	101	70	0
329	11.9	351	3.0	92	3.0	189	358	320	4	104	30	70
330	14.9	72	2.7	328	2.9	299	274	316	4	98	80	10
331	13.4	215	2.9	164	3.1	82	358	310	4	105	80	10
332	13.4	215	2.8	249	2.9	299	287	314	4	90	10	30
333	13.5	205	2.9	164	3.0	189	301	307	4	101	10	50
334	12.8	285	2.7	328	2.8	366	352	307	4	107	10	70
335	13.4	215	2.8	249	2.9	299	372	307	4	102	10	70
336	13.4	215	2.9	164	3.0	189	175	307	4	99	80	30
337	14.9	72	2.7	328	2.9	299	261	307	4	97	80	30
338	14.7	87	3.0	92	3.2	30	200	307	4	90	80	20
339	13.3	226	2.9	164	3.0	189	180	307	4	106	80	30
340	15.5	30	2.6	379	2.8	366	372	303	4	97	0	10
341	14.7	87	2.8	249	3.0	189	237	303	4	102	40	30
342	15.2	52	2.6	379	2.8	366	320	303	4	99	30	30
343	14.4	106	2.7	328	2.8	366	367	303	4	97	40	40
344	17.0	4	2.7	328	3.0	189	276	307	5	101	40	30
345	14.2	130	2.8	249	2.9	299	383	307	5	96	10	10
346	13.9	161	2.6	379	2.8	366	325	307	4	89	20	30
347	13.5	205	2.8	249	3.0	189	330	307	4	92	30	20
348	14.0	149	2.6	379	2.8	366	265	307	4	87	5	20
349	11.4	376	3.2	26	3.2	30	405	318	4	89	10	70
350	11.8	358	3.0	92	3.0	189	224	319	3	91	5	80
351	13.9	161	2.7	328	2.9	299	242	320	5	107	0	10
352	10.2	396	3.3	15	3.0	189	262	323	5	94	20	70
353	12.2	333	2.9	164	2.9	299	271	307	4	88	80	20
354	14.7	87	2.9	164	3.1	82	375	316	4	91	80	10
355	13.1	248	3.0	92	3.1	82	171	307	4	87	80	30
356	13.2	237	2.9	164	3.0	189	280	303	4	85	80	20
357	12.8	285	2.8	249	2.9	299	204	303	5	80	80	20
358	13.9	161	2.6	379	2.8	366	276	307	4	86	20	10
359	14.0	149	2.7	328	2.9	299	490	303	4	84	10	10
360	14.4	106	2.6	379	2.8	366	240	303	5	69	70	10
361	11.9	351	3.0	92	3.0	189	487	314	4	96	0	70
362	12.6	303	2.7	328	2.8	366	482	314	4	101	0	80
363	12.8	285	2.8	249	2.9	299	566	314	4	99	0	70
364	13.4	215	3.0	92	3.1	82	144	303	5	82	80	0
365	16.8	6	2.7	328	3.0	189	609	309	4	97	20	5
366	16.3	11	2.7	328	3.0	189	555	312	4	94	10	10
367	16.7	8	2.8	249	3.0	189	500	312	4	98	10	10
368	16.7	8	2.7	328	2.9	299	540	309	4	92	10	20
369	17.2	2	2.7	328	3.0	189	544	309	4	91	10	10
370	17.0	4	2.7	328	3.0	189	568	314	4	93	10	10
371	14.6	94	2.9	164	3.1	82	474	312	4	86	0	50
372	15.4	34	2.8	249	3.1	82	497	310	4	90	10	20
373	14.9	72	2.8	249	3.0	189	469	310	4	94	10	30
374	15.1	61	2.8	249	3.0	189	485	310	4	97	10	30
375	15.3	42	2.9	164	3.1	82	462	310	4	93	10	30
376	14.9	72	2.8	249	3.0	189	502	310	4	92	10	30
377	13.1	61	3.0	92	3.2	30	510	312	4	95	10	30
378	15.4	34	2.8	249	3.0	189	517	312	4	97	10	30
379	14.6	94	2.9	164	3.1	82	584	312	4	96	10	40
380	15.1	61	2.5	398	2.8	366	512	312	4	96	10	30

Table 13. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Bordenave, Argentina in 1976. Concluded.

Entry No.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield g	Days to flowering from Jan. 1	Seed grade 1-9	Plant height cm	Stripe rust %	Stem rust %
381	14.9	72	2.9	164	3.1	82	478	312	4	100	20	20
382	14.9	72	2.8	249	3.0	189	491	312	4	96	20	20
383	15.7	26	2.7	328	3.0	189	495	312	4	99	20	20
384	15.3	42	2.8	249	3.0	189	426	312	4	92	10	10
385	15.0	66	2.7	328	2.9	299	476	312	4	94	30	30
386	14.8	79	2.8	249	3.0	189	451	312	4	93	10	20
387	13.2	237	3.1	49	3.2	30	292	307	4	90	80	60
388	13.3	276	3.0	92	3.1	82	321	307	4	92	80	10
389	12.6	303	2.8	249	2.9	299	394	316	4	106	0	40
390	13.2	333	2.9	164	3.0	189	242	316	4	105	50	20
391	11.8	358	3.0	92	3.0	189	290	307	4	111	50	20
392	11.[illegible]	367	3.1	49	3.1	82	478	318	4	108	0	70
393	11.5	372	3.1	49	3.1	82	419	318	4	107	0	90
394	12.0	345	3.1	49	3.1	82	423	318	4	101	0	90
395	11.0	397	3.1	49	3.0	189	431	318	4	103	0	70
396	11.6	367	3.1	49	3.1	82	304	320	4	96	20	80
397	11.8	358	3.2	26	3.2	30	380	320	4	89	30	60
398	12.9	272	3.0	92	3.1	82	312	320	4	96	20	80
Centurk	11.0	387	3.1	49	3.0	189	463	309	4	107	50	60
Lancota	11.9	351	2.8	249	2.8	366	420	314	7	114	20	30
CI13449	9.4	401	3.4	[illegible]	3.0	189	209	321	7	83	10	80
Benosta	13.1	248	2.8	249	2.9	299	320	314	4	90	30	70
Overall mean	13.5		2.88		[illegible].99		364.7	312.6	4.2	98.4	39.0	36.2

Correlation Coefficients

Protein	- .69**	- .24**
Lysine/protein		.82**

** Significant at the P=.01 level.

Means of the check varieties

Benosta	13.3	2.78	2.92
Centurk	11.3	3.14	3.08
CI13449	9.8	3.52	3.22
Lancota	12.6	2.72	2.76
Check mean	11.8	3.04	3.00
$LSD_{.05}$ of check means	0.6	0.14	0.13
Coefficient of variation %	3.8	3.40	3.03

Table 14. Protein and lysine values together with kernel rating data for entries in the second high protein-high lysine winter wheat observation nursery grown at Passo Fundo, Brazil in 1976.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade
	%	rank	%	rank	%	rank	1-9
8	11.5	49	3.3	4	3.3	10	6
10	12.0	46	3.3	4	3.3	10	5
29	12.9	38	3.2	10	3.3	10	6
40	13.0	36	3.2	10	3.3	10	6
55	14.4	20	2.9	37	3.1	34	6
64	15.0	11	3.1	18	3.3	10	6
66	12.4	44	3.1	18	3.2	22	6
67	12.7	41	3.2	10	3.2	22	6
70	13.6	29	3.2	10	3.4	2	6
72	10.5	51	3.4	2	3.3	10	6
96	14.4	20	2.9	37	3.1	34	6
97	16.5	4	2.9	37	3.2	22	6
98	17.3	2	2.9	37	3.1	34	6
99	17.5	1	2.7	50	3.0	45	6
100	17.3	2	2.6	51	2.8	51	6
107	15.1	9	2.8	46	3.1	34	6
109	11.3	50	3.5	1	3.4	2	6
110	14.4	20	2.8	46	3.0	45	6
111	14.8	13	2.8	46	3.0	45	6
113	15.7	6	2.9	37	3.2	22	6
114	15.3	7	3.0	26	3.2	22	6
115	12.9	38	3.0	26	3.1	34	6
116	15.0	11	3.3	4	3.5	1	6
124	12.4	44	3.2	10	3.2	22	6
135	15.1	9	3.1	18	3.3	10	6
136	14.8	13	2.9	37	3.1	34	6
143	13.1	35	3.0	26	3.1	34	6
157	14.5	18	3.1	18	3.3	10	6
158	13.9	23	3.0	26	3.2	22	6
170	16.1	5	3.1	18	3.3	10	6
171	14.3	22	3.0	26	3.2	22	6
172	13.6	29	2.9	37	3.1	34	6
173	12.0	46	3.0	26	3.0	45	6
175	13.8	25	2.9	37	3.1	34	6
181	15.3	7	2.8	46	3.1	34	6
218	13.4	33	3.2	10	3.3	10	6
232	14.7	15	3.1	18	3.3	10	6
234	13.8	25	3.0	26	3.2	22	5
236	13.0	36	3.0	26	3.1	34	5
237	12.6	42	3.3	4	3.3	10	5
238	13.5	31	3.2	10	3.3	10	5
239	13.6	29	2.9	37	3.0	45	6
240	14.6	16	3.1	18	3.3	10	5
246	13.5	31	2.9	37	3.1	34	6
255	13.7	27	3.0	26	3.1	34	5
340	14.6	16	2.8	46	3.0	45	6
353	13.4	33	2.8	46	2.9	49	6
356	11.9	48	3.2	10	3.2	22	6
357	12.5	43	2.8	46	2.9	49	5
359	12.8	40	2.9	37	3.0	45	6
364	13.8	25	3.0	26	3.1	34	6
Overall means	13.9		3.0		3.2		5.8

Correlation Coefficients

Protein	- .62**	- .22
Lysine		.86**

** Significant at the P = .01 level.

Table 15. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Temuco, Chile in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield 1/ g	Plant height cm
Centurk	13.0	233	2.8	295	2.9	286	7	144	110
Lancota	12.1	328	3.0	161	3.0	226	6	252	125
C113449	10.2	396	2.9	231	2.7	377	6	130	100
Bezostaya 1	11.3	368	2.8	295	2.7	377	4	201	105
5	10.7	392	3.0	161	2.9	286	6	144	110
6	11.2	373	3.4	26	3.4	45	6	94	110
7	13.3	196	3.7	3	3.8	7	8	19	120
8	12.8	260	2.9	231	3.0	226	7	84	125
9	15.3	31	3.6	8	3.8	7	9	10	120
10	13.9	128	3.2	71	3.4	45	8	12	120
11	13.4	182	2.8	295	3.0	226	6	95	120
12	13.1	218	2.9	231	3.0	226	6	151	125
13	14.4	84	3.0	161	3.2	115	8	98	110
14	11.8	344	3.1	107	3.1	164	7	98	130
15	12.6	281	3.4	26	3.4	45	7	95	130
16	12.3	313	3.5	17	3.6	20	7	17	135
17	12.5	293	2.8	295	2.9	286	6	185	130
18	13.0	233	2.5	401	2.6	398	5	182	105
19	12.9	248	3.1	107	3.2	115	6	51	90
20	13.9	128	2.9	231	3.1	164	6	89	115
21	16.1	11	3.0	161	3.3	76	8	41	130
22	13.7	144	3.1	107	3.2	115	7	56	120
23	13.1	218	3.2	71	3.3	76	7	24	105
24	13.0	233	3.2	71	3.3	76	7	100	130
25	15.5	23	3.0	161	3.2	115	6	79	105
26	14.2	95	3.2	71	3.4	45	8	27	125
27	12.5	293	3.1	107	3.1	164	7	78	130
28	11.4	364	3.0	161	3.0	226	5	107	120
29	11.6	356	2.9	231	2.8	338	4	172	125
30	14.0	116	3.2	71	3.3	76	5	12	90
31	11.2	373	3.2	71	3.1	164	5	108	95
32	12.7	270	3.0	161	3.0	226	5	118	90
33	13.2	206	3.2	71	3.3	76	6	10	90
34	11.6	336	3.3	42	3.3	76	6	35	90
35	13.3	196	3.0	161	3.2	115	6	45	80
36	14.8	55	3.1	107	3.3	76	8	10	110
37	15.6	22	3.2	71	3.5	29	9	10	115
38	15.8	15	3.2	71	3.5	29	9	15	120
39	14.8	55	3.2	71	3.4	45	7	71	120
40	11.9	341	3.0	161	3.0	226	7	108	105
41	10.9	384	3.3	42	3.2	115	6	143	115
42	11.2	373	2.9	231	2.8	338	6	94	110
43	12.3	313	2.9	231	2.9	286	4	138	105
44	13.0	233	2.8	295	2.9	286	4	159	115
45	12.3	313	2.9	231	3.0	226	6	155	120
46	12.8	260	3.0	161	3.1	164	6	140	125
47	13.4	182	3.3	42	3.4	45	7	23	120
48	13.9	128	3.6	8	3.7	15	9	34	120
49	14.1	103	3.0	161	3.2	115	6	39	120
50	13.2	206	3.0	161	3.1	164	5	109	115

1/ Yields based on a plot size of 0.60 square meters.

Table 15. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Temuco, Chile in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm
51	13.0	233	3.1	107	3.2	115	5	127	115
52	15.2	36	3.0	161	3.2	115	6	61	115
53	14.9	48	3.1	107	3.3	76	6	49	110
54	12.6	281	2.9	231	2.9	286	6	147	115
55	12.9	248	2.7	349	2.8	338	5	132	120
56	12.5	293	2.7	349	2.8	338	5	184	120
57	12.1	328	2.8	295	2.9	286	4	179	115
58	12.7	270	2.9	231	3.0	226	4	165	125
59	13.0	233	2.9	231	3.0	226	5	68	120
60	13.4	182	2.9	231	3.1	164	5	62	120
61	12.3	313	2.8	295	2.9	286	5	109	100
62	12.9	248	3.1	107	3.2	115	6	104	100
63	13.7	144	3.0	161	3.1	164	6	17	100
64	14.5	73	3.2	71	3.3	76	6	100	110
65	13.7	144	2.9	231	3.0	226	5	122	125
66	13.7	144	3.0	161	3.1	164	5	56	105
67	15.7	19	2.9	231	3.2	115	6	63	105
68	17.0	3	2.7	349	3.0	226	6	100	95
69	14.9	48	3.3	42	3.5	29	7	32	100
70	16.2	8	3.0	161	3.3	76	7	67	110
71	14.2	95	3.9	2	4.1	2	7	10	110
72	13.8	136	4.1	1	4.3	1	9	10	110
73	13.6	155	3.3	42	3.4	45	8	33	120
74	13.5	168	3.5	17	3.7	15	9	11	110
75	15.1	40	3.4	26	3.6	20	8	27	110
76	13.3	196	3.1	107	3.2	115	8	38	115
77	13.4	182	2.8	295	3.0	226	6	79	115
78	13.4	182	2.9	231	3.1	164	6	82	110
79	12.8	260	2.9	231	3.0	226	5	139	110
80	13.0	233	2.8	295	2.9	286	6	123	120
81	12.9	248	2.8	295	2.9	286	6	105	110
82	12.4	304	3.0	161	3.1	164	6	135	115
83	13.4	182	3.2	71	3.3	76	7	117	115
84	13.9	128	3.2	71	3.3	76	7	87	110
85	12.7	270	3.3	42	3.4	45	6	51	115
86	12.4	304	3.3	42	3.3	76	6	46	120
87	12.4	304	3.1	107	3.2	115	6	47	105
88	13.0	233	3.2	71	3.3	76	6	32	120
89	13.3	196	3.2	71	3.3	76	6	23	120
90	15.1	40	3.3	42	3.5	29	7	10	120
91	16.3	5	3.5	17	3.8	7	9	10	125
92	13.6	155	3.5	17	3.6	20	9	35	125
93	13.9	128	2.8	295	2.9	286	8	14	115
94	11.7	350	3.3	42	3.3	76	7	103	110
95	14.4	84	3.0	161	3.2	115	7	99	110
96	15.0	42	3.1	107	3.3	76	7	40	120
97	13.9	128	3.5	17	3.6	20	6	71	120
98	13.4	182	3.5	17	3.7	15	6	88	115
99	12.9	248	3.0	161	3.1	164	6	101	115
100	13.5	168	3.0	161	3.2	115	6	118	120
Centurk	11.4	364	3.1	107	3.1	164	6	102	110
Lancota	12.1	328	2.8	295	2.8	338	5	208	125
CI13449	10.1	397	3.2	71	3.0	226	6	160	95
Bezostaya 1	11.1	378	2.8	295	2.7	377	3	221	105
105	10.9	384	3.4	26	3.3	76	6	151	115

Table 15. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Temuco, Chile in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm
106	12.9	248	3.1	107	3.2	115	6	151	130
107	13.7	144	2.8	295	2.9	286	7	133	120
108	14.9	48	3.5	17	3.7	15	9	56	125
109	12.5	293	2.9	231	3.0	226	9	64	120
110	13.3	196	3.7	3	3.8	7	7	72	130
111	14.9	48	3.6	8	3.8	7	9	43	120
112	13.5	168	3.5	17	3.7	15	9	63	125
113	13.0	233	3.1	107	3.2	115	6	76	115
114	12.1	328	3.0	161	3.1	164	6	125	115
115	13.2	206	3.1	107	3.2	115	8	69	120
116	11.1	378	2.9	231	2.8	338	4	352	95
117	9.7	400	3.2	71	2.9	286	4	255	136
118	9.8	399	3.3	42	3.0	226	4	201	140
119	9.3	402	3.4	26	3.0	226	4	320	140
120	9.7	400	3.0	161	2.7	377	4	275	140
121	12.1	328	2.9	231	2.9	286	4	217	130
122	12.0	336	3.1	107	3.1	164	5	189	130
123	13.1	218	3.2	71	3.3	76	6	60	125
124	12.7	270	3.2	71	3.2	115	6	113	130
125	13.1	218	3.0	161	3.1	164	6	59	125
126	12.3	313	3.0	161	3.0	226	4	226	135
127	11.1	378	2.9	231	2.8	338	4	266	130
128	11.3	368	3.0	161	2.9	286	4	175	130
129	14.0	116	2.8	295	3.0	226	5	147	120
130	13.3	196	2.7	349	2.8	338	5	147	120
131	14.7	59	3.1	107	3.3	76	6	61	120
132	14.4	84	2.9	231	3.1	164	7	39	125
133	13.0	233	3.2	71	3.3	76	6	95	125
134	13.0	233	2.9	231	3.0	226	6	128	120
135	13.8	136	2.9	231	3.0	226	6	64	115
136	13.6	155	2.7	349	2.9	286	6	165	110
137	14.4	84	3.0	161	3.2	115	6	12	110
138	12.9	248	3.2	71	3.3	76	6	49	115
139	13.7	144	3.0	161	3.2	115	6	58	115
140	12.9	248	3.1	107	3.2	115	6	72	110
141	14.2	95	2.7	349	2.9	286	3	149	105
142	14.1	103	2.7	349	2.9	286	3	135	105
143	14.1	103	2.7	349	2.8	338	4	159	110
144	12.4	304	2.7	349	2.8	338	3	243	125
145	14.9	48	2.8	295	3.0	226	6	36	105
146	13.3	196	2.7	349	2.9	286	5	217	120
147	12.6	281	2.8	295	2.9	286	5	150	115
148	15.2	36	2.9	231	3.1	164	5	43	100
149	14.5	73	2.7	349	2.9	286	5	95	100
150	10.9	384	2.7	349	2.6	398	5	322	125
151	11.7	350	2.9	231	2.9	286	5	475	125
152	12.2	319	2.9	231	2.9	286	5	202	140
153	11.7	350	3.0	161	3.0	226	5	343	140
154	11.7	350	3.0	161	3.0	226	5	285	130
155	12.6	281	3.0	161	3.0	226	6	138	110
156	14.4	84	2.9	231	3.1	164	5	128	110
157	13.4	182	2.8	295	2.9	286	4	212	110
158	13.1	218	2.8	295	2.9	286	4	211	120
159	13.5	168	2.8	295	3.0	226	4	167	110
160	11.9	341	2.7	349	2.7	377	4	213	110

Table 15. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Temuco, Chile in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade	Yield	Plant height
	%	rank	%	rank	%	rank	1-9	g	cm
161	12.0	336	3.0	161	3.0	226	4	117	115
162	10.9	384	3.0	161	2.9	286	4	298	125
163	12.4	304	3.0	161	3.0	226	4	129	85
164	12.8	260	2.7	349	2.8	338	3	296	135
165	13.1	218	3.1	107	3.2	115	4	108	120
166	12.4	304	3.0	161	3.1	164	4	229	130
167	12.1	328	3.3	42	3.3	76	5	46	105
168	13.1	218	3.0	161	3.1	164	5	89	130
169	13.3	196	2.8	295	2.9	286	5	152	130
170	14.0	116	2.6	387	2.8	338	4	161	100
171	13.5	168	2.7	349	2.9	286	6	189	105
172	13.4	182	2.9	231	3.0	226	6	195	105
173	12.5	293	2.8	295	2.8	338	5	134	120
174	12.7	270	2.9	231	3.0	226	5	164	115
175	12.2	319	2.9	231	2.9	286	4	71	120
176	13.6	155	3.1	107	3.3	76	6	100	130
177	14.5	73	3.0	161	3.2	115	6	114	110
178	12.9	248	2.9	231	3.0	226	4	147	115
179	13.6	155	2.9	231	3.0	226	4	117	105
180	12.6	281	3.4	26	3.4	45	5	158	105
181	14.0	116	2.7	349	2.8	338	4	260	105
182	12.1	328	3.0	161	3.0	226	4	125	105
183	13.0	233	3.3	42	3.4	45	6	82	120
184	13.2	206	3.3	42	3.4	45	6	79	120
185	13.4	182	3.4	26	3.5	29	6	81	125
186	13.2	206	3.3	42	3.4	45	6	88	130
187	13.1	218	3.2	71	3.3	76	6	92	125
188	13.0	233	3.2	71	3.3	76	6	50	115
189	13.0	233	3.2	71	3.3	76	5	91	120
190	14.0	116	2.6	387	2.8	338	6	62	105
191	14.5	73	2.9	231	3.1	164	6	114	130
192	11.8	344	3.0	161	3.0	226	5	170	130
193	12.6	281	3.1	107	3.1	164	5	153	125
194	11.7	350	2.8	295	2.8	338	4	296	130
195	11.3	368	2.9	231	2.8	338	4	283	120
196	12.0	336	3.1	107	3.1	164	4	200	100
197	13.0	233	2.7	349	2.8	338	5	149	100
198	11.7	350	2.6	387	2.6	398	4	170	115
199	11.0	380	2.8	295	2.7	377	5	306	110
200	10.8	389	2.7	349	2.6	398	4	304	105
Centurk	11.5	361	3.2	71	3.2	115	5	87	110
Lancota	13.5	168	2.6	387	2.8	338	5	198	120
CI13449	11.6	356	2.9	231	2.8	338	5	71	85
Bezostaya 1	12.5	293	2.6	387	2.7	377	4	216	105
205	11.5	361	2.7	349	2.6	398	3	295	110
206	12.2	319	2.6	387	2.7	377	4	182	95
207	13.9	128	2.7	349	2.8	338	4	172	110
208	12.8	260	2.8	295	2.9	286	4	171	130
209	13.5	168	2.7	349	2.8	338	4	153	130
210	12.6	281	2.7	349	2.7	377	5	202	130
211	13.4	182	2.6	387	2.8	338	4	235	130
212	16.2	8	2.7	349	3.0	226	5	183	135
213	12.4	304	3.0	161	3.0	226	5	219	130
214	12.4	304	2.9	231	2.9	286	5	345	135
215	12.2	319	2.7	349	2.7	377	4	259	140

Table 13. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Temuco, Chile in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade	Yield	Plant height
	%	rank	%	rank	%	rank	1-9	g	cm
216	13.1	218	2.7	349	2.8	338	5	181	135
217	13.1	210	2.9	231	3.0	226	6	123	135
218	13.7	144	3.0	161	3.1	164	6	58	115
219	12.0	336	2.7	349	2.7	377	5	213	130
220	12.8	260	2.8	295	2.9	286	5	176	130
221	12.9	248	3.0	161	3.1	164	6	66	110
222	12.8	260	2.7	349	2.8	338	4	186	105
223	12.9	248	2.9	231	3.0	226	6	69	115
224	12.4	304	2.7	349	2.8	338	5	211	120
225	13.1	218	2.9	231	3.0	226	6	48	120
226	11.9	341	2.8	295	2.8	338	5	296	130
227	10.9	384	2.9	221	2.7	377	5	267	130
228	12.4	304	2.8	295	2.9	286	5	171	110
229	12.6	281	2.9	231	3.0	226	6	188	135
230	14.1	103	3.1	107	3.3	76	7	69	120
231	13.5	168	3.0	161	3.1	164	6	36	110
232	14.7	59	2.8	295	3.0	226	6	108	100
233	13.9	128	2.8	295	3.0	226	6	192	120
234	13.9	128	3.2	71	3.3	76	6	53	130
235	13.6	155	2.9	231	3.1	164	6	132	140
236	13.4	182	2.9	231	3.0	226	6	59	125
237	14.1	103	3.0	161	3.2	115	7	62	120
238	15.4	28	2.6	387	2.9	286	5	128	115
239	12.7	270	2.6	387	2.7	377	4	240	120
240	12.4	304	2.6	387	2.6	398	4	323	125
241	12.6	281	2.7	349	2.7	377	5	159	110
242	12.0	336	2.7	349	2.7	377	5	237	120
243	12.7	270	2.6	387	2.6	398	5	217	105
244	12.1	328	3.1	107	3.2	115	6	74	110
245	13.3	196	3.1	107	3.3	76	6	221	110
246	14.0	116	2.8	295	3.0	226	6	135	110
247	13.8	136	3.0	161	3.1	164	5	146	130
248	15.5	25	3.0	161	3.2	115	7	17	110
249	13.9	128	2.8	295	2.9	286	5	86	115
250	14.4	84	3.0	161	3.2	115	5	88	105
251	14.5	73	2.8	295	2.9	286	6	119	110
252	15.7	19	3.6	8	3.8	7	8	14	115
253	15.7	19	3.2	71	3.4	45	8	28	115
254	15.8	15	3.2	71	3.5	29	9	25	110
255	15.8	15	3.0	161	3.3	76	8	68	120
256	14.1	103	2.8	295	3.0	226	7	163	120
257	12.2	319	2.7	349	2.8	338	7	180	115
258	13.3	196	2.6	387	2.7	377	7	208	110
259	12.5	293	2.6	387	2.7	377	5	186	110
260	13.4	182	2.6	387	2.7	377	6	265	105
261	12.9	248	2.6	387	2.7	377	6	201	115
262	12.9	248	2.6	387	2.7	377	6	206	115
263	12.5	293	2.5	401	2.6	398	6	193	115
264	14.1	103	2.5	401	2.7	377	6	165	105
265	14.0	116	2.7	349	2.9	286	5	156	110
266	12.6	281	3.0	161	3.1	164	6	65	110
267	13.0	233	3.0	161	3.1	164	7	79	135
268	12.1	328	2.6	387	2.7	377	5	256	140
269	11.6	356	2.7	349	2.7	377	4	207	135
270	12.1	328	2.7	349	2.7	377	4	206	120

Table 15. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Temuco, Chile in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade	Yield	Plant height
	%	rank	%	rank	%	rank	1-9	g	cm
271	12.6	281	2.7	349	2.7	377	4	166	120
272	12.5	293	2.9	231	2.9	286	5	200	115
273	12.5	293	2.9	231	2.9	286	5	138	115
274	11.8	344	2.9	231	2.9	286	5	199	125
275	11.6	356	2.9	231	2.8	338	5	182	135
276	11.3	368	2.9	231	2.8	338	5	223	120
277	11.0	380	2.7	349	2.6	398	5	238	125
278	10.8	389	3.0	161	2.9	286	5	143	120
279	10.4	395	3.0	161	2.8	338	5	197	125
280	11.2	373	3.2	71	3.1	164	6	72	115
281	12.7	270	3.6	8	3.6	20	7	48	105
282	10.8	389	3.0	161	2.8	338	5	215	115
283	13.1	218	3.0	161	3.1	164	6	113	115
284	10.8	389	2.8	295	2.7	377	4	268	125
285	11.2	373	2.8	295	2.7	377	4	220	125
286	12.8	260	2.8	295	2.9	286	5	152	115
287	14.1	103	2.6	387	2.8	338	6	126	120
288	13.5	168	2.7	349	2.8	338	6	134	120
289	12.7	270	3.0	161	3.1	164	6	137	125
290	13.2	206	2.8	295	2.9	286	5	158	120
291	13.6	155	3.0	161	3.1	164	6	96	120
292	13.6	155	2.7	349	2.8	338	6	192	115
293	13.5	168	2.6	387	2.7	377	5	189	105
294	14.0	116	2.8	295	3.0	226	6	188	100
295	12.7	270	3.3	42	3.3	76	6	146	115
296	12.3	313	3.0	161	3.0	226	6	175	120
297	11.2	373	3.2	71	3.1	164	6	174	105
298	11.6	356	2.9	231	2.9	286	6	153	120
299	12.2	319	2.8	295	2.9	286	6	207	120
300	12.3	313	2.8	295	2.8	338	6	155	105
Centurk	10.6	394	2.9	231	2.8	338	6	146	110
Lancota	11.3	368	3.1	107	3.1	164	6	232	135
CI13449	10.1	397	2.9	231	2.7	377	6	84	85
Bezostaya 1	11.4	364	3.0	161	3.0	226	5	182	110
305	12.1	328	2.7	349	2.7	377	6	152	90
306	11.7	350	3.4	26	3.4	45	6	167	125
307	14.1	103	2.8	295	3.0	226	7	99	130
308	13.3	196	3.1	107	3.2	115	7	87	110
309	13.1	218	3.4	26	3.5	29	7	65	115
310	14.6	64	2.8	295	3.0	226	7	55	115
311	13.6	155	2.9	231	3.1	164	6	226	110
312	15.0	42	2.8	295	3.0	226	6	162	120
313	14.9	48	3.4	26	3.6	20	6	64	110
314	15.2	36	2.9	231	3.1	164	4	127	100
315	13.6	155	2.8	295	2.9	286	5	164	105
316	13.6	155	3.0	161	3.2	115	4	153	100
317	14.1	103	3.0	161	3.1	164	4	176	105
318	15.2	36	3.1	107	3.3	76	5	172	105
319	14.1	103	3.0	161	3.2	115	5	165	105
320	14.2	95	2.9	231	3.1	164	4	140	105
321	13.8	136	2.9	231	3.1	164	4	184	105
322	14.3	91	2.9	231	3.1	164	5	168	105
323	14.3	73	2.9	231	3.1	164	5	123	105
324	17.5	1	3.1	107	3.3	76	6	49	115
325	16.3	5	5.5	17	3.8	7	7	40	115

Table 15. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Temuco, Chile in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm
326	14.7	59	3.3	42	3.5	29	7	56	125
327	12.9	248	2.7	349	2.8	338	9	288	100
328	14.7	59	3.1	107	3.3	76	6	90	120
329	13.1	218	3.1	107	3.2	115	6	51	115
330	16.2	8	3.1	107	3.3	76	7	20	120
331	13.6	155	3.6	8	3.8	7	8	75	125
332	12.8	260	3.0	161	3.1	164	6	68	110
333	14.0	116	2.9	231	3.1	164	6	170	120
334	13.5	168	2.6	387	2.8	338	5	99	110
335	13.2	206	2.6	387	2.7	377	6	46	110
336	14.9	48	3.3	42	3.5	29	9	10	110
337	15.3	31	3.1	107	3.3	76	8	18	110
338	13.8	136	3.1	107	3.3	76	8	16	110
339	14.4	84	3.0	161	3.1	164	8	18	110
340	15.4	28	3.3	42	3.5	29	8	98	—
341	15.6	22	2.9	231	3.1	164	6	111	115
342	15.5	25	3.0	161	3.3	76	7	57	110
343	15.3	31	3.1	107	3.3	76	6	89	110
344	17.3	2	3.0	161	3.3	76	7	100	110
345	14.6	64	2.9	231	3.1	164	5	91	95
346	15.2	36	2.8	295	3.0	226	6	58	100
347	15.4	28	2.9	231	3.1	164	6	106	105
348	14.9	48	2.6	387	2.8	338	5	94	105
349	14.4	84	2.8	295	3.0	226	5	163	100
350	14.0	116	2.8	295	2.9	286	5	147	105
351	13.3	196	2.7	349	2.8	338	5	194	120
352	12.8	260	3.0	161	3.0	226	5	242	115
353	13.5	168	3.3	42	3.5	29	8	32	95
354	15.6	22	3.2	71	3.4	45	8	31	90
355	14.5	73	2.9	231	3.1	164	7	20	100
356	13.5	168	3.2	71	3.4	45	7	80	105
357	14.0	116	3.1	107	3.3	76	7	16	90
358	13.4	182	2.7	349	2.8	338	4	67	100
359	14.3	91	2.7	349	2.9	286	5	128	105
360	13.1	218	2.8	295	2.9	286	5	133	85
361	11.8	344	2.9	231	2.8	338	4	346	110
362	11.5	361	3.2	71	3.2	115	4	317	115
363	12.6	281	2.9	231	3.0	226	4	306	115
364	13.6	155	3.3	42	3.5	29	7	15	100
365	15.9	13	2.9	231	3.1	164	5	230	100
366	14.8	55	2.9	231	3.1	164	5	213	105
367	14.5	73	2.8	295	3.0	226	5	214	105
368	14.7	59	2.7	349	2.9	286	5	274	105
369	15.1	40	2.8	295	3.0	226	5	204	105
370	16.0	12	2.8	295	3.0	226	6	229	105
371	14.9	48	3.2	71	3.4	45	7	107	100
372	15.8	15	2.6	387	2.9	286	6	238	100
373	14.2	95	3.0	161	3.2	115	6	229	105
374	14.1	103	2.8	295	3.0	226	6	241	105
375	14.6	64	2.7	349	2.9	286	6	236	105
376	14.9	48	2.7	349	2.9	286	6	215	110
377	14.0	116	2.9	231	3.1	164	6	210	105
378	14.6	64	2.9	231	3.1	164	6	201	105
379	14.5	73	2.6	387	2.9	338	5	238	105
380	14.5	73	2.7	349	2.9	286	5	212	105

Table 15. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Temuco, Chile in 1975. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm
381	14.5	73	2.7	349	2.9	286	5	241	105
382	14.6	64	2.7	349	2.9	286	5	227	110
383	14.5	73	2.6	387	2.8	338	4	205	110
384	13.8	136	2.8	295	3.0	226	5	233	110
385	14.4	84	2.7	349	2.9	286	4	147	110
386	15.3	31	2.8	295	3.1	164	5	265	110
387	16.3	5	3.6	8	3.8	7	9	17	110
388	16.2	8	3.6	8	3.8	7	9	13	110
389	13.2	206	2.8	295	2.9	286	6	252	135
390	14.0	116	2.9	231	3.0	226	6	178	130
391	12.5	293	3.0	161	3.1	164	6	159	130
392	15.3	196	3.0	161	3.1	164	6	184	135
393	14.5	73	3.1	107	3.3	76	7	180	125
394	14.0	116	3.0	161	3.1	164	7	203	125
395	14.3	91	2.9	231	3.1	164	7	188	125
396	14.4	84	3.0	161	3.2	115	7	53	110
397	13.7	144	3.3	42	3.4	45	7	90	110
398	13.7	144	3.3	42	3.4	45	7	125	110
Centurk	12.0	336	3.1	107	3.1	164	7	111	115
Lancota	13.5	168	2.7	349	2.8	338	6	270	135
CI13449	10.7	392	3.2	71	3.0	226	6	152	100
Bezostaya 1	10.8	389	2.8	295	2.7	377	5	322	110
Overall mean	13.3		2.97		3.07		5.7	155.4	114.7

Correlation Coefficients

Protein	.07	.44**
Lysine/protein		.91**

** Significant at the P=.01 level.

Means of the check varieties

Bezostaya 1	11.4	2.80	2.76
Centurk	11.7	3.02	3.02
CI13449	10.5	3.02	2.84
Lancota	12.5	2.84	2.90
Check mean	11.5	2.92	2.88
$LSD_{.05}$ of check means	0.3	0.25	0.23
Coefficient of variation %	6.2	6.22	5.80

Table 16. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown at Martonvasar, Hungary in 1976.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade
	%	rank	%	rank	%	rank	1-9
Centurk	14.9	295	2.8	125	3.0	147	2
Lancota	17.7	62	2.6	315	2.9	261	2
CI13449	13.1	378	3.2	5	3.3	8	4
Bezostaya 1	14.9	295	2.7	224	2.9	261	2
5	12.5	390	3.3	2	3.3	8	3
6	12.0	394	3.3	2	3.3	8	3
7	15.0	284	2.8	125	3.0	147	2
8	13.8	356	2.8	125	3.0	147	2
9	13.9	352	3.0	27	3.1	59	2
10	13.6	365	2.9	59	3.1	59	2
11	16.1	164	2.7	224	2.9	261	2
12	17.4	73	2.8	125	3.1	59	3
13	16.7	120	2.8	125	3.1	59	3
14	12.2	392	3.0	27	3.1	59	2
15	13.5	368	3.0	27	3.1	59	2
16	14.8	304	2.9	59	3.1	59	3
17	17.3	82	2.6	315	2.8	347	2
18	13.0	381	3.0	27	3.1	59	3
19	14.4	329	3.0	27	3.1	59	3
20	17.3	82	2.7	224	3.0	147	3
21	20.0	3	3.1	11	3.4	3	3
22	14.9	295	2.7	224	2.9	261	3
23	13.0	381	2.9	59	3.0	147	3
24	15.9	188	2.9	59	3.2	21	3
25	16.7	120	2.7	224	3.0	147	2
26	13.3	373	2.9	59	3.0	147	2
27	15.1	276	2.9	59	3.1	59	2
28	15.2	269	2.9	59	3.1	59	2
29	16.4	141	2.6	315	2.8	347	2
30	15.2	269	2.9	59	3.1	59	4
31	14.5	323	3.1	11	3.3	8	3
32	14.9	295	3.0	27	3.2	21	3
33	16.3	147	3.3	2	3.5	1	4
34	15.6	221	3.2	5	3.4	3	3
35	14.2	338	3.0	27	3.2	21	2
36	17.6	67	2.5	371	2.8	347	2
37	17.1	95	2.5	371	2.8	347	2
38	16.7	120	2.8	125	3.0	147	2
39	15.5	235	2.8	125	3.0	147	3
40	15.0	284	2.8	125	3.0	147	3
41	13.7	361	3.0	27	3.1	59	3
42	14.0	345	2.9	59	3.0	147	3
43	16.0	174	2.9	59	3.1	59	2
44	16.9	103	2.7	224	3.0	147	2
45	15.6	221	2.8	125	3.0	147	2
46	15.7	210	2.8	125	3.1	59	2
47	15.4	246	2.9	59	3.1	59	2
48	15.4	246	2.8	125	3.1	59	2
49	15.3	257	2.8	125	3.0	147	2
50	15.8	202	2.8	125	3.0	147	2
51	15.0	284	2.8	125	3.0	147	2
52	20.0	3	2.7	224	2.9	261	2
53	21.0	1	2.5	371	2.7	384	2
54	15.7	210	2.8	125	3.1	59	2
55	15.0	284	2.7	224	2.9	261	2

Table 16. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown at Martonvasar, Hungary in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade
	%	rank	%	rank	%	rank	1-9
56	15.4	246	2.7	224	2.9	261	2
57	15.9	188	2.6	315	2.8	347	2
58	16.8	110	2.8	125	3.1	59	2
59	16.2	155	3.0	27	3.2	21	2
60	15.8	202	2.7	224	2.9	261	2
61	12.8	386	3.0	27	3.1	59	2
62	15.2	269	2.9	59	3.1	59	2
63	14.5	323	2.9	59	3.1	59	2
64	14.9	295	2.9	59	3.1	59	2
65	17.9	50	2.8	125	3.1	59	2
66	14.4	329	2.9	59	3.1	59	2
67	15.7	210	2.8	125	3.0	147	3
68	15.9	188	2.8	125	3.0	147	2
69	15.3	257	2.9	59	3.1	59	3
70	15.4	246	2.8	125	3.0	147	3
71	13.7	361	2.9	59	3.1	59	3
72	13.9	352	2.8	125	3.0	147	3
73	14.9	295	2.9	59	3.1	59	2
74	14.9	295	2.8	125	3.0	147	2
75	14.6	317	2.8	125	3.0	147	2
76	14.8	304	2.9	59	3.1	59	2
77	16.2	155	2.7	224	3.0	147	2
78	16.8	110	2.8	125	3.0	147	2
80[a]	16.7	120	2.7	224	3.0	147	2
81	17.0	100	2.8	125	3.0	147	2
82	16.7	120	2.7	224	3.0	147	2
83	16.8	110	2.9	59	3.2	21	2
84	16.8	110	2.9	59	3.1	59	2
85	13.3	373	3.1	11	3.2	21	2
86	14.8	304	2.8	125	3.0	147	2
87	14.4	329	2.8	125	3.0	147	3
88	14.0	345	3.0	27	3.1	59	2
89	15.3	257	2.8	125	3.0	147	2
90	14.5	323	3.0	27	3.2	21	2
91	16.1	164	2.9	59	3.1	59	2
92	14.8	304	3.0	27	3.2	21	2
93	15.5	235	3.0	27	3.2	21	2
94	13.2	375	2.9	59	3.0	147	2
95	16.8	110	2.7	224	3.0	147	3
96	18.5	14	2.6	315	2.9	261	2
97	17.9	50	2.8	125	3.1	59	3
98	18.0	40	2.8	125	3.1	59	3
99	18.5	14	2.6	315	2.9	261	2
100	17.7	62	2.8	125	3.0	147	3
Centurk	13.6	365	2.8	125	2.9	261	3
Lancota	18.3	23	2.6	315	2.8	347	3
CI13449	12.8	386	3.1	11	3.2	21	4
Bezostaya 1	15.7	210	2.7	224	3.0	147	2
105	14.3	334	2.8	125	3.0	147	2

[a] Entry numbers 79, 200, 279, 314, 348, 360, 362, 363 were missing.

Table 16. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown at Martonvasar, Hungary in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade
	%	rank	%	rank	%	rank	1-9
106	18.7	10	2.8	125	3.0	147	2
107	17.3	82	2.7	224	2.9	261	2
108	18.7	10	2.6	315	2.9	261	2
109	16.1	34	2.5	371	2.8	347	2
110	17.2	90	2.7	224	2.9	261	2
111	17.3	82	2.7	224	2.9	261	2
112	15.2	269	2.9	59	3.1	59	2
113	15.9	188	2.6	315	2.8	347	2
114	14.9	295	2.7	224	2.9	261	2
115	15.8	202	2.7	224	3.0	147	4
116	14.4	329	3.0	27	3.2	21	4
117	15.6	221	2.6	315	2.9	261	4
118	15.8	202	2.6	315	2.8	347	4
119	15.3	257	2.4	392	2.6	393	4
120	16.2	155	2.6	315	2.8	347	4
121	16.5	134	2.7	224	3.0	147	4
122	16.0	174	2.8	125	3.1	59	4
123	19.3	5	2.6	315	2.9	261	4
124	16.5	134	2.8	125	3.0	147	4
125	18.2	29	2.7	224	3.0	147	4
126	15.9	188	2.8	125	3.1	59	3
127	15.2	269	2.7	224	2.9	261	3
128	15.8	202	2.7	224	3.0	147	4
129	18.0	40	2.7	224	2.9	261	3
130	16.1	164	2.6	315	2.8	347	3
131	15.9	188	3.1	11	3.3	8	3
132	16.2	155	2.7	224	2.9	261	4
133	13.7	361	3.0	27	3.1	59	4
134	15.3	257	2.8	125	3.0	147	4
135	16.7	120	2.6	315	2.8	347	3
136	13.5	368	3.1	11	3.3	8	4
137	14.7	311	2.8	125	3.0	147	4
138	13.7	361	3.0	27	3.2	21	4
139	13.9	352	2.9	59	3.0	147	4
140	13.7	361	2.8	125	2.9	261	4
141	14.9	295	2.8	125	3.0	147	4
142	14.5	323	2.7	224	2.9	261	4
143	15.5	235	2.5	371	2.8	347	3
144	18.0	40	2.7	224	3.0	147	3
145	16.3	147	2.8	125	3.0	147	3
146	16.0	174	2.5	371	2.7	384	3
147	16.8	110	2.6	315	2.9	261	4
148	15.2	269	2.8	125	3.0	147	4
149	13.9	352	2.7	224	2.9	261	4
150	14.0	345	2.8	125	3.0	147	3
151	13.4	371	3.0	27	3.2	21	4
152	17.3	82	2.6	315	2.8	347	3
153	15.0	284	2.7	224	2.9	261	4
154	14.7	311	2.6	315	2.8	347	4
155	15.7	210	2.7	224	2.9	261	3
156	15.6	221	2.5	371	2.7	384	3
157	15.9	188	2.5	371	2.8	347	3
158	15.6	221	2.5	371	2.7	384	3
159	16.8	110	2.5	371	2.8	347	3
160	16.2	155	2.5	371	2.7	384	4

Table 16. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown at Martonvasar, Hungary in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade
	%	rank	%	rank	%	rank	1-9
161	16.3	147	2.5	371	2.7	384	4
162	16.2	155	2.6	315	2.9	261	3
163	14.3	334	2.6	315	2.8	347	5
164	16.5	134	2.6	315	2.9	261	4
165	16.3	147	2.6	315	2.8	347	3
166	16.1	164	2.8	125	3.0	147	3
167	13.5	368	2.9	59	3.0	147	4
168	15.8	202	2.7	224	2.9	261	3
[illegible]	18.1	34	2.4	392	2.7	384	2
170	16.0	174	2.7	224	2.9	261	2
171	15.9	188	2.7	224	2.9	261	3
172	15.6	221	2.8	125	3.0	147	3
173	15.5	235	2.6	315	2.9	261	3
174	15.5	235	2.8	125	3.0	147	3
175	17.3	82	2.8	125	3.1	59	3
176	18.3	23	2.6	315	2.9	261	3
177	15.8	202	2.6	315	2.9	261	3
178	16.5	134	2.8	125	3.0	147	3
179	16.7	120	2.6	315	2.9	261	2
180	13.8	356	2.7	224	2.9	261	3
181	15.5	235	2.5	371	2.8	347	2
182	14.8	304	2.9	59	3.1	59	2
183	17.3	82	2.7	224	3.0	147	3
184	17.3	82	2.7	224	2.9	261	3
185	17.1	95	2.6	315	2.9	261	3
186	16.6	127	2.7	224	3.0	147	3
187	17.1	95	2.7	224	3.0	147	4
188	16.4	141	2.6	315	2.8	347	3
189	16.3	147	2.7	224	2.9	261	3
190	16.4	141	2.7	224	2.9	261	3
191	16.5	134	2.7	224	3.0	147	3
192	16.8	110	2.6	315	2.8	347	3
193	17.9	50	2.5	371	2.8	347	4
194	17.9	50	2.6	315	2.9	261	4
195	17.5	69	2.7	224	3.0	147	3
196	15.3	257	2.7	224	2.9	261	3
197	15.3	257	2.8	125	3.0	147	3
198	14.5	323	2.7	224	2.9	261	3
199	14.9	295	2.7	224	2.9	261	2
Centurk	15.3	257	2.6	315	2.8	347	2
Lancota	18.1	34	2.5	371	2.8	347	3
CI13449	12.7	388	3.2	5	3.3	8	4
Benostaya 1	15.3	257	2.6	315	2.8	347	2
205	15.2	269	2.7	224	3.0	147	2
206	14.2	338	2.8	125	2.9	261	2
207	16.8	110	2.7	224	2.9	261	2
208	16.5	134	2.7	224	3.0	147	3
209	16.5	134	2.8	125	3.0	147	2
210	17.8	57	2.5	371	2.8	347	3
211	17.9	50	2.5	371	2.7	384	3
212	18.8	8	2.7	224	3.0	147	2
213	17.4	73	2.7	224	3.0	147	2
214	17.7	62	2.5	371	2.7	384	3
215	17.9	50	2.6	315	2.9	261	2
216	16.2	155	2.7	224	3.0	147	2

Table 16. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown at Martonvasar, Hungary in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade
	%	rank	%	rank	%	rank	1-9
217	15.9	188	2.7	224	2.9	261	2
218	16.5	134	2.6	315	2.9	261	2
219	14.0	345	2.7	224	2.9	261	2
220	17.4	73	2.6	315	2.9	261	2
221	14.8	304	2.8	125	3.0	147	3
222	15.9	188	2.7	224	3.0	147	2
223	15.2	269	2.7	224	3.0	147	2
224	15.0	284	2.5	371	2.7	384	2
225	15.6	221	2.7	224	2.9	261	2
226	15.3	257	2.8	125	3.1	59	2
227	14.9	295	2.9	59	3.1	59	3
228	14.0	345	2.8	125	3.0	147	3
229	16.6	127	2.6	315	2.8	347	3
230	15.6	221	2.8	125	3.0	147	3
231	14.4	329	2.6	315	2.8	347	2
232	15.0	284	2.7	224	2.9	261	3
233	17.0	100	2.6	315	2.9	261	3
234	17.3	82	2.6	315	2.9	261	2
235	18.3	23	2.5	371	2.7	384	2
236	17.2	90	2.4	392	2.6	393	2
237	15.0	284	2.7	224	2.9	261	2
238	15.6	221	2.7	224	2.9	261	3
239	15.3	257	2.7	224	2.9	261	3
240	15.2	269	2.6	315	2.8	347	3
241	16.6	127	2.7	224	3.0	147	3
242	17.3	257	2.7	224	2.9	261	2
243	14.2	338	2.6	315	2.8	347	3
244	12.9	386	3.0	27	3.0	147	4
245	15.0	284	2.7	224	2.9	261	3
246	15.4	246	2.6	315	2.8	347	3
247	18.2	29	2.4	392	2.6	393	3
248	16.4	141	2.6	315	2.9	261	3
249	16.8	110	2.6	315	2.9	261	3
250	15.5	235	2.6	315	2.9	261	3
251	16.6	127	2.8	125	3.0	147	3
252	15.9	188	2.7	224	2.9	261	3
253	14.0	345	2.8	125	2.9	261	3
254	14.6	317	2.9	59	3.1	59	3
255	18.7	10	2.5	371	2.8	347	2
256	15.9	188	2.7	224	2.9	261	2
257	16.2	155	2.5	371	2.8	347	3
258	15.6	221	2.6	315	2.9	261	3
259	15.4	246	2.6	315	2.8	347	3
260	16.1	164	2.7	224	2.9	261	2
261	16.3	147	2.5	371	2.8	347	2
262	15.8	202	2.6	315	2.9	261	3
263	16.5	134	2.6	315	2.8	347	2
264	15.9	188	2.5	371	2.8	347	3
265	16.3	147	2.5	371	2.7	384	3
266	12.9	383	2.9	59	3.0	147	2
267	14.2	338	2.8	125	3.0	147	2
269	17.1	95	2.7	224	2.9	261	3
269	15.0	284	2.6	315	2.9	261	2
270	15.4	246	2.6	315	2.9	261	3
271	14.5	323	2.8	125	3.0	147	3

Table 16. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown at Martonvasar, Hungary in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade
	%	rank	%	rank	%	rank	1-9
272	13.5	368	2.8	125	2.9	261	3
273	13.2	375	2.9	59	3.0	147	2
274	14.3	334	2.7	224	2.9	261	3
275	14.0	345	2.8	125	2.9	261	3
276	14.7	311	2.7	224	2.9	261	3
277	13.0	381	2.8	125	2.9	261	3
278	13.8	356	2.8	125	3.0	147	3
280	15.1	276	2.9	59	3.1	59	3
281	12.9	383	2.9	59	3.0	147	3
282	13.1	378	2.9	59	3.0	147	3
283	15.7	210	2.7	224	2.9	261	3
284	14.7	311	2.9	59	3.1	59	3
285	14.9	295	2.8	125	3.0	147	3
286	15.6	221	2.7	224	3.0	147	4
287	17.9	50	2.6	315	2.8	347	4
288	15.9	188	2.7	224	2.9	261	3
289	15.9	188	2.6	315	2.8	347	3
290	15.5	235	2.7	224	2.9	261	3
291	16.6	127	2.9	59	3.1	59	2
292	15.6	221	2.8	125	3.0	147	3
293	15.9	188	2.7	224	2.9	261	3
294	14.6	317	2.9	59	3.1	59	3
295	15.7	210	2.7	224	2.9	261	3
296	16.0	174	2.7	224	3.0	147	2
297	12.4	391	3.0	27	3.1	59	3
298	16.1	164	2.6	315	2.8	261	2
299	15.5	235	2.7	224	2.9	261	3
300	12.6	389	2.7	224	2.8	347	3
Centurk	14.0	345	2.8	125	3.0	147	3
Lancota	17.4	73	2.5	371	2.8	347	3
CI13449	13.1	378	3.0	27	3.1	59	5
Bezostaya 1	15.1	276	2.6	315	2.9	261	3
305	12.1	395	3.1	11	3.1	59	4
306	14.2	338	2.6	315	2.8	347	2
307	16.0	174	2.7	224	2.9	261	3
308	13.4	371	2.8	125	2.9	261	3
309	15.5	235	2.7	224	2.9	261	3
310	16.9	103	2.6	315	2.9	261	4
311	16.1	164	2.8	125	3.0	147	3
312	18.2	29	2.4	392	2.7	384	2
313	16.0	174	2.5	371	2.8	347	3
315	17.7	62	2.5	371	2.8	347	2
316	17.1	95	2.7	224	3.0	147	2
317	18.1	34	2.5	371	2.8	347	2
318	17.4	73	2.6	315	2.8	347	3
319	17.3	82	2.8	125	3.1	59	2
320	17.0	100	2.6	315	2.9	261	2
321	17.6	67	2.6	315	2.8	347	3
322	17.3	82	2.6	315	2.9	261	2
323	18.1	34	2.7	224	3.0	147	2
324	16.2	155	2.8	125	3.1	59	3
325	15.9	188	2.6	315	2.9	261	3
326	17.2	90	2.7	224	2.9	261	3
327	14.5	323	2.6	315	2.8	347	3
328	15.1	276	2.8	125	3.0	147	3

Table 16. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown at Martonvasar, Hungary in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade
	%	rank	%	rank	%	rank	1-9
329	14.0	345	2.8	125	3.0	147	3
330	17.8	57	2.5	371	2.7	384	2
331	15.7	210	2.6	315	2.9	261	3
332	14.6	317	2.7	224	2.9	261	3
333	16.1	164	2.6	315	2.9	261	3
334	14.6	317	2.8	125	3.0	147	3
335	15.4	246	2.8	125	3.0	147	3
336	16.8	110	2.8	125	3.1	59	3
337	17.2	90	2.7	224	3.0	147	3
338	16.8	110	3.0	27	3.2	21	3
339	17.0	100	2.9	59	3.1	59	3
340	17.7	62	2.7	224	3.0	147	3
341	17.7	62	2.7	224	3.0	147	2
342	19.0	6	2.5	371	2.8	347	3
343	16.7	120	2.7	224	2.9	261	3
344	18.4	18	2.6	315	2.9	261	3
345	16.0	174	2.8	125	3.0	147	3
346	15.2	269	2.7	224	3.0	147	3
347	15.5	235	2.8	125	3.0	147	3
349	16.1	164	3.0	27	3.3	8	3
350	15.9	188	2.9	59	3.2	21	3
351	14.7	311	2.7	224	2.9	261	3
352	13.9	352	3.0	27	3.2	21	3
353	13.8	356	2.6	315	2.8	347	3
354	20.2	2	2.6	315	2.8	347	3
355	15.0	284	2.7	224	2.9	261	3
356	14.4	329	2.8	125	3.0	147	3
357	15.5	235	2.7	224	2.9	261	2
358	15.9	188	2.5	371	2.8	347	2
359	15.6	221	2.6	315	2.8	347	3
361	15.8	202	2.5	371	2.8	347	3
364	14.7	311	3.0	27	3.2	21	3
365	18.3	23	2.8	125	3.0	147	2
366	18.2	29	2.7	224	2.9	261	2
367	18.5	14	2.7	224	3.0	147	2
368	17.9	50	2.6	315	2.9	261	2
369	17.8	57	2.7	224	3.0	147	2
370	18.4	18	2.7	224	3.0	147	2
371	16.0	174	2.7	224	2.9	261	3
372	18.0	40	2.8	125	3.0	147	2
373	18.3	23	2.7	224	3.0	147	2
374	17.9	50	2.6	315	2.9	261	3
375	18.0	40	2.7	224	2.9	261	3
376	18.0	40	2.6	315	2.9	261	3
377	18.3	23	2.5	371	2.7	384	3
378	18.5	14	2.8	125	3.0	147	3
379	17.5	69	2.8	125	3.1	59	3
380	17.8	57	2.7	224	3.0	147	3
381	18.4	18	2.5	371	2.8	347	3
382	19.0	6	2.6	315	2.9	261	3
383	18.0	40	2.6	315	2.9	261	3
384	17.9	50	2.6	315	2.8	347	3
385	18.2	29	2.7	224	3.0	147	3
386	17.9	50	2.7	224	3.0	147	2
387	15.6	221	2.8	125	3.0	147	3

Table 16. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown at Martonvasar, Hungary in 1976. Concluded.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade 1-9
	%	rank	%	rank	%	rank	
388	15.3	257	2.8	125	3.0	147	3
389	17.3	82	2.7	224	2.9	261	3
390	17.6	67	2.9	59	3.1	59	2
391	15.5	235	2.5	371	2.8	347	3
392	17.1	95	2.8	125	3.0	147	3
393	18.5	14	2.8	125	3.1	59	3
394	17.4	73	2.8	125	3.0	147	-
395	15.4	246	2.8	125	3.1	59	-
396	16.1	164	2.7	224	3.0	147	-
397	16.4	141	2.7	224	3.0	147	-
398	18.4	18	2.8	125	3.1	59	-
Centurk	13.6	365	2.8	125	3.0	147	-
Lancota	18.0	40	2.5	371	2.8	347	-
CI13449	14.7	311	3.2	5	3.4	3	-
Bezostaya 1	15.2	269	2.7	224	2.9	261	-
Overall mean	15.9		2.74		2.96		2.8

Correlation Coefficients

Protein	- .53**	- .31**
Lysine/protein		.92**

** Significant at the P=.01 level.

Means of the check varieties

Bezostaya 1	15.2	2.66	2.90
Centurk	14.3	2.76	2.94
CI13449	13.3	3.14	3.26
Lancota	17.9	2.54	2.82
Check mean	15.2	2.78	2.98
$LSD_{.05}$ of check means	0.9	0.09	0.11
Coefficient of variation %	4.4	2.39	2.73

Table 17. Disease data for stripe, leaf, and stem rusts for entries in the second high protein-high lysine winter wheat observation nursery grown at Simla, India in 1976.

Entry number	Stripe rust1/		Leaf rust1/		Stem rust1/	
	sev. %	resp.	sev. %	resp.	sev. %	resp.
Centurk	0		40	MR	0	
Lancota	0		t	MR	0	
?Ll3449	5	S	100	S	5	S
Bezostaya 1	0		40	X	0	
5	0		40	S	0	
6	0		100	S	0	
7	0		60	S	10	S
8	t	R	20	X	0	
9	0		80	S	0	S
10	0		80	S	10	S
11	0		t	R	0	
12	0		t	X	0	
13	0		5	X	0	
14	20	S	60	S	60	S
15	30	S	80	S	10	S
16	40	S	80	S	0	
17	t	S	20	X	0	
18	0		80	S	20	S
19	10	S	60	S	0	
20	20	S	60	S	0	
21	40	S	40	X	0	
22	t	S	100	S	0	
23	80	S	10	S	t	S
24	t	S	t	R	0	
25	0		80	S	10	S
26	0		100	S	0	
27	t	R	t	R	t	S
28	0		100	S	t	S
29	0		80	S	60	S
30	0		100	S	100	S
31	0		100	S	100	S
32	0		100	S	100	S
33	0		100	S	40	S
34	0		100	S	10	S
35	0		80	X	0	
36	60	S	20	X	5	S
37	10	S	60	X	5	S
38	40	S	40	X	5	X
39	10	S	80	S	t	S
40	0		20	X	60	S
41	10	S	40	S	t	S
42	t	S	60	S	5	S
43	0		60	S	0	
44	0		80	S	0	
45	t	R	40	X	0	
46	t	S	20	X	0	
47	0		100	S	0	
48	t	S	100	S	0	
49	0		100	S	10	S
50	0		40	S	0	

t = trace, X = mesophytic, R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible.

Table 17. Disease data for stripe, leaf, and stem rusts for entries in the second high protein-high lysine winter wheat observation nursery grown at Simla, India in 1976. Continued.

Entry number	Stripe rust		Leaf rust		Stem rust	
	sev. %	resp.	sev. %	resp.	sev. %	resp.
51	0		40	S	0	
52	t	R	100	S	0	
53	t	R	100	S	0	
54	t	R	60	X	10	S
55	0		60	S	0	
56	t	R	60	X	0	
57	t	R	60	X	0	
58	5	S	60	MR	t	S
59	0		t	S	t	S
60	0		40	S	5	S
61	20	S	80	X	0	
62	10	S	60	S	t	S
63	0		40	S	0	
64	0		60	S	0	
65	0		100	S	0	
66	0		60	X	t	S
67	t	R	60	S	0	
68	t	S	80	X	t	S
69	—		80	S	60	S
70	t	R	40	X	0	
71	t	S	40	S	40	S
72	0		80	S	t	S
73	0		40	S	t	S
74	10	S	100	S	t	S
75	0		t-40	S-S	5-40	S-S
76	t	R	40	X	0	
77	t	R	t	X	0	
78	t	R	t	X	0	
79	0		t	X	0	
80	t	S	t	X	t	S
81	t	R	20	S	0	
82	t	S	10	X	0	
83	t	R	20	X	0	
84	0		20	X	t	S
85	10	S	100	S	20	S
86	t	S	40	S	t	S
87	0		60	S	t	S
88	0		60	S	0	
89	0		60	S	0	
90	0		80	S	t	MR
91	40	S	100	S	5	S
92	0		60	S	0	
93	0		100	S	0	
94	t	S	60	S	t	S
95	t	R	40	X	0	
96	0		60	S	15	X
97	0		40	S	t	S
98	t	S	10	S	t	S
99	5	S	40	S	t	S
100	10	S	5	X	t	X
Centurk	t	S	60	X	t	S
Lancota	t	R	t	X	0	
CI13449	40	S	100	S	10	S
Bezostaya 1	0		20	X	0	
105	5	S	80	X	5	S

Table 17. Disease data for stripe, leaf and stem rusts for entries in the second high protein-high lysine winter wheat observation nursery grown at Simla, India in 1976. Continued.

Entry number	Stripe rust		Leaf rust		Stem rust	
	sev. %	resp.	sev. %	resp.	sev. %	resp.
106	0		5	S	t	S
107	0		t	R	t	S
108	0		5	X	t	S
109	40	S	80	X	10	S
110	0		20	S	5	S
111	20	S	100	S	t	S
112	60	S	20	S	0	
113	0		60	X	t	S
114	5	S	80	S	t	MR
115	0		10	X	0	
116	0		t	S	0	
117	10	S	60	S	0	
118	10	S	60	S	0	
119	20	S	40	S	0	
120	0		60	S	5	S
121a	10	S	60	S	10	S
121b	0		80	S	40	S
122	40	S	60	S	0	
123	t	S	60	S	100	S
124	t	S	60	S	100	S
125	0		60	S	10	S
126	0		20	X	0	
127	t	R	t	X	0	
128	10	S	100	S	t	S
129	0		10	S	5	S
130	5	S	60	S	t	S
131	0		80	S	10	S
132	10	S	80	S	40	S
133	0		80	S	0	
134	20	S	60	S	0	
135	0		80	S	0	
136	t	R	0		0	
137	t	R	5	X	t	S
138	t	R	t	X	5	S
139	t	R	t	X	0	
140	0		40	S	t	S
141	t	S	5	S	t	S
142	0		40	S	80	S
143	—		—		—	
144	t	R	40	S	0	
145	t	R	60	S	100	S
146	0		80	S	0	
147	0		80	S	t	S
148	0		80	S	t	S
149	t	R	t	S	t	S
150	0		t	R	0	
151	0		t	S	0	
152	t	S	t	S	t	S
153	0		0		0	
154	—		40	X	10	S
155	0		60	S	0	
156	t	S	100	S	t	S
157	5	S	30	X	t	S
158	t	S	40	X	0	
159	t	R	60	S	0	

Table 17. Disease data for stripe, leaf and stem rusts for entries in the second high protein-high lysine winter wheat observation nursery grown at Fimla, India in 1976. Continued.

Entry number	Stripe rust		Leaf rust		Stem rust	
	sev. %	resp.	sev. %	resp.	sev. %	resp.
160	10	S	60	S	0	
161	0		80	S	t	S
162	0		40	S	40	S
163	10	S	80	S	t	S
164	t	S	20	S	t	S
165	10	S	100	S	40	S
166	0		80	S	t	S
167	t	S	80	S	t	S
168	0		80	S	5	S
169	0		60	S	t	S
170	10	S	100	S	40	S
171	t	S	20	X	20	S
172	5	S	20	X	t	X
173	0		20	X	20	S
174	t	S	20	X	10	S
175	0		40	S	t	S
176	0		20	S	t	S
177	t	S	40	X	t	S
178	t	R	60	S	t	S
179	40	S	10	X	0	
180	t	S	10	S	t	S
181	0		20	S	t	MR
182	0		60	S	10	S
183	t	S	10	X	t	S
184	t	S	10	S	t	S
185	t	S	10	X	t	S
186	t	S	60	S	t	S
187	0		30	S	t	S
188	0		40	S	0	
189	t	R	40	S	0	
190	5	S	20	S	0	
191	0		60	S	20	S
192	t	S	40	S	t	S
193	0		40	S	0	
194	0		60	S	0	
195	t	R	40	S	t	S
196	0		40	X	0	
197	t	S	5	X	0	
198	t	S	60	X	0	
199	0		0		0	
200	0		0		0	
Centurk	0		40	S	0	
Lancota	t	R	t	R	0	
CI13449	20	S	100	S	10	S
Bezostaya 1	0		10	MR	0	
205	0		t	MR	0	
206	t	R	0		0	
207	t	S	40	S	0	
208	0		80	S	0	
209	t	S	40	S	0	
210	t	R	60	S	10	S
211	0		40	S	0	
212	t	S	5	R	t	S
213	---		10	X	5	S
214	0		10	X	t	R

Table 17. Disease data for stripe, leaf, and stem rusts for entries in the second high protein-high lysine winter wheat observation nursery grown at Simla, India in 1976. Continued.

Entry number	Stripe rust		Leaf rust		Stem rust	
	sev. %	resp.	sev. %	resp.	sev. %	resp.
215	t	S	10	X	t	S
216	t	S	10	X	t	S
217	0		20	X	0	
218	10	S	10	X	0	
219	t	S	30	X	0	
220	0		40	X	30	S
221	0		40	X	20	S
222	0		10	X	20	S
223	0		60	S	0	
224	0		80	S	t	S
225	5	S	80	S	0	
226	t	R	0		0	
227	t	S	30	S	0	
228	0		80	S	0	
229	0		60	S	0	
230	20	S	40	X	0	
231	40	S	60	S	0	
232	40	S	60	S	t	S
233	10	S	40	S	t	S
234	t	S	80	S	0	
235	10	S	60	S	t	S
236	10	S	60	S	0	
237	10	S	40	X	t	S
238	10	S	80	S	t	S
239	t	S	80	X	0	
240	t	S	60	S	0	
241	t	S	60	S	t	S
242	t	S	40	X	40	S
243	10	S	40	S	t	S
244	t	S	100	S	40	S
245	40	S	60	S	t	S
246	20	S	40	S	60	S
247	t	S	80	S	0	
248	t	S	80	S	40	S
249	0		t	S	60	S
250	20	S	80	X	20	S
251	0		40	X	40	S
252	0		40	S	5	S
253	t	S	60	S	t	S
254	t	S	80	S	30	S
255	20	S	10	S	20	S
256	0		60	S	20	S
257	t	S	80	S	20	S
258	t	S	60	S	10	S
259	0		60	S	10	S
260	0		40	S	10	S
261	0		40	S	5	S
262	0		40	S	20	S
263	0		30	S	5	S
264	t	S	40	S	10	S
265	t	S	20	X	t	S
266	t	S	20	X	t	S
267	t	R	40	S	20	S
268	5	S	30	S	0	
269	0		40	S	t	S

Table 17. Disease data for stripe, leaf, and stem rusts for entries in the second high protein-high lysine winter wheat observation nursery grown at Simla, India in 1976. Continued.

Entry number	Stripe rust		Leaf rust		Stem rust	
	sev. %	resp.	sev. %	resp.	sev. %	resp.
270	0		20	S	t	S
271	0		20	MR	t	S
272	t	S	80	S	t	S
273	t	S	40	S	t	S
274	t	S	60	S	t	S
275	0		20	X	t	S
276	t	S	60	S	t	S
277	0		60	S	t	S
278	40	S	40	S	t	S
279	10	S	40	S	t	S
280	80	S	40	S	t	S
281	40	S	80	S	t	S
282	t	S	60	S	t	S
283	t	S	80	S	t	S
284	0		100	S	t	S
285	t	S	40	S	0	
286	—		—		—	
287	—		—		—	
288	—		—		—	
289	—		—		—	
290	—		—		—	
291	t	S	40	X	0	
292	0		40	S	t	S
293	0		40	S	0	
294	t	S	60	S	0	
295	5	S	80	S	0	
296	0		0	R	t	S
297	0		60	S	40	S
298	t	R	0		10	S
299	0		40	S	10	S
300	0		0		10	S
Centurk	0		40	S	t	S
Lancota	0		40	S	5	S
CI13449	40	S	80	S	20	S
Basostaya 1	t	S	60	S	t	S
305	5	S	t	MR	t	S
306	t	S	t	R	20	S
307	t	S	t	S	40	S
308	5	S	t	S	t	S
309	5	S	60	S	40	S
310	10	S	40	S	0	
311	5	S	80	S	20	S
312	10	S	60	S	40	S
313	10	S	40	S	40	S
314	t	S	40	S	0	
315	0		20	S	0	
316	0		20	S	t	S
317	t	S	40	S	t	S
318	0		40	S	t	S
319	t	S	40	X	0	
320	0		20	S	t	S
321	t	S	20	S	0	
322	t	S	40	S	t	S
323	t	S	40	S	t	S
324	5	S	40	S	40	S

Table 17. Disease data for stripe, leaf, and stem rusts for entries in the second high protein-high lysine winter wheat observation nursery grown at Simla, India in 1976. Continued.

Entry number	Stripe rust		Leaf rust		Stem rust	
	sev. %	resp.	sev. %	resp.	sev. %	resp.
325	20	S	60	S	40	S
326	20	S	20	X	10	S
327	0		40	S	20	S
328	0		t	R	t	S
329	10	S	80	S	20	S
330	10	S	80	X	0	
331	0		20	X	0	
332	10	S	100	S	0	
333	0		60	S	t	S
334	t	S	80	S	40	S
335	10	S	60	S	20	S
336	10	S	80	S	60	S
337	10	S	80	S	t	S
338	10	S	60	S	20	S
339	40	S	40	X	40	S
340	t	S	20	S	0	
341	0		60	S	40	S
342	0		20	S	10	S
343	t	S	40	X	t	S
344	0		20	S	10	S
345	t	S	10	X	t	S
346	40	S	80	S	100	S
347	40	S	80	S	100	S
348	10	S	60	S	40	S
349	20	S	80	S	40	S
350	40	S	60	S	5	S
351	0		10	X	0	
352	5	S	10	X	0	
353	10	S	40	S	10	S
354	0		10	S	0	
355	20	S	80	S	40	S
356	0		60	S	5	S
357	0		60	S	60	S
358	0		0		20	S
359	40	S	80	S	80	S
360	0		0		t	S
361	0		0		20	S
362	0		t	S	5	S
363	0		t	X	40	S
364	0		40	S	60	S
365	0		10	S	t	S
366	0		40	S	0	
367	0		20	S	t	S
368	0		40	S	0	
369	10	S	20	S	t	S
370	10	S	10	S	10	S
371	0		20	X	20	S
372	0		20	X	0	
373	0		10	S	t	S
374	t	S	10	S	5	S
375	0		40	S	t	S
376	0		40	S	t	S
377	t	S	20	S	t	S
378	0		20	S	t	S
379	0		40	S	t	S

Table 17. Disease data for stripe, leaf, and stem rusts for entries in the second high protein-high lysine winter wheat observation nursery grown at Simla, India in 1976. Concluded.

Entry number	Stripe rust		Leaf rust		Stem rust	
	sev. %	resp.	sev. %	resp.	sev. %	resp.
380	0		20	S	0	
381	t	S	60	S	0	
382	0		40	S	t	S
383	0		40	S	t	S
384	0		20	S	0	
385	t	S	40	S	t	S
386	0		40	X	t	S
387	t	S	40	S	0	
388	20	S	80	S	0	
389	0		20	X	0	
390	20	S	100	S	0	
391	0		10	X	10	S
392	t	S	40	X	t	S
393	10	S	20	S	t	S
394	40	S	40	S	t	S
395	10	S	20	X	t	S
396	t	S	20	S	0	
397	40	S	20	X	0	
398	40	S	40	S	0	
Centurk	40	S	60	S	t	S
Lancota	t	S	10	X	t	S
CI13449	60	S	100	S	20	S
Besostaya 1	10	S	40	S	0	

Table 18. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Hamadan, Iran in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield[1] g	Days to flowering from Jan. 1	Plant height cm
Centurk	14.6	214	3.0	162	3.2	134	3	150	153	68
Lancota	14.2	243	2.8	328	3.0	335	3	110	151	70
CI13449	11.8	382	3.3	15	3.3	56	3	210	153	58
Bezostaya 1	13.8	265	2.9	251	3.1	239	3	35	153	66
5	13.3	300	3.3	15	3.4	18	4	110	154	56
6	14.1	230	3.1	87	3.3	56	4	70	153	48
7	16.1	123	2.8	328	3.1	239	3	100	154	64
8	13.4	293	3.2	38	3.3	56	3	70	152	67
9	12.9	319	3.1	87	3.2	134	3	120	153	65
10	12.6	340	3.1	87	3.2	134	3	150	151	58
11	15.1	176	2.9	251	3.1	239	3	140	153	80
12	15.9	135	3.1	87	3.3	56	3	110	150	47
13	18.0	41	3.0	162	3.3	56	3	50	153	65
14	13.8	265	3.2	38	3.4	18	3	90	151	61
15	15.2	169	3.1	87	3.4	18	3	115	152	63
16	13.7	274	3.2	38	3.4	18	3	95	154	63
17	16.9	84	2.9	251	3.1	239	3	105	153	48
18	15.2	169	3.1	87	3.3	56	3	65	149	55
19	15.7	144	3.1	87	3.3	56	4	75	151	56
20	17.0	78	2.9	251	3.2	134	4	65	150	75
21	17.0	78	2.8	328	3.1	239	3	140	153	75
22	14.3	234	3.0	162	3.2	134	3	140	154	69
23	15.5	153	2.8	328	3.0	335	3	100	155	83
24	15.9	135	3.0	162	3.3	56	3	110	152	78
25	15.9	135	2.9	251	3.1	239	2	190	152	63
26	15.4	160	2.9	251	3.2	134	2	90	152	79
27	13.6	282	3.1	87	3.2	134	2	120	151	62
28	17.4	62	2.8	328	3.1	239	2	130	154	52
29	15.6	147	3.1	87	3.4	18	4	130	154	64
30	15.0	184	3.1	87	3.3	56	4	120	152	52
31	16.9	84	3.1	87	3.3	56	4	110	151	57
32	16.9	84	3.1	87	3.4	18	4	105	151	61
33	16.6	103	3.2	38	3.5	5	4	90	151	67
34	17.5	59	2.8	328	3.1	239	4	120	152	65
35	17.3	67	2.8	328	3.0	335	3	100	153	62
36	18.2	37	2.8	328	3.1	239	3	120	151	67
37	17.7	51	2.7	376	3.0	335	2	125	150	66
38	18.2	37	2.8	328	3.1	239	2	120	154	80
39	13.4	293	2.9	251	3.0	335	3	150	152	78
40	13.6	282	3.0	162	3.2	134	3	145	152	73
41	16.2	118	2.9	251	3.2	134	3	130	152	74
42	19.5	13	2.8	328	3.0	335	3	180	150	62
43	18.5	32	2.6	394	2.9	386	3	110	151	78
44	17.4	62	2.9	251	3.1	239	3	160	150	89
45	14.1	250	3.0	162	3.1	239	2	225	150	96
46	14.8	202	2.8	328	3.1	239	3	205	152	85
47	16.0	129	2.7	376	2.9	386	3	180	151	77
48	15.1	176	2.9	251	3.1	239	2	170	152	78
49	13.8	265	3.0	162	3.1	239	3	140	152	79
50	11.3	393	3.6	2	3.5	5	5	150	152	72
51	10.5	399	2.9	251	2.8	397	3	220	151	81
52	13.1	311	3.1	87	3.2	134	4	215	152	82
53	14.0	256	2.8	328	2.9	386	2	85	153	86
54	15.5	153	2.6	394	2.8	397	2	240	150	85
55	14.5	218	2.8	328	3.0	335	3	165	151	80

[1] Yield data are based on a harvested plot size of 0.75 square meters.

Table 18. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Hermiston, Iran in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm
56	13.3	300	2.9	251	3.0	335	3	150	150	84
57	14.7	209	2.9	251	3.1	239	3	115	152	85
58	13.5	287	3.0	162	3.1	239	3	90	152	90
59	12.5	346	3.1	87	3.2	134	3	155	152	89
60	12.4	351	3.0	162	3.0	335	3	240	151	94
61	13.9	259	3.1	87	3.3	56	3	205	150	90
62	14.3	234	3.2	38	3.4	18	3	150	150	81
63	13.1	311	3.2	38	3.4	18	3	115	151	84
64	12.6	340	3.1	87	3.1	239	2	225	151	78
65	13.7	274	2.9	251	3.0	335	2	140	150	89
66	13.5	287	2.9	251	3.1	239	3	325	149	84
67	14.0	184	2.9	251	3.1	239	3	170	149	97
68	11.8	326	3.3	15	3.3	56	3	415	150	84
69	15.4	160	2.9	251	3.1	239	2	140	151	85
70	13.0	314	3.4	6	3.5	5	3	195	152	66
71	11.4	391	3.2	38	3.1	239	3	160	332	93
72	11.5	389	3.1	87	3.0	335	3	345	152	90
73	13.2	307	3.1	87	3.2	134	3	325	150	86
74	13.7	274	3.2	38	3.3	56	3	380	153	97
75	14.2	243	3.0	162	3.2	124	3	280	152	95
76	15.4	160	2.9	251	3.1	239	3	370	151	88
77	14.8	202	2.9	251	3.1	239	3	320	153	99
78	16.1	123	2.9	251	3.1	239	3	350	152	92
79	15.4	160	2.8	328	3.0	335	2	200	151	98
80	17.5	59	2.9	251	3.1	239	3	270	151	91
81	15.9	135	2.9	251	3.2	134	2	340	150	107
82	15.5	153	3.0	162	3.2	134	2	285	150	103
83	12.7	335	3.1	87	3.2	134	3	280	149	98
84	16.6	103	2.9	251	3.2	134	3	270	150	99
85	15.2	169	3.0	162	3.2	134	3	240	149	98
86	15.9	135	2.9	251	3.1	239	4	370	151	103
87	16.0	129	2.8	328	3.0	335	2	250	151	112
88	16.1	123	2.9	251	3.1	239	2	335	151	116
89	16.1	123	2.8	328	3.0	335	2	250	150	100
90	16.1	123	3.0	162	3.3	56	2	200	149	98
91	17.2	72	2.8	328	3.1	239	3	330	149	103
92	16.9	84	2.9	251	3.1	239	2	415	150	101
93	15.2	169	3.1	87	3.3	56	2	230	152	106
94	18.6	28	2.9	251	3.2	134	2	300	150	107
95	18.7	23	2.8	328	3.0	335	2	300	153	103
96	18.3	35	2.9	251	3.2	134	3	360	151	103
97	17.6	55	3.0	162	3.3	56	2	280	152	97
98	17.8	48	2.9	251	3.2	134	3	220	153	95
99	16.4	108	3.0	162	3.3	56	3	235	150	99
100	13.6	282	3.0	162	3.1	239	2	370	152	99
Centurk	15.0	184	2.9	251	3.1	239	2	340	151	72
Lancota	11.8	382	3.3	15	3.3	56	3	345	152	85
Bezostaya 1 [2]	13.2	307	2.8	328	2.9	386	3	290	153	101
105	11.8	382	3.0	162	3.0	335	4	350	151	106
106	14.5	218	2.9	251	3.1	239	3	240	151	105

[2] Missing entries were not harvested.

Table 18. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Ramadan, Iran in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm
107	15.3	141	2.9	251	3.2	134	3	240	150	65
108	16.5	218	2.8	328	3.0	335	3	210	150	105
109	15.4	293	2.9	251	3.0	335	3	220	150	67
110	13.8	265	3.0	162	3.2	134	3	180	149	66
111	13.7	274	3.2	38	3.4	18	2	260	152	98
112	13.2	307	3.0	162	3.1	239	3	270	150	83
113	12.3	355	3.1	87	3.1	239	3	300	149	102
114	12.3	355	3.1	87	3.1	239	3	270	153	62
115	12.5	355	3.1	87	3.1	239	3	320	154	115
116	12.8	326	3.0	162	3.1	239	3	220	152	111
117	12.2	361	3.0	162	3.0	335	2	345	152	101
118	12.0	371	3.1	87	3.1	239	3	265	151	100
119	12.2	361	3.0	162	3.0	335	3	315	150	107
120	13.2	307	3.0	162	3.1	239	3	365	153	86
121	12.3	355	2.9	251	3.0	335	3	165	155	107
122	12.1	361	3.2	38	3.2	134	3	230	152	95
123	12.7	335	3.0	162	3.1	239	3	145	151	98
124	12.4	351	3.2	38	3.2	134	3	180	155	81
125	12.7	335	3.1	38	3.3	56	3	290	150	93
126	12.5	344	3.2	38	3.3	56	3	220	151	97
127	13.3	300	2.9	251	3.0	335	2	300	151	98
128	12.5	344	3.2	38	3.2	134	2	260	152	92
129	12.0	371	3.3	15	3.3	56	2	290	152	91
130	12.0	371	3.1	87	3.1	239	2	165	152	85
131	12.0	371	3.1	87	3.1	239	2	200	153	86
132	12.6	340	3.0	162	3.0	335	3	190	151	86
133	11.2	393	3.4	6	3.3	56	3	325	152	95
134	13.7	274	3.0	162	3.2	134	2	190	150	105
135	14.4	224	2.9	251	3.1	239	2	280	150	98
136	13.7	274	3.1	87	3.3	56	3	230	150	88
137	12.0	371	3.1	87	3.1	239	3	415	153	89
138	12.3	355	3.1	87	3.2	134	3	250	152	97
139	12.0	371	3.2	38	3.2	134	3	290	152	84
140	11.6	396	3.3	15	3.3	56	3	220	152	92
141	16.5	218	2.8	328	3.0	335	2	255	152	80
142	13.4	293	3.0	162	3.1	239	2	280	151	85
143	16.6	103	2.8	328	3.1	239	2	300	150	86
144	15.2	169	2.8	328	3.0	335	2	290	151	99
145	15.4	160	2.7	376	2.9	386	2	200	151	86
146	13.8	265	2.8	328	2.9	386	2	270	151	87
147	14.1	250	2.9	251	3.1	239	2	250	150	98
148	13.3	307	3.0	162	3.1	239	2	190	150	80
149	12.7	335	2.9	251	3.0	335	3	210	149	74
150	11.9	377	3.6	2	3.6	1	2	260	152	81
151	12.9	319	3.2	38	3.3	56	2	340	151	109
152	13.8	265	2.9	251	3.1	239	2	220	151	93
153	12.7	335	2.9	251	3.0	335	3	320	151	97
154	11.8	382	3.1	87	3.0	335	2	280	151	99
155	12.5	346	3.1	87	3.1	239	2	330	152	92
156	12.0	371	3.2	38	3.3	56	3	240	152	94
157	14.1	250	3.1	87	3.3	56	2	280	152	77
158	15.9	135	2.9	251	3.1	239	3	220	152	82
159	15.8	141	3.2	38	3.4	18	2	220	152	85
160	12.8	326	3.0	162	3.1	239	2	200	151	80
161	13.3	307	3.0	162	3.1	239	2	300	150	83

Table 18. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Ramadan, Iran in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm
162	13.3	330	3.1	87	3.2	134	2	225	151	81
163	13.5	287	3.1	87	3.2	134	2	280	151	70
164	14.1	250	2.8	328	3.0	335	2	260	151	91
165	13.8	265	3.0	162	3.2	134	2	255	151	94
166	11.8	382	3.0	162	3.0	335	2	220	151	91
167	10.7	397	3.3	15	3.2	134	2	165	150	93
168	11.3	393	3.0	162	2.9	386	2	180	150	77
169	11.9	377	3.0	162	3.0	335	2	165	152	80
170	13.0	314	2.9	251	3.0	335	2	180	151	86
171	17.6	55	2.8	328	3.1	239	2	100	152	63
172	16.8	92	3.2	38	3.5	5	2	220	152	58
173	16.3	113	2.8	328	3.1	239	3	200	152	73
174	17.3	67	2.9	251	3.2	134	3	205	151	92
175	14.7	209	3.0	162	3.2	134	2	150	151	87
176	16.1	123	2.8	328	3.1	239	2	225	151	66
177	16.6	103	2.9	251	3.2	134	3	120	151	78
178	16.7	98	2.9	251	3.2	134	2	240	151	75
179	16.1	123	2.9	251	3.1	239	2	245	152	92
180	15.2	169	2.9	251	3.1	239	2	320	152	88
181	15.0	184	2.8	328	3.0	335	3	215	150	82
182	11.9	377	3.0	162	3.0	335	2	265	150	77
183	12.5	346	3.2	38	3.2	134	2	250	151	68
184	12.9	319	3.1	87	3.2	134	3	285	153	80
185	12.7	335	3.0	162	3.1	239	2	270	151	92
186	14.4	224	2.8	328	3.0	335	2	260	152	93
187	14.4	224	2.8	328	3.0	335	2	230	147	90
188	15.6	147	2.7	376	2.9	386	2	220	151	80
189	15.1	176	2.8	328	3.0	335	2	220	152	79
190	14.9	194	2.8	328	3.1	239	2	180	153	78
191	16.3	113	2.9	251	3.2	134	3	120	150	85
192	11.9	377	3.2	38	3.2	134	3	170	150	82
193	12.2	361	3.0	162	3.0	335	3	160	150	82
194	13.7	274	2.9	251	3.0	335	3	190	151	91
195	12.5	346	2.9	251	2.9	386	3	170	150	81
196	14.3	234	2.9	251	3.1	239	2	125	151	67
197	16.1	123	3.1	87	3.3	56	2	120	151	72
198	13.5	287	3.2	38	3.3	56	2	290	151	84
199	14.3	234	3.1	87	3.3	56	2	235	151	86
200	12.8	326	3.1	87	3.2	134	3	210	150	88
Centurk	11.3	393	3.2	38	3.2	134	3	200	151	85
Lincoln	11.6	386	3.0	162	3.0	335	3	220	151	84
CI13449	10.1	400	3.3	4	3.3	56	3	240	152	67
Bezostaya 1	11.1	396	3.1	87	3.0	335	2	200	150	80
205	12.6	340	3.2	38	3.3	56	2	190	153	74
206	15.0	184	3.2	38	3.4	18	2	250	150	63
207	18.6	28	3.0	162	3.2	134	2	185	150	75
208	14.9	194	2.9	251	3.1	239	2	280	150	83
209	17.8	48	2.8	328	3.1	239	2	230	152	115
210	12.8	326	3.0	162	3.1	239	2	335	150	106
211	14.4	224	2.9	251	3.1	239	3	250	151	91
212	14.9	194	3.0	162	3.2	134	3	250	150	94
213	12.8	326	3.1	87	3.2	134	3	270	150	100
214	12.3	355	3.0	162	3.0	335	3	300	150	98
215	13.6	282	2.9	251	3.0	335	3	460	151	104
216	16.3	113	2.9	251	3.1	239	2	260	151	93

Table 18. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Hamadan, Iran in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm
217	15.1	176	2.9	251	3.1	239	3	255	149	102
218	14.4	224	3.0	162	3.2	134	3	305	152	87
219	14.7	209	3.0	162	3.2	134	3	315	151	108
220	12.8	326	3.1	87	3.2	134	3	225	150	96
221	13.4	293	3.0	162	3.1	239	2	215	151	74
222	13.3	300	3.0	162	3.1	239	2	220	150	81
223	13.7	274	2.9	251	3.1	239	2	250	150	86
224	14.1	250	3.1	87	3.2	134	2	215	151	88
225	14.3	234	3.1	87	3.2	134	2	220	150	79
226	13.4	293	3.0	162	3.2	134	2	260	150	78
227	15.0	184	2.8	328	3.0	335	3	255	150	93
228	15.4	160	2.8	328	3.0	239	3	270	151	79
229	16.3	113	2.8	328	3.1	239	3	300	152	93
230	14.8	202	2.9	251	3.1	239	3	215	152	85
231	16.0	129	2.8	328	3.1	239	2	220	151	77
232	14.5	218	2.9	251	3.1	239	2	270	151	76
233	13.8	265	2.9	251	3.1	239	2	200	152	81
234	14.9	194	2.9	251	3.1	239	2	260	150	86
235	18.3	35	2.6	394	2.9	386	2	195	149	96
236	17.5	59	2.8	328	3.0	335	2	205	153	86
237	16.2	118	2.8	328	3.0	335	2	200	151	92
238	16.3	113	2.8	328	3.0	335	2	260	149	81
239	14.0	256	2.9	251	3.1	239	2	260	150	81
240	13.2	307	3.0	162	3.1	239	2	220	151	88
241	11.5	389	3.3	15	3.2	134	2	270	151	87
242	11.6	386	3.0	162	3.0	335	3	215	150	86
243	10.6	398	3.6	2	3.5	5	3	200	149	87
244	11.5	389	3.4	6	3.4	18	2	320	149	86
245	12.4	351	3.2	38	3.2	134	3	310	150	75
246	12.1	365	3.0		3.0	335	3	235	151	82
247	12.2	361	3.1		3.1	239	3	265	151	77
248	13.0	314	3.2	38	3.3	56	3	245	151	95
249	12.7	335	3.1	87	3.2	134	3	300	152	86
250	12.9	319	2.9	251	3.0	335	2	245	153	105
251	13.3	300	3.0	162	3.2	134	2	300	152	86
252	12.0	371	3.2	38	3.2	134	2	200	151	80
253	14.3	234	3.0	162	3.2	134	2	265	152	83
254	16.4	108	2.8	328	3.0	335	2	210	150	75
255	16.6	103	2.7	376	2.9	386	2	215	151	79
256	13.3	300	3.1	87	3.2	134	2	190	151	92
257	13.5	287	3.2	38	3.3	56	2	320	149	91
258	14.3	234	3.0	162	3.1	239	2	210	151	84
259	13.9	259	3.3	15	3.4	18	2	290	150	74
260	15.0	184	2.9	251	3.1	239	2	220	153	81
261	14.9	194	2.5	399	2.7	400	2	345	152	80
262	14.9	194	2.8	328	3.1	239	2	310	151	80
263	14.3	234	2.9	251	3.1	239	2	325	152	85
264	14.2	243	2.9	251	3.1	239	2	290	149	81
265	12.9	319	3.0	162	3.1	239	3	265	150	81
266	12.1	365	3.1	87	3.1	239	3	450	153	94
267	15.0	184	3.0	162	3.2	134	2	330	150	91
268	14.6	214	3.0	162	3.2	134	2	270	151	100
269	15.5	153	2.9	251	3.1	239	2	310	150	114
270	15.3	164	2.9	251	3.2	134	2	355	151	97
271	14.4	224	2.9	251	3.1	239	2	405	150	91

Table 18. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Hamadan, Iran in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm
272	14.7	209	3.0	162	3.2	134	2	325	150	102
273	15.6	147	3.1	87	3.4	18	2	455	150	98
274	13.9	259	3.0	162	3.2	134	2	295	150	94
275	13.0	314	3.1	87	3.2	134	2	250	151	91
276	12.8	326	3.1	87	3.2	134	2	190	151	96
277	12.8	326	3.2	38	3.3	56	3	320	153	88
278	14.1	250	3.2	38	3.3	56	2	270	150	89
279	13.6	282	3.1	87	3.3	56	2	390	151	93
280	13.7	274	3.0	162	3.2	134	3	185	150	96
281	12.0	371	3.2	38	3.2	134	3	335	149	91
282	14.0	256	3.1	87	3.3	56	3	220	151	83
283	14.7	209	3.0	162	3.2	134	3	305	152	96
284	14.9	194	3.1	87	3.3	56	3	270	152	80
285	14.9	194	3.0	162	3.2	134	3	280	151	74
286	15.2	169	2.8	328	3.1	239	3	170	151	81
287	16.9	84	2.8	328	3.0	335	2	250	150	71
288	16.8	92	3.0	162	3.3	56	3	160	151	79
289	17.7	51	2.9	251	3.2	134	3	350	152	79
290	16.8	92	2.9	251	3.2	134	2	200	150	77
291	16.4	108	3.0	162	3.2	134	2	225	149	91
292	16.2	118	3.0	162	3.3	56	2	160	150	83
293	15.2	169	3.0	162	3.2	134	2	210	152	66
294	14.8	202	3.1	87	3.3	56	2	160	151	75
295	14.3	234	3.2	38	3.4	18	2	170	150	79
296	21.5	346	3.3	15	3.3	56	2	180	151	82
297	14.9	194	3.2	38	3.4	18	2	210	151	87
298	14.7	209	3.0	162	3.3	56	2	170	151	63
299	14.3	234	3.0	162	3.2	134	3	180	150	79
300	12.8	326	3.1	87	3.2	134	2	180	150	58
Centurk	14.9	194	2.8	328	3.1	239	3	250	152	54
Lancota	12.2	361	3.4	6	3.4	18	2	150	150	68
Bakhtiya 1	13.9	259	3.0	162	3.2	134	2	160	151	56
303	14.2	243	3.1	87	3.3	56	2	305	152	66
306	13.1	176	2.9	251	3.1	239	2	160	152	64
307	15.3	164	3.0	162	3.3	56	2	200	152	66
308	14.7	209	3.1	87	3.3	56	2	110	152	80
309	15.4	160	3.0	162	3.2	134	2	170	152	61
3101	15.5	153	3.1	87	3.4	18	3	120	152	76
311	17.2	72	3.0	62	3.3	56	3	105	151	65
312	18.5	32	2.8	328	3.0	335	2	100	151	70
313	15.8	141	3.0	162	3.3	56	2	120	150	76
314	14.9	194	3.0	162	3.2	134	2	140	149	55
315	14.1	250	3.0	162	3.2	134	2	155	151	54
316	14.7	209	3.0	162	3.2	134	2	150	151	65
317	15.7	274	3.1	87	3.3	56	2	150	150	66
318	15.1	176	2.9	251	3.1	239	2	140	152	74
319	14.3	234	3.0	162	3.2	134	2	160	151	64
320	15.6	147	2.9	251	3.2	134	2	165	151	69
321	15.5	153	3.0	162	3.2	134	2	160	152	62
322	14.8	202	3.0	162	3.2	134	2	150	151	59
323	15.5	153	2.9	251	3.2	134	2	170	152	54
324	18.9	20	2.9	251	3.1	239	2	100	151	66
325	16.9	84	3.3	15	3.6	1	2	155	151	59
326	17.9	46	2.8	328	3.1	239	2	170	150	78
327	17.1	74	2.9	251	3.1	239	2	130	151	76

Table 18. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Hamedan, Iran in 1976. Continued.

Entry No.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm
328	18.0	41	3.1	87	3.4	18	2	120	151	69
329	14.4	224	3.0	162	3.2	134	3	270	150	80
330	16.9	84	2.7	376	3.0	335	2	160	150	83
331	14.4	224	2.8	328	3.0	335	3	190	152	64
332	14.2	243	3.0	162	3.2	134	2	230	151	75
333	14.3	234	2.9	251	3.1	239	3	200	151	69
334	15.6	147	3.0	162	3.2	134	2	165	152	69
345	15.0	184	3.0	162	3.2	134	2	190	150	66
336	18.0	41	2.9	251	3.2	134	3	110	152	66
337	18.0	41	2.9	251	3.2	134	3	100	151	68
338	17.3	67	3.1	87	3.3	56	2	90	151	81
339	13.4	293	3.3	15	3.4	18	2	110	152	75
340	16.7	98	3.3	15	3.5	5	2	100	150	85
341	17.6	55	2.9	251	3.2	134	2	100	150	80
342	14.2	243	3.1	87	3.3	56	3	105	150	76
343	20.3	3	2.7	376	3.0	335	2	--	151	75
344	21.5	1	2.8	328	3.0	335	2	120	152	74
345	20.3	3	2.7	376	3.0	335	3	110	152	45
346	20.6	2	2.7	376	2.9	386	3	160	151	58
347	19.6	11	2.8	328	3.1	239	3	150	150	73
348	18.7	23	2.9	251	3.2	134	2	160	147	77
349	17.9	46	2.9	251	3.2	134	3	130	153	59
350	17.3	67	2.7	376	3.0	335	3	140	152	60
351	19.1	18	2.8	328	3.1	239	2	120	152	60
352	18.7	23	2.6	394	2.8	397	2	120	152	75
353	17.0	78	2.7	376	3.0	335	2	190	150	60
354	16.7	98	2.8	328	3.0	335	2	115	151	65
355	20.2	5	2.7	376	2.9	386	3	110	149	70
356	20.0	7	2.7	376	3.0	335	2	60	152	60
357	18.7	23	2.9	251	3.1	239	2	85	153	65
358	20.0	7	2.7	376	3.0	335	3	110	151	70
359	18.3	113	2.7	376	3.0	335	3	130	151	60
360	19.1	18	2.8	328	3.0	335	3	80	152	65
361	19.8	9	2.6	394	2.9	386	3	120	151	65
362	17.2	72	2.8	328	3.0	335	3	110	149	60
363	16.8	92	2.8	328	3.1	239	2	155	153	60
364	16.9	84	3.0	162	3.2	134	2	150	151	60
365	19.6	11	2.6	394	2.9	386	2	125	151	55
366	18.5	32	2.7	376	3.0	335	2	100	150	60
367	18.4	34	2.7	376	3.0	335	2	110	149	60
368	19.1	18	2.7	376	3.0	335	2	110	150	60
369	19.2	15	2.7	376	2.9	386	2	160	150	60
370	19.2	15	2.5	399	2.8	397	2	170	150	60
371	18.6	28	2.7	376	3.0	335	2	180	150	70
372	18.7	23	2.6	394	2.9	386	2	160	151	80
373	19.6	11	2.8	328	3.0	335	2	110	150	65
374	19.2	15	2.7	376	3.0	335	2	170	151	65
375	18.6	28	2.7	376	3.0	335	2	180	151	70
376	18.6	28	2.7	376	3.0	335	2	280	153	75
377	17.3	67	2.8	328	3.0	335	2	190	151	70
378	17.7	51	2.8	328	3.1	239	2	270	150	70
379	16.7	98	2.8	328	3.0	335	2	200	150	70
380	17.1	74	2.8	328	3.0	335	2	215	150	65
381	15.9	135	2.8	328	3.1	239	2	200	150	65
382	17.3	67	2.7	376	3.0	335	2	190	155	70

Table 18. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Hamadan, Iran in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm
383	16.6	103	2.8	328	3.1	239	2	210	151	75
384	17.7	51	2.6	394	2.8	397	2	190	152	65
385	15.9	135	2.8	328	3.0	335	2	210	152	75
386	16.3	113	2.7	376	3.0	335	2	190	152	75
387	15.9	133	2.7	376	3.0	335	2	180	152	75
388	18.0	41	2.9	251	3.2	134	2	235	152	75
389	18.0	41	2.9	251	3.2	134	2	195	151	70
390	17.6	55	2.7	376	3.0	335	2	260	150	70
391	16.8	92	2.9	251	3.1	239	2	215	147	85
392	16.8	92	2.7	376	3.0	335	2	260	150	80
393	16.8	92	2.9	251	3.2	134	3	250	150	80
394	17.9	46	3.0	162	3.3	56	3	250	131	85
395	17.4	62	3.0	162	3.3	56	2	250	151	90
396	16.7	98	3.0	162	3.2	134	3	300	152	85
397	17.0	78	2.8	328	3.1	239	3	250	150	83
398	20.0	7	2.8	328	3.1	239	3	260	149	85
Centurk	17.3	67	2.9	251	3.2	134	3	290	153	80
Lancota	17.0	78	2.7	376	3.0	335	2	400	151	80
CI13449	14.8	202	3.1	87	3.3	56	2	300	150	90
Bezostaya 1	15.8	141	3.0	162	3.2	134	2	320	152	85
Overall mean	15.0		2.97		3.14		2.5	214.1	151.5	80.8

Correlation Coefficients

Protein	- .66**	- .22**
Lysine/protein		- .80**

** Significant at the P=.01 level.

Means of the check varieties

Bezostaya 1	13.6	2.96	3.08
Centurk	14.6	2.96	3.16
CI13449	12.2	3.30	3.30
Lancota	13.4	3.04	3.14
Check mean	13.6	3.04	3.16
$LSD_{.05}$ of check means	1.2	0.29	0.20
Coefficient of variation %	6.4	6.80	4.47

Table 19. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Karaj, Iran in 1976.

Entry No.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield[1] g	Plant height cm	Stem rust sev. %	Stem rust resp.
Centurk	13.2	504	3.0	159	3.2	114	3	500	110	—	-
Lancota	14.7	135	3.0	159	3.2	114	3	490	125	10	S
CI13449	8.9	402	3.6	2	3.2	114	5	250	90	75	S
Bezostaya 1	10.8	396	3.3	18	3.1	229	4	520	115	50	S
5	11.5	388	3.4	9	3.4	9	4	490	110	25	S
6	10.6	397	3.6	2	3.4	9	4	600	105	50	S
7	12.5	351	3.2	40	3.3	42	4	670	115	--	-
8	12.1	372	3.2	40	3.2	114	3	580	115	--	-
9	12.3	351	3.1	83	3.2	114	4	430	115	—	-
10	12.2	367	3.3	18	3.3	42	3	640	120	—	-
11	12.9	326	3.1	83	3.2	114	4	420	110	25	S
12	13.6	269	3.2	40	3.3	42	4	460	120	25	S
13	16.4	24	3.0	159	3.3	42	4	500	100	50	S
14	12.3	361	3.3	18	3.3	42	4	580	125	--	-
15	12.5	351	3.4	9	3.4	9	2	460	115	10	S
16	12.6	344	3.0	159	3.0	338	3	680	120	10	S
17	11.0	395	3.3	18	3.2	114	3	240	110	75	S
18	12.8	331	3.1	83	3.2	114	3	620	115	50	S
19	12.3	361	3.3	18	3.4	9	3	460	115	25	S
20	13.0	321	3.2	40	3.3	42	4	410	105	—	-
21	14.1	206	3.1	83	3.3	42	3	410	130	25	S
22	11.8	379	3.3	18	3.3	42	4	530	130	—	-
23	13.7	338	3.1	83	3.2	114	3	340	105	10	S
24	12.3	351	3.4	9	3.4	9	4	500	125	—	-
25	13.9	235	2.9	260	3.1	229	3	440	115	—	-
26	11.4	389	3.2	40	3.2	114	4	560	115	25	S
27	13.2	304	3.2	40	3.3	42	3	430	125	—	-
28	12.2	367	3.1	83	3.1	229	4	530	120	25	S
29	11.7	383	3.3	18	3.2	114	4	470	125	—	-
30	11.6	387	3.4	9	3.4	9	5	370	85	75	S
31	9.2	401	3.6	2	3.3	42	4	320	95	75	S
32	11.2	393	3.3	18	3.3	42	4	410	90	75	S
33	11.7	383	3.4	9	3.4	9	3	410	90	75	S
34	11.7	383	3.6	2	3.6	1	4	370	90	75	S
35	13.4	356	3.5	5	3.6	1	4	440	95	25	S
36	15.0	103	2.9	260	3.1	229	3	610	115	25	S
37	14.6	144	2.9	260	3.0	338	3	340	125	50	S
38	14.0	221	2.8	343	3.0	338	3	520	120	50	S
39	15.1	84	3.0	159	3.2	114	3	520	115	50	S
40	15.0	103	2.8	343	3.0	338	4	450	115	25	S
41	13.7	259	3.1	83	3.3	42	3	720	120	—	-
42	13.8	247	3.0	159	3.1	229	4	450	115	—	-
43	14.9	113	2.9	260	3.1	229	4	540	115	—	-
44	15.9	39	2.9	260	3.2	114	3	370	120	25	S
45	13.8	247	3.2	40	3.3	42	4	630	120	25	S
46	14.0	221	3.1	83	3.2	114	4	440	115	25	S
47	13.4	289	3.0	159	3.2	114	4	460	115	25	S
48	14.2	190	3.0	159	3.2	114	4	340	110	50	S
49	14.2	190	2.9	260	3.1	229	3	480	120	50	S
50	12.8	331	3.1	83	3.2	114	3	280	105	25	S

[1] Yield data based on a harvested plot area of 0.75 square meters.

Table 19. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Karaj, Iran in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm	Stem rust sev. %	Stem rust resp.
51	13.1	314	3.1	83	3.2	114	3	570	115	25	S
52	14.5	152	3.1	83	3.3	42	3	410	115	—	-
53	15.3	75	3.0	159	3.2	114	3	510	110	—	-
54	13.9	235	2.9	260	3.1	229	3	320	115	25	S
55	15.2	84	2.8	343	3.1	229	3	540	120	—	-
56	13.4	289	2.9	260	3.1	229	3	480	125	25	S
57	13.4	289	2.9	260	3.0	338	3	540	120	50	S
58	15.4	70	2.9	260	3.1	229	4	370	125	25	S
59	13.1	314	3.1	83	3.2	114	3	630	115	25	S
60	12.0	375	3.1	83	3.2	114	4	400	110	25	S
61	12.7	338	3.0	159	3.1	229	4	510	115	75	S
62	14.3	177	2.9	260	3.1	229	4	440	105	75	S
63	15.5	63	3.0	159	3.2	114	3	630	115	50	S
64	15.5	63	3.0	159	3.3	42	4	410	115	50	S
65	13.4	289	3.0	159	3.1	229	4	480	135	75	S
66	13.1	314	2.9	260	3.0	338	4	400	105	50	S
67	13.7	259	2.9	260	3.0	338	4	580	115	—	-
68	14.0	221	2.9	260	3.1	229	4	330	100	25	S
69	13.1	94	2.8	343	3.0	338	4	340	105	—	-
70	15.7	49	2.8	343	3.1	229	4	430	115	25	S
71	14.4	163	3.0	159	3.1	229	4	490	110	—	-
72	14.4	163	3.0	159	3.2	114	4	330	110	—	-
73	14.8	124	2.8	343	3.0	338	4	570	105	—	-
74	14.3	177	2.9	260	3.1	229	4	590	115	25	S
75	14.9	113	2.7	386	3.0	338	4	500	115	—	-
76	15.0	103	2.9	260	3.1	229	4	460	110	25	S
77	13.5	278	2.9	260	3.1	229	4	510	120	25	S
78	12.5	351	3.0	159	3.0	338	4	440	115	50	S
79	12.3	361	3.0	159	3.0	338	4	310	115	50	S
80	14.4	163	2.8	343	3.0	338	4	330	110	50	S
81	13.6	269	2.7	386	2.9	389	4	490	115	50	S
82	13.8	247	2.9	260	3.1	229	4	430	110	50	S
83	14.1	206	3.1	83	3.2	114	4	600	120	25	S
84	14.2	190	2.9	260	3.1	229	4	290	110	25	S
85	10.4	399	3.4	9	3.2	114	4	710	125	50	S
86	12.6	344	3.0	159	3.0	338	3	450	125	50	S
87	13.2	304	3.0	159	3.1	229	4	470	100	50	S
88	14.5	152	2.7	386	2.9	389	4	480	125	25	S
89	15.8	44	2.7	386	3.0	338	4	450	115	25	S
90	15.6	53	2.9	260	3.2	114	4	320	125	25	S
91	15.4	70	2.9	260	3.1	229	4	550	115	—	-
92	14.6	144	2.9	260	3.0	338	4	360	115	25	S
93	15.3	75	2.8	343	3.1	229	3	230	115	—	-
94	13.8	247	3.0	159	3.1	229	4	590	115	—	-
95	16.9	10	2.8	343	3.1	229	4	360	110	25	S
96	16.6	17	2.8	343	3.0	338	4	420	120	25	S
97	16.9	10	3.0	159	3.2	114	3	460	120	—	-
98	16.2	31	3.0	159	3.2	114	3	420	125	—	-
99	16.0	37	2.9	260	3.1	229	3	400	120	—	-
100	16.5	20	3.1	83	3.3	42	4	480	120	—	-
Centurk	13.3	297	3.1	83	3.3	42	3	390	100	—	-
Lancota	13.5	278	2.9	260	3.1	229	4	740	120	10	S
CI13449	12.4	336	3.1	83	3.2	114	5	250	85	75	S
Bezostaya 1	12.4	356	3.1	83	3.2	114	4	560	110	50	S
103	12.2	367	3.0	159	3.0	338	4	530	115	10	S

Table 19. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Karaj, Iran in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade	Yield	Plant height	Stem rust	
	%	rank	%	rank	%	rank	1-9	kg	cm	sev. %	resp.
106	14.0	221	2.8	343	2.9	389	4	430	125	—	-
107	15.4	70	3.1	83	3.3	42	4	400	115	25	S
108	16.2	31	2.9	260	3.1	229	4	350	125	—	-
109	16.1	34	2.9	260	3.1	229	4	470	120	—	-
110	16.5	20	3.0	159	3.3	42	4	370	130	—	-
111	14.7	133	2.9	260	3.1	229	4	540	120	10	S
112	14..	177	3.0	159	3.2	114	3	620	125	—	-
113	13.0	321	3.0	159	3.1	229	4	340	125	—	-
114	15.8	247	3.2	40	3.3	42	4	590	115	—	-
115	12.1	372	3.2	40	3.2	114	4	440	130	—	-
116	13.5	278	3.1	83	3.2	114	3	640	95	—	-
117	12.1	372	3.1	83	3.2	114	4	360	130	—	-
118	11.7	383	3.2	40	3.1	229	4	540	135	25	S
119	12.2	367	3.0	159	3.0	338	4	470	120	50	S
120	13.6	269	3.0	159	3.1	229	4	480	130	25	S
121	15.2	84	2.9	260	3.1	229	4	390	130	—	-
122	14.6	144	2.9	260	3.1	229	4	520	130	25	S
123	15.7	49	2.8	343	3.1	229	3	420	130	25	S
124	13.2	304	3.0	159	3.1	229	4	590	125	25	S
125	14.4	163	3.1	83	3.3	42	4	380	120	25	S
126	13.2	304	3.2	40	3.3	42	3	490	125	25	S
127	14.8	124	2.9	260	3.1	229	4	350	115	—	-
128	14.4	163	2.9	260	3.1	229	4	470	125	—	-
129	14.9	113	3.0	159	3.2	114	3	510	110	—	-
130	13.3	278	3.0	159	3.1	229	3	550	115	25	S
131	14.0	221	2.5	401	2.7	402	4	270	110	—	-
132	13.9	235	3.0	159	3.1	229	4	460	115	25	S
133	12.7	338	3.2	40	3.3	42	3	440	120	—	-
134	14.1	206	2.9	260	3.1	229	3	400	130	10	S
135	14.7	135	3.0	159	3.2	114	3	570	110	10	S
136	14.7	135	3.1	83	3.3	42	3	510	105	25	S
137	13.1	314	3.1	83	3.2	114	4	450	115	—	-
138	11.9	377	3.1	83	3.1	229	4	470	110	25	S
139	11.3	391	3.4	9	3.3	42	4	310	105	50	S
140	11.7	383	3.3	18	3.2	114	4	610	110	25	S
141	14.1	206	3.1	83	3.2	114	3	420	105	—	-
142	13.9	235	2.9	260	3.0	338	3	670	105	25	S
143	14.9	113	2.9	260	3.1	229	3	430	100	50	S
144	15.3	75	2.8	343	3.0	338	3	690	120	—	-
145	14.0	221	2.9	260	3.1	229	3	420	110	25	S
146	14.7	135	2.9	260	3.1	229	3	550	120	25	S
147	15.4	70	2.7	386	3.0	338	3	540	110	25	S
148	14.2	190	3.0	159	3.2	114	3	460	100	50	S
149	15.0	103	2.9	260	3.1	229	3	680	105	75	S
150	14.9	113	3.1	83	3.3	42	3	350	105	25	S
151	14.0	221	3.2	40	3.4	9	3	850	110	—	-
152	14.9	113	3.0	159	3.2	114	4	310	110	—	-
153	14.6	144	3.0	159	3.2	114	3	700	125	25	S
154	13.2	304	3.0	159	3.1	229	3	530	120	25	S
155	12.2	367	3.0	159	3.1	229	4	510	120	50	S
156	15.6	269	3.2	40	3.3	42	4	490	120	50	S
157	13.5	278	3.3	18	3.4	9	3	510	115	50	S
158	15.0	103	2.9	260	3.1	229	3	340	125	50	S
159	14.1	206	3.2	40	3.4	9	3	440	110	25	S
160	12.6	344	3.2	40	3.3	42	3	380	115	50	S

Table 19. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Karaj, Iran in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm	Stem rust sev. %	Stem rust resp.
161	13.0	321	3.2	40	3.3	42	4	470	125	25	S
162	12.6	344	3.1	83	3.2	114	4	450	115	75	S
163	13.1	314	3.1	83	3.3	42	4	560	95	25	S
164	12.3	361	3.2	40	3.2	114	3	400	125	--	-
165	13.4	289	2.9	260	3.0	338	3	490	115	50	S
166	13.7	259	3.0	159	3.1	229	3	400	125	--	-
167	13.4	289	3.2	40	3.4	9	3	490	110	50	S
168	13.5	278	3.0	159	3.2	114	3	430	105	50	S
169	14.3	177	2.9	260	3.1	229	3	540	120	10	S
170	14.3	177	3.0	159	3.2	114	4	500	100	75	S
171	15.6	55	3.0	159	3.2	114	3	530	105	50	S
172	15.5	63	3.0	159	3.2	114	3	500	105	50	S
173	13.7	259	3.0	159	3.1	229	4	480	125	50	S
174	14.8	124	2.9	260	3.1	229	3	460	125	75	S
175	13.6	269	3.1	83	3.3	42	3	520	120	--	-
176	12.0	375	3.1	83	3.1	229	3	430	115	10	S
177	13.8	247	2.9	260	3.1	229	4	550	120	10	S
178	13.3	297	3.0	159	3.1	229	3	510	115	25	S
179	14.4	163	2.8	343	3.0	338	3	550	115	75	S
180	11.9	377	3.1	83	3.1	229	3	590	110	75	S
181	13.7	259	2.8	343	3.0	338	3	620	110	50	S
182	12.8	331	3.0	159	3.1	229	3	520	100	50	S
183	14.4	163	3.0	159	3.2	114	3	380	115	--	-
184	14.8	124	3.0	159	3.2	114	3	430	115	25	S
185	14.8	124	3.1	83	3.3	42	3	570	110	10	S
186	14.2	190	3.0	159	3.2	114	3	480	100	25	S
187	13.4	289	3.0	159	3.2	114	3	630	120	25	S
188	13.9	235	3.0	159	3.2	114	3	410	95	--	-
189	13.8	247	3.0	159	3.1	229	3	440	105	--	-
190	13.7	259	3.1	83	3.2	114	3	400	105	10	S
191	15.5	63	2.9	260	3.2	114	3	500	115	10	S
192	15.2	84	2.8	343	3.1	229	4	500	120	10	S
193	14.1	206	3.0	159	3.2	114	4	600	125	25	S
194	14.2	190	3.0	159	3.2	114	3	380	130	10	S
195	14.1	206	2.8	343	3.0	338	3	630	125	25	S
196	15.1	94	3.1	83	3.3	42	3	390	110	25	S
197	16.7	14	2.9	260	3.1	229	4	430	110	25	S
198	14.4	163	3.0	159	3.2	114	4	470	110	25	S
199	14.9	113	2.9	260	3.1	229	4	520	110	10	S
200	14.2	190	2.9	260	3.1	229	3	350	110	25	S
Centurk	13.7	259	3.1	83	3.2	114	3	290	110	--	-
Lancota	13.9	235	2.8	343	3.0	338	4	670	115	25	S
CI13449	12.6	344	3.1	83	3.2	114	4	350	85	50	S
Bezostaya 1	12.9	326	3.0	159	3.0	338	3	560	115	75	S
203	14.4	163	3.1	83	3.3	42	3	300	115	50	S
206	12.8	331	3.0	159	3.0	338	3	530	105	25	S
207	13.6	269	3.1	83	3.3	42	3	380	120	--	-
208	13.0	321	3.3	18	3.4	9	3	510	125	25	S
209	15.6	55	2.8	343	3.0	338	3	360	130	10	S
210	15.6	55	2.7	386	2.9	389	3	500	125	25	S
211	14.6	144	3.0	159	3.2	114	3	420	125	50	S
212	14.4	163	3.2	40	3.3	42	3	500	130	25	S
213	13.6	269	3.0	159	3.1	229	3	430	125	50	S
214	13.4	289	2.9	260	3.1	229	3	590	120	--	-
215	14.1	206	3.0	159	3.1	229	3	480	130	--	-

Table 19. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Karaj, Iran in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade 1-9	Yield g	Plant height cm	Stem rust sev. %	Stem rust resp.
	%	rank	%	rank	%	rank					
216	14.5	152	2.8	343	3.0	338	3	490	120	25	S
217	15.3	75	2.7	386	2.9	389	3	410	125	--	-
218	15.0	103	2.8	343	3.0	338	4	550	150	25	S
219	13.8	247	2.7	386	2.9	389	3	460	130	--	-
220	14.4	163	2.8	343	3.0	338	3	460	125	50	S
221	14.1	206	3.0	159	3.2	114	3	450	105	50	S
222	15.5	63	2.9	260	3.1	229	3	350	110	25	S
223	15.8	44	2.8	343	3.0	338	3	590	110	--	-
224	14.2	190	2.8	343	3.0	338	3	510	110	50	S
225	14.3	177	2.9	260	3.1	229	3	400	115	25	S
226	14.6	144	2.9	260	3.1	229	3	510	125	--	-
227	14.0	221	3.0	159	3.2	114	3	430	120	--	-
228	14.9	113	2.9	260	3.2	114	3	500	105	25	S
229	15.2	84	2.8	343	3.1	229	3	500	120	25	S
230	15.0	103	2.8	343	3.0	338	3	580	110	25	S
231	13.5	278	3.1	83	3.2	114	3	480	115	25	S
232	13.5	278	3.0	159	3.1	229	3	600	105	75	S
233	14.2	190	2.9	260	3.1	229	3	430	115	25	S
234	14.1	206	2.8	343	3.0	338	3	630	130	--	-
235	14.7	135	2.9	260	3.1	229	3	460	120	--	-
236	13.9	235	2.8	343	3.0	338	3	600	120	--	-
237	12.8	331	3.0	159	3.1	229	3	500	120	--	-
238	15.8	44	2.9	260	3.2	114	3	460	115	25	S
239	14.3	177	2.9	260	3.0	338	3	360	115	25	S
240	13.8	247	2.8	343	3.0	338	3	610	115	25	S
241	14.2	190	2.8	343	3.0	338	3	390	110	50	S
242	14.0	221	3.0	159	3.2	114	3	390	115	25	S
243	13.1	314	3.0	159	3.1	229	4	460	110	50	S
244	11.4	389	3.2	40	3.2	114	4	780	110	50	S
245	13.5	278	3.0	159	3.1	229	3	440	105	25	S
246	13.6	269	2.8	343	2.9	389	3	550	115	25	S
247	13.8	247	2.8	343	3.0	338	3	390	120	25	S
248	14.3	177	2.9	260	3.1	229	3	620	120	50	S
249	13.3	297	3.2	40	3.3	42	3	360	130	25	S
250	13.1	314	3.0	159	3.1	229	3	630	110	50	S
251	13.9	235	3.1	83	3.2	114	4	490	110	75	S
252	14.3	177	2.9	260	3.1	229	3	650	110	25	S
253	14.2	190	3.0	159	3.2	114	3	500	115	50	S
254	15.2	84	2.8	343	3.0	338	3	430	110	50	S
255	17.0	6	2.6	398	2.9	389	3	550	125	--	-
256	13.2	84	2.8	343	3.0	338	3	350	125	50	S
257	15.5	63	3.0	159	3.2	114	3	610	120	25	S
258	14.4	163	2.9	260	3.1	229	3	430	100	50	S
259	13.9	235	2.8	343	3.0	338	3	610	110	50	S
260	15.2	84	2.9	260	3.1	229	3	460	110	50	S
261	14.0	221	2.7	386	2.9	389	3	500	110	50	S
262	14.5	152	2.9	260	3.1	229	3	440	115	75	S
263	12.9	326	3.0	159	3.1	229	3	480	105	50	S
264	14.0	221	2.8	343	3.0	338	3	500	120	75	S
265	13.9	235	2.9	260	3.0	338	3	530	115	50	S
266	12.3	361	2.9	260	3.0	338	4	500	120	25	S
267	12.6	344	3.0	159	3.0	338	3	570	115	25	S
268	16.3	27	2.8	343	3.0	338	4	350	125	10	S
269	13.3	297	3.0	159	3.1	229	3	350	110	10	S
270	13.9	235	2.9	260	3.1	229	3	460	105	10	S

Table 19. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Karaj, Iran in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm	Stem rust sev. %	Stem rust resp.
271	12.6	344	3.2	40	3.3	42	3	440	100	25	S
272	13.0	321	3.0	159	3.1	229	3	400	115	50	S
273	12.3	361	3.1	83	3.2	114	3	570	120	25	S
274	14.2	190	2.6	398	2.8	400	3	580	125	50	S
275	14.2	190	3.0	159	3.2	114	3	520	105	—	-
276	14.0	221	2.9	260	3.1	229	3	430	110	—	-
277	13.8	247	2.9	260	3.1	229	4	630	105	—	-
278	14.3	177	3.0	159	3.2	114	4	390	120	—	-
279	15.3	63	2.9	260	3.1	229	3	510	120	—	-
280	15.6	55	2.9	260	3.2	114	3	400	110	—	-
281	12.8	331	3.0	159	3.1	229	3	480	115	75	S
282	11.8	379	3.2	40	3.2	114	3	400	115	75	S
283	12.5	351	3.0	159	3.1	229	4	700	120	50	S
284	12.8	331	2.9	260	3.0	338	4	440	110	25	S
285	14.9	113	2.8	343	3.0	338	4	500	105	25	S
286	14.0	221	2.9	260	3.1	229	4	480	115	75	S
287	16.9	10	2.8	343	3.0	338	3	400	115	—	-
288	16.9	10	2.8	343	3.1	229	3	380	125	—	-
289	15.2	84	3.0	159	3.3	42	3	530	100	—	-
290	15.2	84	2.9	260	3.1	229	3	360	115	25	S
291	15.2	84	2.8	343	3.1	229	3	350	120	25	S
292	14.9	113	2.8	343	3.0	338	3	450	105	25	S
293	14.1	206	2.8	343	3.0	338	2	380	115	10	S
294	14.1	206	2.9	260	3.1	229	3	320	115	25	S
295	12.7	338	3.1	83	3.2	114	3	490	110	25	S
296	14.1	206	2.9	260	3.0	338	3	310	110	—	-
297	13.6	269	3.1	83	3.3	42	4	530	115	25	S
298	14.6	144	2.9	260	3.1	229	2	360	105	25	S
299	14.1	206	2.9	260	3.1	229	3	440	110	25	S
300	13.1	314	3.0	159	3.1	229	3	480	105	25	S
Centurk	11.3	391	3.2	40	3.1	229	4	600	115	—	-
Lancota	12.4	356	3.0	159	3.1	229	4	350	115	25	S
CI13449	11.1	394	3.3	18	3.2	114	4	320	85	75	S
Bezostaya 1	13.3	278	3.0	159	3.2	114	2	580	110	50	S
303	13.7	239	2.9	260	3.1	229	3	320	85	—	-
306	14.7	135	2.9	260	3.1	229	3	550	115	25	S
307	15.3	75	2.8	343	3.0	338	3	580	115	25	S
308	15.1	94	2.9	260	3.1	229	3	300	90	—	-
309	13.8	247	3.1	83	3.3	42	2	370	110	25	S
310	15.1	94	3.1	83	3.3	42	3	490	110	25	S
311	16.4	24	2.9	260	3.2	114	3	360	115	25	S
312	17.1	4	2.8	343	3.0	338	3	350	110	25	S
313	16.7	14	3.0	159	3.2	114	3	400	115	10	S
314	15.7	49	2.9	260	3.1	229	2	560	105	25	S
315	14.8	124	2.8	343	3.1	229	2	390	110	25	S
316	14.0	221	3.0	159	3.2	114	2	500	105	25	S
317	14.8	124	3.0	159	3.2	114	2	470	105	25	S
318	15.1	94	3.0	159	3.2	114	2	530	110	25	S
319	16.3	27	2.9	260	3.1	229	2	450	105	25	S
320	16.3	27	2.8	343	3.1	229	2	540	105	25	S
321	14.9	113	2.8	343	3.1	229	2	450	105	25	S
322	14.4	169	3.0	159	3.2	114	2	540	105	50	S
323	14.7	135	2.9	260	3.1	229	2	460	110	25	S
324	14.5	152	3.2	40	3.4	9	3	500	115	50	S
325	16.0	37	3.7	386	2.9	389	3	450	115	25	S

Table 19. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Karaj, Iran in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted Lysine/protein		Seed grade 1-9	Yield	Plant height	Stem rust	
	%	rank	%	rank	%	rank		g	cm	sev. %	resp.
326	16.1	34	3.0	159	3.2	114	4	370	130	50	S
327	13.7	259	2.9	260	3.1	229	3	440	105	10	S
328	15.6	55	2.9	260	3.1	229	3	460	115	10	S
329	15.7	49	2.8	343	3.0	338	4	370	110	10	S
330	15.2	84	2.7	386	2.9	389	3	390	115	10	S
331	14.7	135	2.7	386	2.9	389	4	500	110	—	-
332	14.1	206	2.9	260	3.0	338	3	400	115	—	-
333	12.7	338	2.8	343	2.9	389	4	410	115	25	S
334	12.5	351	3.0	159	3.1	229	3	510	115	25	S
335	13.4	289	2.9	260	3.0	338	3	460	115	—	-
336	14.4	163	3.0	159	3.2	114	4	500	125	25	S
337	16.5	20	2.7	386	3.0	338	3	400	115	25	S
338	16.9	10	2.8	343	3.1	229	3	410	115	10	S
339	15.9	39	2.8	343	3.0	338	3	380	115	10	S
340	16.6	17	2.9	260	3.1	229	3	360	110	10	S
341	16.8	13	2.6	398	2.9	389	3	420	115	25	S
342	18.8	1	2.5	401	2.8	400	3	490	110	—	-
343	18.3	2	2.6	398	2.8	400	3	410	125	10	S
344	17.1	4	2.7	386	3.0	338	3	460	115	25	S
345	15.3	63	2.7	386	2.9	389	3	450	105	25	S
346	13.7	259	3.2	40	3.3	42	4	370	115	75	S
347	13.2	304	3.0	159	3.1	229	4	430	105	75	S
348	13.4	289	2.9	260	3.0	338	3	520	120	75	S
349	13.1	314	3.2	40	3.3	42	4	430	115	25	S
350	14.5	132	2.9	260	3.1	229	4	560	115	25	S
351	14.8	124	3.1	83	3.3	42	3	620	125	—	-
352	14.4	163	2.9	260	3.1	229	4	540	125	25	S
353	13.7	259	2.9	260	3.1	229	3	460	115	—	-
354	14.6	144	2.9	260	3.1	229	4	540	125	—	-
355	15.1	94	3.1	83	3.3	42	3	430	130	25	S
356	14.1	206	3.2	40	3.4	9	4	500	130	25	S
357	15.3	63	2.9	260	3.2	114	3	260	95	25	S
358	13.4	289	2.9	260	3.0	338	3	450	120	10	S
359	12.8	331	2.8	343	2.9	389	4	510	105	75	S
360	13.2	304	2.9	260	3.0	338	4	470	90	75	S
361	14.3	177	2.8	343	3.0	338	4	390	110	—	-
362	13.9	235	2.9	260	3.1	229	4	570	110	—	-
363	14.1	206	3.0	159	3.2	114	4	450	110	—	-
364	14.2	190	2.8	343	2.9	389	3	430	105	75	S
365	16.3	27	2.8	343	3.0	338	3	500	105	25	S
366	16.6	17	2.7	386	3.0	338	2	430	95	25	S
367	15.3	73	2.7	386	3.0	338	2	320	100	25	S
368	16.4	24	2.7	386	2.9	389	2	430	105	25	S
369	16.5	20	2.7	386	3.0	338	2	330	105	10	S
370	15.5	63	2.8	343	3.1	229	2	370	105	10	S
371	14.4	163	2.8	343	3.0	338	3	480	110	10	S
372	15.8	44	2.8	343	3.0	338	2	440	105	10	S
373	16.1	34	3.0	159	3.2	114	2	600	105	10	S
374	15.8	44	2.7	386	3.0	338	2	480	110	10	S
375	15.6	53	2.7	386	3.0	338	3	540	100	25	S
376	14.3	177	2.8	343	3.0	338	3	500	110	25	S
377	13.9	235	2.9	260	3.0	338	3	450	105	25	S
378	14.6	144	2.9	260	3.1	229	3	410	100	25	S
379	15.0	103	2.9	260	3.1	229	2	440	110	10	S
380	15.8	44	2.9	260	3.1	229	2	440	110	10	S

Table 19. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Karaj, Iran in 1975. Concluded.

Entry No.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm	[illegible] rust sev. %	[illegible] rust resp.
381	1[illegible]	124	2.9	260	3.1	229	2	500	110	15	[illegible]
382	14.8	124	3.1	83	3.3	42	2	450	105	10	S
383	16.0	37	2.8	343	3.1	229	3	420	105	25	S
384	15.2	84	2.9	260	3.2	115	3	520	105	25	S
385	15.6	44	2.8	343	3.1	329	2	460	110	25	S
386	16.2	32	3.0	159	3.2	114	3	400	100	25	S
387	17.0	6	3.0	159	3.5	42	3	510	120	30	S
388	17.1	4	3.0	159	3.3	42	3	360	105	25	S
389	15.0	103	2.8	343	3.0	338	3	370	115	25	S
390	13.3	297	2.9	260	3.0	338	3	410	120	25	S
391	10.2	400	3.3	83	2.9	389	3	410	120	25	S
392	10.5	398	3.2	40	3.0	338	3	330	110	10	S
393	12.1	372	3.1	83	3.1	229	3	400	115	10	S
394	13.2	304	3.0	159	3.1	229	3	510	110	10	S
395	13.3	304	3.2	83	3.2	114	3	450	120	10	S
396	14.8	124	2.8	343	3.0	338	3	500	110	10	S
397	14.6	1[illegible]	2.9	260	3.1	229	3	660	110	25	S
398	15.1	94	3.1	83	3.3	42	3	[illegible]	100	25	S
Centurk	13.0	331	3.0	159	3.1	229	3	510	115	—	-
Lancota	14.8	124	3.1	83	3.3	42	2	540	125	—	-
CI13449	11.7	383	3.2	40	3.1	229	3	360	90	75	S
Bezostaya 1	12.2	367	3.1	83	3.1	229	2	370	105	75	S
Overall mean	14.1		2.97		3.13		3.3	474.9	113.5	27.6	

Correlation Coefficients

Protein	-.67**	-.75**
Lysine/protein		.82**

** Significant at the P=.05 level.

Means of the check varieties

Bezostaya 1	12.4	3.10	3.12
Centurk	12.9	3.08	3.18
CI13449	11.3	3.26	3.18
Lancota	13.9	2.96	3.14
Check mean	12.6	3.10	3.16
LSD .05 of check mean	1.5	0.18	0.12
Coefficient of variation %	8.7	4.13	2.81

Table 20. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Amman, Jordan in 1976.

Entry no.	Protein %	Protein rank	Lys/protein %	Lys/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm
Centurk	16.7	173	2.8	194	3.1	127	5	130	40
Lancota	16.0	230	2.6	328	2.9	296	5	130	40
CI13449	15.6	247	2.8	194	3.1	127	5	128	40
Bezostaya 1	17.6	110	2.5	381	2.8	364	4	128	45
5	18.0	82	2.8	194	3.1	127	5	128	40
6	18.6	44	2.8	194	3.1	127	5	130	40
7	19.0	29	2.8	194	3.1	127	5	131	45
8	18.2	70	2.8	194	3.1	127	5	130	45
9	17.6	110	2.9	127	3.2	58	5	128	45
10	16.1	223	2.8	194	3.1	127	5	128	45
11	20.7	4	2.5	381	2.8	364	5	130	40
12	19.1	26	2.6	328	2.9	296	5	128	40
13	18.4	57	2.6	328	2.9	296	5	128	40
14	14.6	289	2.7	260	2.9	296	5	130	40
15	14.6	289	3.0	79	3.2	58	5	128	40
16	15.6	247	2.8	194	3.0	212	5	130	40
17	17.8	95	2.6	328	2.8	364	5	128	45
18	16.8	162	2.7	260	3.0	212	5	130	45
19	20.0	9	2.8	194	3.0	212	5	130	45
20	19.5	14	2.7	260	2.9	296	5	128	40
21	20.1	7	2.6	328	2.8	364	5	130	40
22	18.4	57	2.6	328	2.9	296	5	128	40
23	19.4	17	2.8	194	3.0	212	5	128	40
24	18.4	57	2.8	194	3.1	127	5	126	45
25	19.3	20	2.5	381	2.7	394	3	126	50
26	18.8	36	2.8	194	3.0	212	4	126	50
27	18.9	32	2.9	127	3.1	127	4	126	50
28	17.3	128	2.6	328	2.9	296	3	126	50
29	18.0	82	2.7	260	3.0	212	3	125	45
30	20.5	5	3.2	17	3.4	8	5	128	35
31	17.3	128	2.8	194	3.1	127	5	125	40
32	19.3	20	2.9	127	3.1	127	5	125	40
33	17.8	95	3.1	44	3.3	21	5	126	40
34	17.3	128	3.1	44	3.3	21	5	126	35
35	15.6	247	2.8	194	3.1	127	5	126	35
36	17.3	128	2.6	328	2.9	296	4	125	35
37	18.6	44	2.7	260	3.0	212	4	125	35
38	18.5	49	2.7	260	2.9	296	3	125	40
39	19.4	17	2.7	260	3.0	212	5	125	40
40	18.3	64	2.6	328	2.9	296	4	124	40
41	17.3	128	2.8	194	3.1	127	5	124	40
42	15.9	235	2.8	194	3.0	212	5	124	40
43	16.9	155	2.8	194	3.1	127	5	125	45
44	17.0	148	2.7	260	2.9	296	5	125	45
45	16.1	223	2.8	194	3.0	212	5	126	45
46	15.8	240	2.7	260	2.9	296	5	124	45
47	17.3	128	2.7	260	2.9	296	5	125	45
48	18.3	64	2.7	260	2.9	296	5	125	40
49	18.2	70	2.8	194	3.1	127	4	125	40
50	16.3	205	2.7	260	3.0	212	5	124	40
51	15.9	235	2.7	260	3.0	212	5	124	45
52	17.6	95	2.6	328	2.9	296	4	124	45
53	18.2	70	2.6	328	2.8	364	4	124	45
54	16.9	155	2.6	328	2.9	296	3	126	45
55	18.5	49	2.6	328	2.8	364	3	125	50

Table 20. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter w at observation nursery grown at Amman, Jordan in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm
56	17.7	103	2.5	381	2.8	364	3	125	30
57	16.7	173	2.6	328	2.8	364	3	125	30
58	16.1	223	2.6	328	2.8	364	4	124	30
59	17.9	88	2.6	328	2.9	296	5	124	30
60	17.8	95	2.6	328	2.9	296	5	124	30
61	14.4	301	2.8	194	3.0	212	4	124	35
62	17.6	110	2.6	328	2.8	364	3	125	35
63	17.4	117	2.6	328	2.9	296	3	126	35
64	16.8	162	2.8	194	3.0	212	3	126	35
65	16.3	205	2.7	260	3.0	212	4	130	35
66	17.3	128	2.5	381	2.8	364	3	126	35
67	17.6	110	2.6	328	2.9	296	4	127	35
68	18.7	39	2.5	381	2.8	364	3	124	35
69	19.1	26	2.6	328	2.8	364	4	124	35
70	19.5	14	2.4	396	2.7	394	4	125	35
71	18.8	36	2.6	328	2.9	296	4	125	35
72	19.8	11	2.7	260	2.9	296	4	124	35
73	20.2	6	2.3	398	2.5	399	5	124	35
74	19.3	20	2.8	194	3.1	127	6	124	35
75	20.1	7	2.9	127	3.1	127	6	124	35
76	17.3	128	2.8	194	3.1	127	6	128	35
77	21.4	2	2.7	260	3.0	212	6	128	35
78	22.1	1	2.7	260	3.0	212	5	128	35
79	21.0	3	2.7	260	2.9	296	4	130	35
80	19.3	20	2.7	260	2.9	296	4	130	40
81	17.9	88	2.9	127	3.2	58	4	127	40
82	15.6	247	2.9	127	3.1	127	4	127	40
83	17.6	110	2.7	260	3.0	212	4	124	40
84	16.7	173	3.0	79	3.2	58	4	124	40
85	14.9	278	2.9	127	3.1	127	4	125	40
86	15.8	240	2.9	127	3.1	127	4	127	40
87	16.5	190	2.8	194	3.1	127	5	126	40
88	13.4	257	3.3	4	3.5	2	4	126	40
89	15.6	247	2.9	127	3.1	127	4	127	40
90	15.6	247	3.0	79	3.2	58	4	127	40
91	17.7	103	2.8	194	3.1	127	5	124	40
92	14.6	289	3.0	79	3.2	58	5	125	40
93	16.7	173	3.1	44	3.3	21	5	125	40
94	16.1	223	3.2	17	3.4	8	5	124	40
95	16.7	173	3.3	4	3.5	2	5	124	40
96	15.2	266	3.0	79	3.3	21	5	127	40
97	16.7	173	3.1	44	3.4	8	4	126	40
98	16.8	162	3.1	44	3.3	21	5	125	40
99	15.5	253	2.9	127	3.2	58	4	124	40
100	16.2	216	3.0	79	3.3	21	5	124	40
Centurk	13.3	341	3.2	17	3.3	21	4	124	40
Lancota	14.1	312	2.8	194	3.0	212	4	125	45
CI13449	13.5	332	3.2	17	3.3	21	4	125	45
Bezostaya 1	11.7	387	3.1	44	3.1	127	3	126	45
105	11.7	387	3.2	17	3.2	58	4	126	45
106	13.2	344	3.0	79	3.1	127	5	124	45
107	13.5	332	3.1	44	3.3	21	5	124	45
108	13.8	323	3.0	79	3.1	127	4	127	45
109	12.7	361	3.0	79	3.1	127	4	127	45
110	13.6	328	2.9	127	3.0	212	4	127	45

Table 20. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Amman, Jordan in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm
	%	rank	%	rank	%	rank			
111	13.3	341	3.2	17	3.4	8	4	128	45
112	13.6	328	3.0	79	3.2	58	4	128	45
113	13.1	346	2.9	127	3.0	212	3	124	45
114	12.9	354	3.0	79	3.1	127	4	125	45
115	12.3	376	3.2	17	3.2	58	5	125	45
116	16.0	230	2.7	260	3.0	212	5	124	45
117	15.1	271	2.9	127	3.1	127	4	130	50
118	12.7	361	3.1	44	3.2	58	4	130	55
119	13.0	350	2.9	127	3.0	212	5	130	55
120	14.2	309	2.9	127	3.1	127	4	125	55
121	13.9	320	2.9	127	3.1	127	3	126	55
122	12.4	371	3.2	17	3.2	58	3	126	55
123	14.4	301	2.8	194	3.0	212	3	126	55
124	14.9	278	2.9	127	3.1	127	4	125	55
125	15.1	271	2.8	194	3.0	212	4	125	55
126	14.3	307	2.9	127	3.0	212	3	125	55
127	15.6	247	2.6	328	2.9	296	4	126	50
128	17.1	144	2.7	260	3.0	212	4	124	50
129	16.2	216	2.9	127	3.1	127	3	124	50
130	15.8	240	2.6	328	2.8	364	3	124	50
131	15.5	253	2.8	194	3.1	127	4	125	50
132	15.7	243	2.6	328	2.8	364	4	125	50
133	14.9	278	2.8	194	3.1	127	3	130	50
134	16.0	230	2.7	260	2.9	296	3	127	50
135	16.0	230	2.7	260	3.0	212	4	127	50
136	16.2	216	2.7	260	3.0	212	4	130	50
137	15.4	257	2.8	194	3.0	212	4	130	45
138	16.3	205	2.9	127	3.2	58	4	128	45
139	16.5	190	2.8	194	3.1	127	4	130	45
140	16.0	230	2.8	194	3.0	212	4	125	45
141	16.6	183	2.7	260	2.9	296	4	124	40
142	16.3	205	2.6	328	2.9	296	3	125	40
143	16.7	173	2.6	328	2.8	364	3	128	40
144	16.4	196	2.6	328	2.9	296	3	126	45
145	16.5	190	2.6	328	2.9	296	3	126	45
146	17.0	148	2.8	194	3.0	212	3	125	45
147	18.2	70	2.5	381	2.8	364	3	124	45
148	17.9	88	2.5	381	2.7	394	3	125	40
149	19.2	23	2.6	328	2.9	296	4	127	45
150	18.7	39	2.8	194	3.0	212	4	130	45
151	18.2	70	2.7	260	3.0	212	4	130	40
152	18.9	32	2.6	328	2.9	296	3	128	40
153	18.1	76	2.7	260	3.0	212	5	130	50
154	17.3	128	2.5	381	2.7	394	5	128	50
155	18.0	82	2.6	328	2.9	296	3	126	55
156	16.9	155	2.8	194	3.1	127	3	126	55
157	17.6	110	2.8	194	3.0	212	4	124	55
159[1]	18.7	39	2.5	381	2.8	364	4	124	50
160	19.9	10	2.6	328	2.9	296	5	126	50
161	19.4	17	2.6	328	2.9	296	5	126	50

[1] Entries 158, 317, 338 were missing.

Table 20. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Amman, Jordan in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm
162	17.5	114	2.7	260	2.9	296	5	126	50
163	18.5	49	2.5	381	2.8	364	4	124	55
164	17.4	117	2.6	328	2.9	296	4	124	55
165	17.8	95	2.6	328	2.8	364	3	125	55
166	18.4	57	2.5	381	2.8	364	3	124	50
167	19.0	29	2.5	381	2.8	364	3	127	50
168	17.9	88	2.6	328	2.9	296	3	126	50
169	18.8	36	2.5	381	2.7	394	4	125	55
170	18.4	57	2.6	328	2.8	364	3	124	75
171	17.7	103	2.5	381	2.8	364	4	124	75
172	17.3	128	2.6	328	2.9	296	4	124	75
173	16.8	162	2.4	396	2.7	394	3	124	75
174	18.3	64	2.6	328	2.8	364	3	125	75
175	18.1	76	2.7	260	2.9	296	4	125	75
176	18.5	49	2.6	328	2.9	296	4	126	75
177	17.3	128	2.6	328	2.9	296	3	127	75
178	18.0	82	2.7	260	3.0	212	4	127	70
179	18.1	76	2.6	328	2.9	296	4	127	70
180	17.2	140	2.8	194	3.0	212	4	127	70
181	18.4	57	2.5	381	2.7	394	3	126	75
182	17.7	103	2.7	260	3.0	212	4	125	75
183	18.4	57	2.5	381	2.8	364	3	125	75
184	18.5	49	2.6	328	2.8	364	4	125	75
185	18.5	49	2.6	328	2.9	296	4	124	75
186	18.4	57	2.5	381	2.8	364	4	126	70
187	17.9	88	2.6	328	2.9	296	3	126	70
188	18.3	64	2.6	328	2.9	296	3	126	70
189	18.9	32	2.6	328	2.8	364	3	125	70
190	18.4	57	2.5	381	2.8	364	3	127	75
191	18.6	44	2.6	328	2.9	296	3	124	75
192	17.4	117	2.6	328	2.9	296	3	125	75
193	17.3	128	2.7	260	2.9	296	5	127	75
194	17.8	95	2.6	328	2.9	296	4	124	75
195	18.3	64	2.5	381	2.8	364	4	125	75
196	17.3	128	2.6	328	2.9	296	3	126	75
197	18.6	44	2.8	194	3.0	212	4	124	75
198	17.3	128	2.6	328	2.8	364	3	127	75
199	18.2	70	2.6	328	2.9	296	3	127	75
200	16.2	216	2.6	328	2.9	296	3	124	75
Centurk	17.7	103	2.5	381	2.8	364	4	124	70
Lancota	16.7	173	2.6	328	2.8	364	3	123	70
CI13449	16.1	223	2.8	194	3.0	212	4	130	70
Bezostaya 1	15.0	274	2.6	328	2.8	364	3	125	70
205	16.8	162	2.6	328	2.8	364	3	126	70
206	16.2	216	2.6	328	2.9	296	3	126	70
207	19.0	29	2.6	328	2.9	296	3	127	70
208	17.8	95	2.8	194	3.1	127	4	127	70
209	16.4	196	2.6	328	2.9	296	3	124	70
210	17.2	140	2.5	381	2.8	364	3	124	70
211	17.7	103	2.6	328	2.9	296	3	125	70
212	18.1	76	2.5	381	2.8	364	3	125	70
213	18.1	76	2.6	328	2.8	364	3	124	75
214	18.9	32	2.5	381	2.8	364	4	130	75
215	18.2	70	2.5	381	2.8	364	4	126	75
216	17.6	110	2.5	381	2.8	364	4	127	55

Table 20. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Ammon, Jordan in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm
217	16.6	183	2.7	260	3.0	212	4	125	55
218	16.8	162	2.6	328	2.8	364	4	124	55
219	16.7	173	2.7	260	2.9	296	4	127	55
220	17.3	128	2.6	328	2.8	364	3	127	55
221	16.3	205	2.7	260	3.0	212	3	127	50
222	16.3	205	2.7	260	3.0	212	3	127	50
223	17.1	144	2.6	328	2.9	296	4	124	40
224	15.4	257	2.7	260	2.9	296	4	125	40
225	16.4	196	2.8	194	3.0	212	4	126	40
226	16.4	196	2.8	194	3.1	127	4	126	40
227	15.5	253	2.8	194	3.0	212	4	124	40
228	15.0	274	2.7	260	3.0	212	4	124	50
229	16.9	155	2.5	381	2.8	364	4	125	50
230	17.2	140	2.6	328	2.9	296	5	124	50
231	17.0	148	2.7	260	2.9	296	5	125	50
232	17.0	148	2.7	260	2.9	296	5	125	40
233	19.7	12	2.6	328	2.9	296	5	125	40
234	17.3	128	2.5	381	2.8	364	5	126	40
235	19.5	14	2.5	381	2.8	364	5	126	40
236	17.0	148	2.6	328	2.8	364	4	127	50
237	16.4	196	2.7	260	2.9	296	4	127	50
238	18.6	44	2.7	260	3.0	212	5	127	50
239	17.2	140	2.7	260	2.9	296	5	124	50
240	17.0	148	2.6	328	2.9	296	3	124	50
241	16.6	183	2.6	328	2.8	364	5	125	50
242	16.9	155	2.8	194	3.0	212	5	130	40
243	16.4	196	2.7	260	3.0	212	5	125	50
244	15.9	235	2.8	194	3.0	212	5	124	50
245	16.1	223	2.8	194	3.1	127	4	127	55
246	14.8	283	2.8	194	3.0	212	4	126	55
247	14.5	294	2.9	127	3.1	127	4	125	55
248	14.4	301	2.7	260	2.9	296	4	125	50
249	14.4	301	2.8	194	3.0	212	4	126	50
250	15.1	271	2.9	127	3.1	127	4	128	50
251	17.3	128	2.7	260	3.0	212	4	127	55
252	16.8	162	2.7	260	3.0	212	4	125	55
253	16.7	173	2.6	328	2.9	296	4	125	55
254	17.3	128	2.8	194	3.1	127	4	125	55
255	17.4	117	2.7	260	2.9	296	3	124	55
256	15.4	257	2.7	260	2.9	296	4	127	40
257	13.0	350	2.8	194	2.9	296	3	128	65
258	13.5	332	2.8	194	3.0	212	3	128	60
259	11.6	391	3.0	79	3.0	212	3	128	60
260	13.2	344	2.9	127	3.0	212	3	128	65
261	12.4	371	2.9	127	2.9	296	3	126	60
262	12.8	358	3.1	44	3.2	58	3	126	60
263	12.9	354	2.9	127	3.0	212	4	126	60
264	11.8	384	3.1	44	3.1	127	3	125	60
265	12.5	366	2.9	127	2.9	296	3	125	60
266	12.3	376	2.9	127	3.0	212	4	124	60
267	12.9	354	3.0	79	3.1	127	4	124	65
268	15.2	266	2.9	127	3.1	127	4	128	65
269	13.1	346	3.0	79	3.1	127	4	125	65
270	14.0	315	2.9	127	3.1	127	4	124	60
271	13.4	337	3.1	44	3.2	58	4	128	70

Table 20. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Amman, Jordan in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm
272	13.4	337	3.0	79	3.2	58	4	128	70
273	11.5	393	3.1	44	3.1	127	4	128	75
274	12.0	380	3.1	44	3.1	127	4	128	75
275	12.4	371	3.1	44	3.2	58	4	124	75
276	13.6	328	2.7	260	2.8	364	4	124	75
277	12.5	366	3.0	79	3.0	212	4	124	80
278	11.7	387	3.2	17	3.2	58	4	128	80
279	12.0	380	3.2	17	3.2	58	4	127	80
280	12.0	380	3.1	44	3.2	58	4	128	75
281	11.1	398	3.0	79	2.9	296	4	124	75
282	10.8	399	3.1	44	3.0	212	3	127	70
283	11.4	394	3.1	44	3.0	212	3	127	70
284	13.7	325	2.8	194	3.0	212	4	127	70
285	11.7	387	3.0	79	3.0	212	4	127	70
286	11.3	396	3.3	4	3.2	58	4	127	70
287	12.4	371	3.1	44	3.2	58	4	127	70
288	13.0	350	3.0	79	3.1	127	4	126	70
289	13.9	320	3.0	79	3.2	58	4	125	70
290	14.4	301	2.9	127	3.1	127	4	124	70
291	14.4	301	2.9	127	3.1	127	4	124	70
292	14.9	278	2.9	127	3.1	127	4	125	70
293	14.8	283	2.9	127	3.1	127	3	125	70
294	14.5	294	3.0	79	3.2	58	4	126	70
295	14.4	301	2.9	127	3.1	127	4	126	75
296	13.9	320	3	79	3.2	58	4	125	75
297	12.3	376	3.2	17	3.2	58	4	125	75
298	14.1	312	3.0	79	3.2	58	3	124	75
299	14.3	307	2.9	127	3.1	127	4	124	65
300	14.8	283	2.9	127	3.1	127	4	124	65
Centurk	13.9	320	3.1	44	3.3	21	4	125	65
Lancota	12.8	358	3.1	44	3.2	58	4	126	55
CI13449	11.8	384	3.4	1	3.4	8	4	124	55
Bezostaya 1	11.2	397	3.3	4	3.2	58	3	124	70
305	11.4	394	3.3	4	3.2	58	4	124	75
306	12.7	361	3.1	44	3.2	58	4	125	70
307	11.6	391	3.1	44	3.1	127	3	125	70
308	11.6	391	3.2	17	3.2	58	4	125	70
309	12.4	371	3.2	17	3.3	21	3	125	70
310	12.6	364	3.1	44	3.2	58	4	124	70
311	13.0	350	3.1	44	3.2	58	4	126	75
312	13.2	344	3.2	17	3.3	21	3	126	75
313	12.2	378	3.0	79	3.0	212	4	126	75
314	13.3	341	2.9	127	3.0	212	3	126	75
315	12.4	371	3.0	79	3.0	212	4	128	75
316	11.9	382	3.2	17	3.2	58	3	127	75
318	11.9	382	3.1	44	3.1	127	3	127	75
319	12.4	371	3.1	44	3.2	58	4	127	75
320	13.4	337	3.0	79	3.1	127	3	124	75
321	13.4	337	3.0	79	3.2	58	3	126	75
322	13.5	332	3.0	79	3.2	58	3	115	75
323	13.3	262	2.9	127	3.1	127	3	124	60
324	16.5	190	2.9	127	3.1	127	4	125	60
325	15.2	266	2.8	194	3.0	212	4	125	65
326	18.0	82	2.7	260	3.0	212	4	125	63
327	16.6	183	2.7	260	2.9	296	4	128	65

Table 20. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Amman, Jordan in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm
	%	rank	%	rank	%	rank			
328	16.0	230	3.0	79	3.2	58	4	124	60
329	14.4	301	3.3	4	3.5	2	4	125	75
330	13.9	320	2.9	127	3.1	127	4	125	75
331	13.0	350	2.9	127	3.0	212	4	125	75
332	13.5	332	2.8	194	2.9	296	3	127	75
333	14.0	315	3.2	17	3.3	21	4	127	75
334	14.4	301	2.8	194	3.0	212	3	127	75
335	14.2	309	2.9	127	3.1	127	3	124	75
336	16.6	183	2.9	127	3.2	58	3	124	75
337	17.9	[illegible]	2.6	328	2.9	296	4	124	75
339	18.1	76	2.9	127	3.2	58	4	125	65
340	16.3	205	2.7	260	3.0	212	4	124	65
341	17.2	140	2.7	260	2.9	296	4	124	40
342	17.9	88	2.6	328	2.9	296	4	124	40
343	16.9	155	2.7	260	2.9	296	4	125	40
344	18.7	39	2.6	328	2.9	296	4	125	40
345	16.2	216	2.8	194	3.1	127	4	125	40
346	16.7	173	2.9	127	3.1	127	4	124	40
347	16.8	162	2.9	127	3.2	58	4	127	40
348	16.6	183	2.6	328	2.8	364	4	127	40
349	16.7	173	2.9	127	3.2	58	4	127	40
350	16.2	216	2.9	127	3.1	127	4	124	55
351	14.6	289	2.7	260	2.9	296	3	124	55
352	15.2	266	2.8	194	3.0	212	4	124	60
353	12.6	364	2.9	127	3.0	212	3	125	60
354	16.3	205	2.9	127	3.2	58	4	125	60
355	14.9	278	2.8	194	3.0	212	4	124	60
356	13.5	332	3.2	17	3.3	21	4	125	55
357	14.6	289	2.8	194	3.0	212	3	125	55
358	16.6	183	2.8	194	3.0	212	3	125	60
359	13.3	262	2.8	194	3.1	127	4	124	60
360	13.9	235	2.8	194	3.1	127	4	124	60
361	16.3	205	2.8	194	3.1	127	4	126	60
362	17.5	114	2.8	194	3.0	212	4	125	60
363	16.9	755	2.8	194	3.0	212	4	124	60
364	16.7	173	2.8	194	3.0	212	4	124	75
365	17.7	103	2.8	194	3.1	127	4	124	75
366	16.4	196	2.9	127	3.1	127	4	125	75
367	16.3	205	2.9	127	3.2	58	4	125	75
368	16.3	205	2.7	260	3.0	212	3	125	70
369	16.5	190	3.1	44	3.3	21	4	124	70
370	15.8	240	3.1	44	3.4	8	4	124	70
371	15.6	247	2.9	127	3.1	127	4	124	70
372	16.3	205	2.8	194	3.0	212	4	125	70
373	16.2	216	2.9	127	3.1	127	4	124	70
374	15.4	257	2.9	127	3.2	58	4	125	70
375	15.4	257	3.0	79	3.2	58	4	125	70
376	14.8	283	3.0	79	3.2	58	3	125	75
377	14.7	286	2.8	194	3.0	212	4	125	75
378	15.2	266	2.9	127	3.1	127	4	124	75
379	13.7	325	3.1	44	3.2	58	3	124	75
380	14.5	294	2.9	127	3.1	127	3	124	70
381	12.6	364	3.2	17	3.2	58	3	125	70
382	12.8	358	3.0	79	3.1	127	3	125	70
383	14.1	312	3.2	17	3.4	8	4	124	70

Table 20. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Amman, Jordan in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm
384	15.2	266	2.9	127	3.1	127	4	124	70
385	13.8	323	3.2	17	3.3	21	3	124	75
386	15.0	230	2.9	127	3.1	127	3	124	75
387	15.0	274	3.0	79	3.2	58	4	125	75
388	14.6	289	3.0	79	3.2	58	4	125	75
389	14.0	315	3.0	79	3.2	58	4	127	75
390	14.8	283	2.9	127	3.1	127	3	126	75
391	12.9	354	3.1	44	3.2	58	4	125	70
392	14.0	315	3.1	44	3.3	21	4	125	70
393	16.2	216	3.1	44	3.3	21	4	125	70
394	16.6	183	2.8	194	3.1	127	4	126	70
395	17.2	140	2.8	194	3.1	127	4	125	75
396	17.8	95	3.1	44	3.4	8	4	125	75
397	19.2	23	2.8	194	3.0	212	4	126	75
398	19.1	26	2.3	398	2.6	398	4	126	75
Centurk	14.4	301	3.0	79	3.2	58	3	126	75
Lancota	15.8	240	2.6	328	2.8	364	3	126	70
CI13449	15.3	262	3.1	44	3.4	8	3	125	70
Basostaya 1	14.5	294	2.7	260	2.9	296	3	125	65
Overall mean	16.1		2.81		3.02		3.9	126.1	56.1

Correlation Coefficients

Protein	- .71**	- .48**
Lysine/protein		.91**

** Significant at the P=.01 level.

Means of the check varieties

Basostaya 1	14.0	2.84	2.96
Centurk	15.2	2.92	3.14
CI13449	14.5	3.06	3.24
Lancota	15.0	2.74	2.94
Check mean	14.7	2.89	3.07
$LSD_{.05}$ of check means	1.27	0.17	0.13
Coefficient of variation %	6.26	4.31	3.06

Table 21. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Suwon, Korea in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield[1] g	Winter survival %	Days to flowering from Jan. 1	Plant height cm
Centurk	13.1	371	3.2	12	3.3	19	5	950	80	147	122
Lemcota	14.1	300	3.1	32	3.3	19	4	1009	90	146	123
CI13449	12.8	380	3.3	4	3.3	19	5	730	90	152	91
Besostaya 1	15.0	190	2.8	237	3.0	245	3	823	90	148	112
5	10.5	402	3.5	1	3.4	3	5	1097	80	148	109
6	11.1	401	3.3	4	3.2	55	5	1079	60	147	106
7	13.4	355	3.1	32	3.2	55	4	877	90	146	122
8	12.4	393	3.1	32	3.1	130	4	935	80	145	119
9	13.3	360	3.2	12	3.3	19	4	955	70	146	125
10	13.2	365	3.0	68	3.1	130	3	1032	90	146	126
11	15.3	152	2.9	137	3.1	130	4	734	90	148	116
12	15.0	190	2.9	137	3.1	130	4	863	60	147	115
13	15.1	175	2.9	137	3.1	130	4	684	70	144	133
14	12.4	393	3.2	12	3.3	19	5	1044	90	147	126
15	13.9	320	3.0	68	3.2	55	5	599	90	147	130
16	11.9	399	3.1	32	3.1	130	4	993	80	146	129
17	13.2	365	2.8	237	3.0	245	4	918	70	144	112
18	12.8	380	2.9	137	3.0	245	5	887	90	152	100
19	13.8	328	2.9	137	3.0	245	5	911	80	151	132
20	14.2	287	2.9	137	3.1	130	4	922	80	148	143
21	16.5	49	2.7	320	3.0	245	4	747	80	150	137
22	13.0	375	2.9	137	3.0	245	5	1030	80	140	113
23	13.7	336	2.9	137	3.1	130	4	940	70	149	127
24	12.5	391	3.3	4	3.3	19	5	908	80	147	130
25	15.7	104	2.7	320	2.9	341	4	832	90	142	124
26	13.8	328	3.0	68	3.1	130	5	826	80	148	132
27	13.7	336	3.2	12	3.3	19	5	671	70	148	126
28	13.9	320	2.9	137	3.1	130	3	695	90	148	131
29	13.6	345	2.9	137	3.1	130	3	867	90	142	82
30	14.1	300	3.1	32	3.3	19	4	509	80	151	96
31	12.6	387	3.2	12	3.3	19	5	682	90	150	80
32	14.7	228	3.0	68	3.2	55	5	640	80	150	95
33	13.5	350	3.2	12	3.3	19	5	698	80	145	100
34	14.0	310	3.1	32	3.3	19	4	779	80	145	102
35	12.6	387	3.1	32	3.1	130	5	975	80	148	135
36	14.2	287	2.8	237	3.0	245	5	1034	70	148	135
37	15.0	190	2.9	137	3.1	130	3	701	90	147	130
38	15.1	175	2.8	237	3.0	245	4	738	80	147	130
39	15.4	139	2.8	237	3.0	245	4	643	60	144	125
40	15.3	152	2.7	320	3.0	245	4	741	90	148	129
41	14.3	273	3.0	68	3.2	55	4	632	90	148	126
42	15.4	139	2.9	137	3.1	130	5	766	90	146	114
43	16.2	68	2.9	137	3.1	130	5	509	90	148	129
44	16.4	56	2.9	137	3.1	130	4	642	90	148	130
45	14.1	300	2.9	137	3.1	130	4	733	80	148	130
46	14.2	287	2.9	137	3.1	130	5	763	80	148	130
47	15.5	121	2.9	137	3.2	55	4	632	80	146	130
48	16.1	74	2.9	137	3.1	130	5	786	90	144	126
49	16.6	42	2.8	237	3.1	130	5	629	80	145	119
50	15.0	190	3.0	68	3.2	55	5	602	80	148	122

1/ Yield in grams from 1.6 m^2 of harvested plot.

Table 21. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Suwon, Korea in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Winter survival %	Days to flowering from Jan. 1	Plant height cm
51	15.5	121	2.9	137	3.2	55	5	615	80	148	127
52	17.6	9	2.7	320	2.9	341	4	758	90	148	127
53	18.0	6	2.8	237	3.1	130	4	791	90	148	124
54	15.8	96	2.8	237	3.0	245	4	682	90	148	129
55	16.9	30	2.7	320	3.0	245	4	707	90	146	125
56	16.6	42	2.7	320	3.0	245	4	841	90	146	131
57	16.5	49	2.7	320	3.0	245	4	689	80	146	131
58	15.9	87	2.9	137	3.1	130	4	745	80	150	131
59	16.1	74	2.7	320	3.0	245	4	648	80	148	124
60	15.5	121	2.8	237	3.0	245	4	717	70	148	128
61	13.2	365	2.9	137	3.0	245	4	1151	80	147	125
62	15.0	190	2.8	237	3.0	245	4	1016	80	146	121
63	15.7	104	2.8	237	3.0	245	4	955	80	146	125
64	16.4	56	2.8	237	3.0	245	4	911	90	148	124
65	16.0	80	2.8	237	3.1	130	4	821	90	148	132
66	15.7	104	2.7	320	3.0	245	4	661	90	147	115
67	16.8	33	2.9	137	3.1	130	4	849	60	146	128
68	17.1	23	2.8	237	3.0	245	5	761	80	143	119
69	16.7	37	2.9	137	3.1	130	5	613	70	144	125
70	16.2	68	2.8	237	3.1	130	4	684	80	145	130
71	13.9	320	3.0	68	3.1	130	4	777	80	148	130
72	14.6	239	3.0	68	3.2	55	5	703	80	148	132
73	16.7	37	2.7	320	3.0	245	5	946	80	148	131
74	15.1	175	2.9	137	3.1	130	5	785	90	148	132
75	15.9	87	2.7	320	2.9	341	4	941	90	148	126
76	14.1	300	2.7	320	2.9	341	4	949	80	152	122
77	15.3	152	2.8	237	3.1	130	5	685	80	152	126
78	14.3	273	3.0	68	3.2	55	5	999	80	150	121
79	15.1	175	2.8	237	3.0	245	3	968	90	150	121
80	16.4	56	2.7	320	3.0	245	5	758	100	150	122
81	16.2	68	2.8	237	3.0	245	5	829	90	148	125
82	15.0	190	2.9	137	3.1	130	5	864	80	149	124
83	15.5	121	2.7	320	3.0	245	5	1090	80	148	123
84	16.3	62	3.0	68	3.2	55	4	483	90	150	125
85	12.3	396	3.1	32	3.2	55	5	1194	90	148	132
86	15.0	190	2.8	237	3.0	245	4	1063	90	150	138
87	14.6	239	2.6	373	2.8	387	5	855	80	150	111
88	13.6	345	2.8	237	3.0	245	4	813	90	142	128
89	14.3	273	2.8	237	3.0	245	4	875	80	147	130
90	14.7	228	2.7	320	2.9	341	4	683	80	148	133
91	14.6	239	2.7	320	2.9	341	5	909	90	142	131
92	13.9	320	3.0	68	3.2	55	6	709	80	147	131
93	14.2	287	2.9	137	3.1	130	5	794	80	147	130
94	13.9	320	2.9	137	3.1	130	5	783	80	148	127
95	17.2	18	2.8	237	3.1	130	4	653	60	145	127
96	16.0	80	2.9	137	3.1	130	3	862	70	143	126
97	15.3	152	3.0	68	3.2	55	3	970	90	142	130
98	15.5	121	2.9	137	3.1	130	3	837	90	145	129
99	15.8	96	2.9	137	3.2	55	3	1017	90	142	128
100	15.5	121	2.9	137	3.2	55	4	941	100	142	130
Centurk	12.1	398	3.2	12	3.2	55	4	997	90	146	129
Lancota	12.6	387	2.9	137	2.9	341	4	1009	90	145	125
CI13449	14.8	213	2.6	373	2.8	387	4	646	90	152	94
Bezostaya 1	13.7	336	2.8	237	3.0	245	5	813	90	148	112
105	13.1	371	3.0	68	3.1	130	5	1017	90	146	125

Table 21. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Suwon, Korea in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Winter survival %	Days to flowering from Jan. 1	Plant height cm
106	15.7	104	2.8	237	3.0	245	4	660	90	148	133
107	15.1	175	2.9	137	3.1	130	4	813	90	147	133
108	14.5	252	2.9	137	3.1	130	4	763	80	145	133
109	14.2	287	2.8	237	3.0	245	3	894	80	144	133
110	16.0	80	2.8	237	3.1	130	4	657	80	143	130
111	15.0	190	2.8	237	3.0	245	3	907	80	142	128
112	13.7	336	3.1	52	3.2	55	4	900	80	[illegible]	126
113	14.0	310	2.9	137	3.0	245	4	725	80	[illegible]	131
114	14.0	310	3.1	32	3.3	19	4	902	80	142	103
115	11.7	400	3.1	32	3.1	130	4	907	80	146	137
116	13.1	371	3.2	12	3.3	19	4	927	80	147	136
117	12.7	382	2.8	237	2.9	341	4	1176	70	148	137
118	12.6	387	2.8	237	2.9	341	4	891	70	147	135
119	12.9	377	2.8	237	2.9	341	4	1244	80	146	135
120	13.1	371	2.9	137	3.0	245	3	859	90	147	124
121	14.4	262	2.9	137	3.1	130	3	930	90	148	129
122	15.0	190	2.9	137	3.1	130	4	532	80	143	132
123	15.3	152	2.8	237	3.0	245	4	807	80	146	132
124	13.4	355	2.9	137	3.1	130	4	742	90	140	123
125	14.6	239	2.8	237	3.0	245	4	705	70	141	131
126	12.9	377	3.0	68	3.1	130	4	762	80	142	136
127	13.3	360	2.9	137	3.0	245	3	769	90	143	117
128	14.5	252	2.9	137	3.1	130	3	905	90	144	126
129	16.2	68	2.8	237	3.1	130	3	742	90	141	123
130	14.8	215	2.8	237	3.1	130	4	819	90	145	129
131	14.1	300	3.0	68	3.2	55	4	512	80	143	132
132	13.8	328	3.0	68	3.1	130	4	744	70	141	127
133	14.2	287	3.1	32	3.3	19	4	875	80	144	129
134	14.9	202	3.0	68	3.2	55	3	479	90	147	126
135	14.4	262	3.0	68	3.2	55	3	634	80	142	116
136	14.3	273	2.9	137	3.0	245	4	780	80	144	121
137	14.5	252	3.1	32	3.3	19	4	831	90	148	119
138	14.7	228	3.0	68	3.2	55	3	949	80	144	121
139	14.3	273	3.0	68	3.2	55	3	668	80	143	113
140	13.8	328	2.9	137	3.0	245	3	1002	80	145	116
141	15.5	121	2.9	137	3.2	55	3	607	90	143	119
142	14.9	202	2.9	137	3.1	130	2	882	100	143	123
143	15.5	121	2.8	237	3.0	245	2	836	70	145	119
144	14.4	262	2.8	237	3.0	245	3	849	80	148	125
145	15.2	164	2.8	237	3.0	245	2	885	90	142	126
146	14.9	202	2.9	137	3.2	55	3	1190	90	148	120
147	14.8	215	2.8	237	3.0	245	3	[illegible]	90	143	116
148	14.8	215	2.7	320	2.9	341	3	[illegible]	90	147	116
149	14.2	287	2.9	137	3.1	130	4	[illegible]70	80	144	121
150	14.7	228	2.9	137	3.1	130	4	1181	80	148	128
151	14.0	310	3.1	32	3.3	19	4	1167	90	148	129
152	13.7	336	3.1	32	3.3	19	4	1210	80	146	129
153	13.7	336	3.2	12	3.4	[illegible]3	4	1133	90	148	123
154	13.7	336	3.0	68	3.1	130	4	1143	100	148	127
155	14.8	215	2.8	237	3.1	130	3	931	80	146	121
156	15.5	121	2.9	137	3.1	130	3	1021	70	143	132
157	15.3	152	3.0	68	3.2	55	3	915	90	144	127
158	15.0	190	2.7	320	2.9	341	3	963	80	144	120
159	15.1	175	2.9	137	3.1	130	2	906	90	148	122
160	14.1	300	2.7	320	2.9	341	3	919	90	145	99

Table 21. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Suwon, Korea in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Winter survival %	Days to flowering from Jan. 1	Plant height cm
161	13.9	320	3.0	68	3.1	130	3	926	90	145	134
162	14.6	239	3.1	32	3.3	19	3	846	90	141	129
163	14.6	239	2.8	237	3.0	245	3	709	90	151	133
164	15.4	139	2.7	320	2.9	341	2	857	80	143	116
165	15.8	96	2.7	320	2.9	341	2	890	80	145	120
166	14.4	262	3.0	68	3.1	130	2	890	80	145	120
167	14.8	215	2.8	237	3.0	245	2	977	80	142	124
168	14.7	228	2.8	237	3.0	245	2	1004	80	146	105
169	14.8	215	3.1	32	3.3	19	3	912	60	146	112
170	15.5	121	2.8	237	3.0	245	4	914	80	143	113
171	15.1	175	2.8	237	3.0	245	4	919	90	140	134
172	14.9	202	2.8	237	3.0	245	4	1050	90	140	102
173	13.7	336	2.8	237	3.0	245	4	759	90	142	124
174	16.1	74	2.8	237	3.1	130	4	601	90	144	120
175	14.2	287	2.9	137	3.1	130	4	730	90	144	124
176	14.5	252	3.1	32	3.3	19	3	924	90	145	129
177	14.1	300	2.9	137	3.0	245	3	771	70	144	119
178	14.8	215	2.8	237	3.0	245	3	886	80	145	116
179	14.9	202	2.7	320	2.9	341	4	701	90	147	114
180	12.4	393	3.2	12	3.2	55	3	1069	80	145	112
181	15.1	175	2.7	320	2.9	341	2	835	80	146	123
182	14.4	262	2.9	137	3.1	130	3	9.4	90	148	122
183	14.2	287	3.1	32	3.3	19	4	864	70	144	121
184	14.5	252	2.9	137	3.1	130	4	779	80	146	119
185	14.8	215	2.9	137	3.1	130	4	776	90	145	119
186	15.2	164	2.8	237	3.1	130	4	749	90	145	121
187	15.1	175	2.8	237	3.0	245	3	804	80	146	118
188	15.2	164	2.8	237	3.0	245	3	779	80	146	113
189	14.4	262	3.1	32	3.3	19	3	1007	90	144	121
190	14.3	275	2.7	320	2.9	341	3	959	90	146	117
191	15.9	87	2.9	137	3.1	130	4	811	90	145	118
192	19.4	1	2.7	320	3.0	245	4	606	80	146	123
193	15.5	121	2.8	237	3.0	245	4	696	80	148	120
194	16.6	42	2.6	373	2.9	341	4	748	90	148	127
195	13.2	365	3.0	68	3.1	130	4	1033	90	145	125
196	14.0	310	2.7	320	2.9	341	4	931	90	147	120
197	14.8	215	2.9	137	3.2	55	4	107	70	146	116
198	15.9	87	2.7	320	3.0	245	3	886	90	147	114
199	14.6	239	2.8	237	3.0	245	2	930	80	145	116
200	14.5	252	2.8	237	3.0	245	3	977	80	147	119
Centurk	13.7	336	2.9	137	3.0	245	3	1020	90	145	120
Lancota	15.1	175	2.6	373	2.8	387	2	914	90	144	125
CI13449	13.5	350	3.0	68	3.1	130	4	873	100	152	93
Bezostaya 1	16.1	73	2.5	398	2.8	387	2	839	80	148	111
205	15.4	139	2.8	237	3.1	130	2	333	80	147	119
206	15.3	152	2.6	373	2.9	341	2	950	80	144	106
207	15.8	96	2.7	320	3.0	245	3	761	90	144	126
208	14.7	228	2.9	137	3.1	130	3	798	80	147	131
209	16.9	30	2.5	398	2.8	387	2	855	80	149	130
210	16.6	42	2.6	373	2.9	341	2	734	70	145	123
211	15.9	87	2.7	320	3.0	245	3	867	90	146	210
212	17.2	18	2.6	373	2.9	341	3	928	80	148	133
213	16.4	56	2.7	320	2.9	341	3	926	80	146	126
214	16.2	68	2.6	373	2.9	341	3	897	90	149	135
215	14.6	239	2.8	237	3.0	245	3	723	100	144	132

Table 21. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Suwon, Korea in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Winter survival %	Days to flowering from Jan. 1	Plant height cm
216	15.8	96	2.7	320	3.0	245	3	1173	90	145	134
217	14.5	252	2.8	237	3.0	245	3	889	80	146	126
218	13.9	320	2.8	237	2.9	341	3	929	80	142	129
219	14.3	273	2.9	137	3.1	130	4	956	90	146	129
220	14.6	239	2.9	137	3.1	130	3	1018	90	134	125
221	14.8	215	2.8	237	3.0	245	4	1016	90	145	115
222	15.4	139	2.8	237	3.1	130	3	795	90	142	117
223	15.3	152	2.7	320	2.9	341	3	772	80	148	117
224	15.3	152	2.7	320	2.9	341	3	863	80	148	123
225	15.5	121	2.6	373	2.9	341	2	907	90	147	126
226	15.5	121	2.8	237	3.0	245	3	900	70	149	127
227	14.2	287	3.1	32	3.3	19	3	1103	80	149	117
228	15.2	164	2.8	237	3.0	245	3	910	90	146	126
229	15.4	139	2.8	237	3.0	245	4	1071	80	145	121
230	14.7	228	2.9	137	3.1	130	3	1056	80	144	118
231	14.3	273	2.7	320	2.9	341	4	926	80	143	117
232	14.5	252	3.2	12	3.4	3	4	1098	80	140	122
233	15.4	139	2.8	237	3.0	245	4	876	80	144	133
234	14.8	215	2.8	237	3.0	245	4	959	70	143	133
235	14.8	215	3.1	32	3.3	19	4	776	90	145	134
236	15.0	190	2.9	137	3.1	130	3	879	90	144	127
237	13.5	350	2.9	137	3.0	245	3	1010	90	142	117
238	15.7	104	2.6	373	2.9	341	3	609	90	143	124
239	14.5	252	2.8	237	3.0	245	3	768	80	148	120
240	14.5	252	2.8	237	3.0	245	3	784	80	147	124
241	14.0	310	2.8	237	3.0	245	3	964	90	147	117
242	14.6	239	3.0	68	3.2	55	3	809	80	148	110
243	16.4	56	2.6	373	2.9	341	4	610	80	148	116
244	12.6	387	2.9	137	3.0	245	4	1180	80	146	116
245	13.4	355	2.9	137	3.0	245	4	916	80	143	121
246	13.6	345	2.8	237	2.9	341	3	717	80	142	129
247	14.4	262	2.7	320	2.9	341	4	725	90	146	124
248	15.3	152	2.8	237	3.0	245	4	793	80	144	112
249	14.2	287	2.9	137	3.1	130	3	947	80	148	109
250	13.7	336	3.0	68	3.1	130	4	947	80	143	122
251	14.2	287	2.8	237	3.0	245	4	925	80	143	119
252	14.1	300	2.9	137	3.1	130	4	799	90	143	117
253	13.9	320	2.8	237	3.0	245	3	719	90	142	116
254	15.2	164	2.8	237	3.0	245	3	864	90	145	124
255	15.5	121	2.6	373	2.8	387	3	645	90	143	120
256	14.2	287	2.7	320	2.9	341	3	726	80	148	116
257	13.9	320	2.8	237	2.9	341	3	859	70	145	122
258	15.4	139	2.6	373	2.8	387	3	768	90	143	112
259	15.0	190	2.6	373	2.8	387	3	1001	90	145	114
260	15.9	87	2.6	373	2.8	387	3	828	90	145	110
261	15.0	190	2.7	320	2.9	341	3	838	90	143	120
262	15.5	121	2.6	373	2.9	341	2	962	80	143	115
263	15.5	121	2.6	373	2.9	341	2	1051	80	148	112
264	15.7	336	2.7	320	2.8	387	3	873	80	143	113
265	15.1	175	2.6	373	2.8	387	3	1101	80	146	120
266	12.3	396	3.0	68	3.1	130	4	897	70	144	113
267	13.2	365	2.8	237	2.9	341	3	859	70	143	122
268	16.8	33	2.6	373	2.8	387	4	849	80	149	128
269	14.2	287	2.8	237	3.0	245	4	834	90	146	128
270	15.3	152	2.7	320	2.9	341	4	945	90	148	126

Table 21. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Suwon, Korea in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Winter survival %	Days to flowering from Jan. 1	Plant height cm
271	14.9	202	2.8	237	3.0	245	4	726	90	146	110
272	13.3	360	2.8	237	2.9	341	4	727	80	146	120
273	14.1	300	2.7	320	2.8	337	3	1029	80	148	202
274	14.7	228	2.9	137	3.1	130	3	958	80	143	126
275	15.0	190	2.9	137	3.1	130	4	900	80	149	130
276	14.4	262	3.2	12	3.4	3	4	975	70	148	115
277	12.9	377	2.9	137	3.0	245	3	1165	80	144	116
278	13.5	350	2.9	137	3.0	245	3	1163	80	146	119
279	14.4	262	2.9	137	3.1	130	4	1000	80	150	126
280	14.7	228	2.8	237	3.0	245	4	1102	80	149	127
281	13.4	355	3.0	68	3.1	130	3	810	80	147	110
282	13.6	345	3.0	68	3.1	130	3	1048	90	148	120
283	13.9	320	2.8	237	3.0	245	4	1031	80	147	119
284	13.6	345	2.9	137	3.0	245	4	928	80	147	123
285	14.1	300	2.8	237	3.0	245	3	779	80	146	124
286	16.3	62	2.8	237	3.1	130	5	791	80	146	119
287	17.2	18	2.6	373	2.9	341	4	731	90	147	119
288	15.8	96	2.9	137	3.1	130	3	772	90	148	126
289	15.5	121	2.7	320	2.9	341	3	702	90	146	122
290	14.9	202	2.8	237	3.1	130	3	707	90	148	126
291	14.8	215	2.8	237	3.0	245	3	748	90	146	124
292	15.5	121	2.7	320	3.0	245	2	910	80	146	121
293	15.8	96	2.6	373	2.9	341	2	860	80	145	122
294	15.3	152	2.8	237	3.0	245	4	822	80	144	116
295	15.2	164	2.9	137	3.1	130	3	833	80	145	122
296	13.2	365	3.1	32	3.2	55	3	883	70	145	122
297	12.4	393	3.3	4	3.3	19	4	881	70	147	110
298	12.7	382	3.1	32	3.1	130	3	968	70	145	117
299	14.3	273	3.0	68	3.2	55	4	917	70	143	126
300	12.9	377	2.9	137	3.0	245	4	963	60	145	117
Centurk	13.6	345	3.0	68	3.1	130	5	960	80	147	125
Lancota	13.1	371	2.9	137	3.0	245	5	815	80	145	121
CI13449	13.3	360	3.3	4	3.4	3	4	547	80	152	95
Bansotaya 1	15.1	175	2.8	237	3.0	245	2	756	80	148	107
303	12.6	387	3.1	32	3.2	55	3	918	80	147	99
306	13.3	360	3.1	32	3.2	55	4	908	80	145	126
307	13.1	371	2.9	137	3.0	245	4	937	90	143	129
308	13.7	336	2.9	137	3.0	245	4	882	90	146	107
309	14.0	310	3.0	68	3.2	55	4	765	90	141	126
310	15.4	139	2.9	137	3.1	130	4	859	90	141	122
311	15.3	152	2.9	137	3.1	130	4	991	30	144	114
312	17.3	11	3.0	68	3.3	19	4	837	80	145	115
313	15.0	190	3.1	32	3.3	19	2	700	80	143	126
314	17.3	11	2.9	137	3.1	130	2	692	70	148	116
315	16.4	56	2.7	320	3.0	245	2	937	70	148	115
316	16.5	49	2.6	373	2.9	341	2	949	80	148	111
317	17.0	27	2.6	373	2.9	341	2	1074	90	148	118
318	15.4	139	2.9	137	3.1	130	3	847	60	148	114
319	16.6	42	2.6	373	2.9	341	3	938	90	148	115
320	17.6	9	2.7	320	3.0	245	3	1059	80	148	108
321	17.6	9	2.7	320	3.0	245	4	1027	80	148	112
322	16.7	37	2.8	237	3.1	130	4	1043	80	148	110
323	17.1	23	2.8	237	3.1	130	4	935	80	148	111
324	16.0	80	2.8	237	3.1	130	3	680	80	143	113
325	14.8	215	2.8	237	3.0	245	3	886	80	143	118

Table 21. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Suwon, Korea in 1976. Continued.

Entry No.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Winter survival %	Days to flowering from Jan. 1	Plant height cm
326	16.0	80	2.7	320	2.9	341	2	787	80	148	126
327	14.8	215	2.8	237	3.0	245	4	1040	70	146	107
328	15.6	109	2.8	237	3.0	245	4	653	90	148	118
329	14.6	239	3.0	68	3.2	55	4	684	90	150	113
330	17.2	18	2.6	373	2.9	341	3	780	90	145	115
331	15.1	175	2.7	320	2.9	341	3	832	90	146	117
332	15.7	104	2.9	137	3.2	55	3	700	80	148	113
333	16.0	80	2.9	137	3.1	130	2	1089	80	146	119
334	14.3	273	2.8	237	3.0	245	3	972	80	146	115
335	15.4	139	2.9	137	3.1	130	3	859	80	147	116
336	16.0	80	2.9	137	3.1	130	3	888	80	143	117
337	16.1	74	2.6	373	2.9	341	3	758	80	146	122
338	15.8	96	2.9	137	3.1	130	4	669	70	144	119
339	15.9	87	2.8	237	3.1	130	5	561	90	144	123
340	15.7	104	2.8	237	3.0	245	4	662	90	146	121
341	17.1	23	2.5	398	2.7	400	3	559	90	146	123
342	18.8	3	2.9	137	3.1	130	3	673	90	147	129
343	16.3	62	2.6	373	2.9	341	4	703	90	146	120
344	18.5	4	2.9	137	3.2	55	4	613	80	147	123
345	16.4	56	2.6	373	2.9	341	4	855	90	147	116
346	14.8	215	2.5	398	2.7	400	3	864	90	146	117
347	15.4	139	2.6	373	2.8	387	3	883	90	145	114
348	15.5	121	2.9	137	3.1	130	4	806	90	147	118
349	15.2	164	2.7	320	3.0	245	3	956	80	146	109
350	15.0	190	2.6	373	2.9	341	3	1018	80	146	104
351	15.5	121	2.8	237	3.0	245	3	894	80	148	123
352	14.3	273	2.9	137	3.1	130	4	928	80	149	118
353	15.2	164	2.7	320	2.9	341	4	619	80	147	124
354	17.9	7	2.7	320	3.0	245	3	893	90	146	123
355	15.8	96	2.9	137	3.2	55	4	646	90	145	129
356	14.2	287	3.0	68	3.2	55	4	904	90	143	121
357	15.5	121	2.7	320	3.0	245	4	807	90	144	113
358	15.9	87	2.5	398	2.8	387	3	519	90	148	111
359	15.1	175	2.6	373	2.8	387	3	1021	90	143	109
360	15.3	152	2.7	320	2.9	341	4	806	80	145	82
361	14.6	239	2.7	320	2.9	341	4	896	80	149	112
362	14.0	310	2.8	237	3.0	245	3	911	80	149	113
363	14.1	300	2.8	237	2.9	341	4	821	80	149	108
364	13.4	355	2.8	237	2.9	341	3	883	80	143	114
365	17.3	14	2.6	373	2.8	387	3	508	90	147	118
366	17.1	23	2.6	373	2.8	387	4	743	80	147	116
367	17.3	14	2.4	402	2.7	400	3	984	70	148	113
368	17.2	18	2.6	373	2.8	387	2	835	90	148	117
369	16.8	33	2.6	373	2.9	341	3	723	90	148	115
370	17.3	14	2.6	373	2.9	341	3	992	80	144	111
371	16.3	62	2.7	320	3.0	245	3	867	90	148	109
372	16.6	42	2.5	398	2.7	400	3	1119	90	148	109
373	17.0	27	2.6	373	2.8	387	3	942	90	148	118
374	16.3	62	2.6	373	2.8	387	2	1010	100	148	114
375	16.5	49	2.6	373	2.9	341	3	927	100	148	114
376	17.0	27	2.6	373	2.9	341	3	902	80	148	116
377	17.1	23	2.6	373	2.9	341	2	842	80	148	115
378	18.1	3	2.7	320	3.0	245	3	890	90	148	114
379	16.6	42	2.6	373	2.8	387	3	1031	90	148	113
380	17.0	27	2.6	373	2.9	341	2	887	90	148	114

Table 21. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Suwon, Korea in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Winter survival %	Days to flowering from Jan. 1	Plant height cm
381	15.7	104	2.7	320	3.0	245	2	910	70	148	117
382	16.5	49	2.8	237	3.0	245	2	966	90	148	113
383	16.2	68	2.7	320	3.0	245	2	928	80	148	112
384	16.5	49	3.0	68	3.2	55	3	483	90	148	11[illegible]
385	15.6	109	2.6	373	2.9	341	5	967	70	148	109
386	15.4	139	2.8	237	3.0	245	2	863	80	146	112
387	14.3	273	3.0	68	3.2	55	4	919	80	143	120
388	15.[illegible]	164	3.1	32	3.3	19	4	912	80	143	120
389	13.9	320	2.[illegible]	137	3.1	130	3	843	80	146	129
390	14.6	239	2.8	237	3.0	245	3	760	80	144	125
391	15.5	121	2.7	320	3.0	245	4	690	90	144	116
392	14.6	239	3.0	68	3.2	55	4	285	80	148	119
393	19.0	2	2.8	237	3.0	245	4	803	80	148	120
394	16.8	33	2.7	320	3.0	245	4	956	80	148	117
395	14.1	300	2.9	137	3.1	130	4	1017	70	148	121
396	14.4	262	3.0	68	3.2	55	3	1069	80	148	114
397	14.5	252	2.7	320	2.9	342	4	1138	80	147	114
398	16.3	62	2.8	237	3.0	245	3	974	90	148	115
Centurk	12.6	387	3.0	68	3.1	130	5	1041	90	145	125
Lancota	14.9	202	2.7	320	2.9	341	4	882	90	146	140
CI13449	13.9	320	3.0	68	3.2	55	5	812	60	152	98
Bezostaya 1	16.5	49	2.6	373	2.8	387	4	1005	90	148	112
Overall mean	14.9		2.8		3.0		3.6	[illegible]	81.2	145.0	121.1

Correlation Coefficients

Protein	- .62**	- .34**
Lysine/protein		.90**

** Significant at the P = .05 level.

Means of the check varieties

Bezostaya 1	15.3	2.70	2.92
Centurk	13.0	3.06	3.14
CI13449	13.7	3.04	3.16
Lancota	14.0	2.84	2.98
Check mean	14.0	2.91	3.05
$LSD_{.05}$ of check means	1.2	0.23	0.19
Coefficient of variation %	6.2	3.84	4.44

Table 21 Agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown under irrigation at Bethlehem, South Africa in 1976.[1/]

Entry no.	Yield[2/] g	Days to flowering from July 1	Plant height cm	Septoria 1-9	Stem rust[3/] 1-5
Centurk	204	120	108	0	3
Lancota	231	125	116	0	4
CI13449	72	130	88	0	5
Begosta	169	123	89	0	0
5	86	128	92	0	5
6	99	129	88	0	4
7	192	120	106	0	5
8	220	111	105	1	5
9	195	113	112	0	4
10	270	115	105	1	5
11	11	142	86	0	5
12	130	129	101	0	5
13	150	124	95	0	5
14	173	120	110	0	5
15	266	122	130	0	4
16	225	121	125	0	5
17	189	126	118	0	5
18	213	130	96	0	4
19	50	138	86	0	5
20	151	132	95	1	4
21	114	133	113	0	4
22	58	137	115	0	5
23	161	133	95	0	5
24	239	128	117	0	1
25	271	106	116	0	3
26	120	132	106	0	3
27	156	130	110	0	4
28	366	127	130	0	3
29	237	116	128	0	5
30	107	127	90	0	5
31	119	124	90	0	5
32	144	125	92	0	5
33	221	124	94	0	5
34	86	126	68	0	5
35	78	124	82	1	2
36	220	123	103	0	4
37	175	124	105	0	1
38	244	123	112	0	0
39	240	120	110	0	1
40	251	115	118	0	2
41	249	124	125	0	4
42	244	117	108	0	4
43	119	128	100	0	5
44	156	126	110	0	3
45	225	127	115	0	4
46	216	126	116	0	3
47	236	128	122	0	2
48	191	118	120	0	1
49	190	125	115	0	3
50	144	127	91	0	3

1/ No seed samples were received at Nebraska for quality analyses.

2/ Yield data based on a harvested plot size of 0.875 square meters.

3/ Stem rust readings were recorded as follows: 0 = no rust, 1 = 5 S, 2 = 25 S, 3 = 50 S, 4 = 75 S, 5 = 99 S.

Table 22. Agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown under irrigation at Bethlehem, South Africa in 1976. Continued.

Entry no.	Yield g	Days to flowering from July 1	Plant height cm	Septoria 1-9	Stem rust 1-5
51	98	129	95	0	4
52	197	126	104	0	4
53	147	127	105	0	3
54	196	124	105	0	1
55	200	120	111	0	0
56	84	127	103	0	3
57	128	126	110	0	3
58	137	132	105	0	5
59	239	123	114	0	4
60	187	126	118	0	4
61	64	128	80	0	5
62	190	113	100	0	3
63	239	113	101	0	3
64	285	117	110	0	4
65	107	127	112	0	4
66	146	112	85	1	0
67	159	111	99	1	1
68	145	113	94	3	2
69	93	110	100	2	3
70	187	107	110	0	1
71	161	115	105	0	4
72	218	118	105	0	5
73	145	121	118	0	5
74	186	120	112	0	5
75	137	120	109	0	4
76	128	129	98	0	5
77	2	148	70	1	5
78	20	143	81	0	5
79	35	144	83	0	5
80	220	128	106	0	4
81	186	128	108	0	5
82	202	129	105	0	5
83	91	137	106	1	4
84	120	135	111	0	4
85	180	128	116	0	4
86	72	136	111	1	5
87	81	136	90	0	5
88	147	125	105	0	4
89	78	126	96	0	4
90	81	130	98	0	4
91	120	124	103	0	5
92	202	123	112	0	5
93	193	122	110	0	1
94	193	123	110	0	2
95	200	123	110	0	0
96	127	118	111	0	1
97	186	108	113	0	2
98	186	110	111	0	2
99	177	106	100	0	3
100	208	110	115	0	3
Centurk	115	124	92	0	5
Lancota	150	126	100	1	3
CI13449	28	131	74	3	5
Bezostaya 1	112	125	85	0	1
105	168	123	102	0	4

Table 22. Agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown under irrigation at Bethlehem, South Africa in 1976. Continued.

Entry no.	Yield g	Days to flowering from July 1	Plant height cm	Septoria 1-9	Stem rust 1-5
106	184	125	125	0	2
107	286	116	121	0	2
108	171	120	117	0	2
109	213	122	116	0	1
110	289	114	122	0	2
111	263	116	112	0	2
112	17	140	108	0	5
113	198	119	117	0	4
114	309	112	112	0	2
115	173	133	108	0	1
116	245	118	80	0	0
117	144	134	108	0	3
118	235	130	111	0	3
119	213	128	112	0	2
120	160	131	106	0	2
121	176	123	102	3	1
122	204	127	100	4	0
123	198	125	102	0	0
124	190	112	110	0	1
125	145	114	103	0	3
126	242	129	113	1	1
127	102	134	104	1	3
128	130	134	99	2	4
129	238	124	108	0	1
130	198	129	102	0	4
131	129	127	105	0	1
132	206	123	113	0	5
133	168	119	110	0	5
134	113	129	112	0	5
135	295	114	116	0	2
136	290	116	110	0	3
137	134	131	112	0	5
138	182	127	121	0	5
139	127	128	114	0	5
140	181	128	110	0	5
141	248	122	104	1	4
142	200	114	99	5	1
143	219	116	101	0	4
144	99	133	96	0	1
145	199	113	98	3	2
146	275	134	72	2	3
147	184	122	97	2	0
148	130	120	94	0	3
149	149	114	98	6	1
150	130	138	92	1	2
151	132	139	91	0	3
152	211	125	108	0	5
153	164	130	106	0	2
154	168	130	105	0	4
155	184	123	97	0	3
156	205	118	112	3	4
157	227	120	102	2	3
158	173	121	116	2	0
159	238	118	100	3	2
160	182	125	97	1	3

Table 22. Agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown under irrigation at Bethlehem, South Africa in 1976. Continued.

Entry no.	Yield g	Days to flowering from July 1	Plant height cm	Septoria 1-9	Stem rust 1-5
161	154	124	92	1	4
162	211	124	102	0	3
163	223	120	82	0	5
164	119	139	106	0	2
165	222	123	110	0	3
166	271	125	102	0	1
167	256	124	105	0	0
168	328	123	114	0	1
169	259	124	115	0	1
170	148	112	86	0	4
171	348	104	92	0	4
172	251	105	92	0	3
173	209	111	117	0	1
174	205	115	96	0	2
175	311	114	116	0	1
176	172	127	112	0	1
177	205	115	107	0	3
178	217	113	105	0	1
179	142	123	86	0	5
130	175	113	92	0	4
181	197	112	93	0	1
182	215	124	96	0	2
183	212	127	104	0	1
184	199	128	110	0	1
185	218	128	103	0	1
186	228	129	108	0	1
187	191	128	111	0	0
188	230	129	107	0	0
189	157	129	102	0	1
190	160	130	93	0	1
191	172	124	101	0	2
192	227	125	105	0	2
193	241	128	111	0	4
194	253	131	116	0	4
195	124	127	113	0	4
196	169	122	98	0	3
197	157	123	92	0	1
198	167	121	96	0	0
199	155	121	97	0	0
200	228	122	94	0	0
Centurk	217	122	100	0	3
Lancota	225	126	101	0	1
CI13449	234	131	86	0	4
Bezostaya 1	182	122	94	0	0
205	177	125	91	0	0
206	207	113	82	0	0
207	226	130	86	0	0
208	167	134	90	1	1
209	213	135	104	0	0
210	222	125	96	0	0
211	205	134	102	0	3
212	190	127	102	3	0
213	228	129	110	3	1
214	262	132	115	3	1
215	227	128	116	2	1

Table 22. Agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown under irrigation at Bethlehem, South Africa in 1976. Continued.

Entry no.	Yield g	Days to flowering from July 1	Plant height cm	Septoria 1-9	Stem rust 1-5
326	160	118	106	0	4
327	192	119	84	0	3
328	158	118	86	0	4
329	97	125	95	0	4
330	225	126	112	0	4
331	225	119	114	0	2
332	172	123	103	0	4
333	187	121	102	0	4
334	132	122	97	0	4
335	264	123	108	0	5
336	151	124	110	0	2
337	146	122	111	0	3
338	170	124	102	0	2
339	190	124	99	0	3
340	236	114	105	0	1
341	186	113	112	0	2
342	200	117	110	0	3
343	171	114	106	0	1
344	168	113	114	0	1
345	237	118	94	0	2
346	172	115	91	0	2
347	173	115	86	0	3
348	175	118	90	0	2
349	119	130	80	0	5
350	31	135	72	0	5
351	161	137	100	4	0
352	116	136	106	1	4
353	305	115	96	0	4
354	142	127	105	0	5
355	184	120	110	0	4
356	235	114	112	0	5
357	207	106	92	3	2
358	129	125	96	0	3
359	189	113	95	2	3
360	214	119	72	0	4
361	211	127	88	0	3
362	227	127	97	1	1
363	208	125	91	1	1
364	155	102	90	0	0
365	273	124	98	0	0
366	231	127	101	0	0
367	246	130	90	0	0
368	295	125	92	0	0
369	284	127	95	0	0
370	262	128	93	0	0
371	252	120	100	0	2
372	268	129	93	0	0
373	234	129	92	0	0
374	271	128	92	0	0
375	308	128	96	0	0
376	284	127	101	0	0
377	268	129	96	0	0
378	260	129	110	0	0
379	278	128	102	0	0
380	283	130	97	0	0

Table 22. Agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown under irrigation at Bethlehem, South Africa in 1976. Continued.

Entry no.	Yield g	Days to flowering from July 1	Plant height cm	Septoria 1-9	Stem rust 1-5
216	247	127	111	0	1
217	242	128	108	0	1
218	266	114	103	0	1
219	249	130	112	0	2
220	114	133	100	0	3
221	200	120	100	0	3
222	277	115	97	0	3
223	203	134	102	1	2
224	216	131	98	0	1
225	234	130	95	0	2
226	233	134	101	1	2
227	250	132	110	3	1
228	197	122	94	0	1
229	246	128	102	1	1
230	222	119	102	0	0
231	293	116	96	0	1
232	270	116	94	0	1
233	177	130	94	0	1
234	216	115	102	0	2
235	151	131	104	0	3
236	233	116	103	0	1
237	252	114	108	0	1
238	177	119	101	0	1
239	191	120	102	0	1
240	244	122	107	0	1
241	276	119	108	0	1
242	131	134	100	0	3
243	268	122	92	0	0
244	202	133	90	0	3
245	250	121	93	0	2
246	228	104	94	0	0
247	193	130	108	0	1
248	222	124	104	0	3
249	196	131	110	0	3
250	224	115	98	0	2
251	173	119	94	0	4
252	179	125	87	0	3
253	259	124	90	0	1
254	133	124	92	0	4
255	233	118	102	0	1
256	214	129	96	0	2
257	195	116	101	0	1
258	214	121	97	0	0
259	289	119	101	0	2
260	238	117	96	0	2
261	246	116	100	0	3
262	258	118	103	0	3
264	212	123	106	0	3
264	183	119	97	0	3
265	293	121	109	0	0
266	300	120	105	0	1
267	310	134	124	0	1
268	267	115	117	0	3
269	298	116	112	0	0
270	257	123	110	0	0

Table 22. Agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown under irrigation at Bethlehem, South Africa in 1976. Continued.

Entry no.	Yield g	Days to flowering from July 1	Plant height cm	Septoria 1-9	Stem rust 1-5
271	230	128	93	0	1
272	205	130	98	0	4
273	290	120	96	0	2
274	266	117	106	0	3
275	255	130	114	0	3
276	253	131	106	0	3
277	234	115	104	0	5
278	198	118	90	0	4
279	287	130	110	0	4
280	290	129	113	0	0
281	300	115	100	0	2
282	146	129	105	0	4
283	291	131	101	0	2
284	251	140	98	0	3
285	194	137	98	0	3
286	166	125	96	0	4
287	239	129	105	0	1
288	155	144	100	1	1
289	137	136	86	1	1
290	140	140	93	3	0
291	173	135	101	3	0
292	222	120	82	3	1
293	229	118	91	3	0
294	140	124	91	0	0
295	118	136	92	0	1
296	207	122	109	0	3
297	260	123	98	0	3
298	242	124	124	1	3
299	296	117	104	0	2
300	190	119	93	0	3
Centurk	186	121	90	0	4
Lancota	201	128	98	0	3
CI13449	60	135	82	0	5
Bezostaya 1	157	122	94	0	0
305	161	126	81	0	5
306	243	125	110	0	3
307	186	122	118	0	2
308	242	124	98	0	4
309	185	114	102	0	2
310	217	113	116	0	3
311	137	119	97	0	4
312	134	115	108	0	3
313	190	114	102	0	3
314	162	126	102	0	0
315	245	126	102	0	0
316	198	124	96	0	0
317	240	124	98	0	0
318	229	125	101	0	0
319	212	124	101	0	0
320	196	124	99	0	0
321	204	125	100	0	0
322	172	125	98	0	0
323	220	124	97	0	0
324	81	114	90	0	4
325	157	113	108	0	3

Table 22. Agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown under irrigation at Bethlehem, South Africa in 1976. Concluded.

Entry no.	Yield g	Days to flowering from July 1	Plant height cm	Septoria 1-9	Stem rust 1-5
381	277	130	98	0	0
382	334	129	103	0	0
383	236	128	93	0	0
384	272	130	95	0	0
385	236	128	100	0	0
386	275	129	96	0	0
387	268	118	109	0	4
388	269	120	105	0	4
389	183	129	110	0	4
390	155	130	110	0	4
391	206	118	110	0	2
392	148	130	95	0	5
393	134	130	90	0	5
394	172	128	100	0	5
395	121	131	92	0	5
396	130	133	96	0	5
397	124	134	90	0	5
398	135	134	90	0	5
Centurk	245	122	100	0	4
Lancota	285	128	108	0	3
CI13449	37	137	71	0	4
Bezostaya 1	130	125	80	0	0
Overall mean	195.0	126.7	103.1	0.3	2.5

Table 23. Protein and lysine values together with seed [illegible] for entries in the second high protein-high lysine winter wheat observation nursery grown under dryland conditions at Bethlehem, South Africa in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield[1] g	Test weight kg/hl	Days to flowering from July 1	Plant height cm	Septoria 1-9	Powdery mildew 0-9:	Powdery mildew %	Leaf rust sev. %	Leaf rust[2] resp.	Stem rust sev. %	Stem rust[2] resp.	Days to maturity from planting
Centurk	11.4	381	3.1	37	3.0	196	3	606	77.3	149	105	0	0		2	MR	40	S	200
Lancota	11.9	372	2.9	134	2.9	307	3	869	76.3	144	112	0	0		5	MR	50	S	198
CI13449	9.8	399	3.5	3	3.2	24	5	387	59.0	159	86	0	9	5	90	S	40	S	210
Semostaya 1	12.8	339	2.8	223	2.9	307	3	672	78.8	146	104	0	0		0		5	S	196
5	9.9	397	3.4	8	3.1	87	3	888	72.5	155	109	0	6	20	10	MS	50	S	206
6	10.7	390	3.3	11	3.1	87	3	776	70.3	153	102	0	5	10	2	MR	5	MS	208
7	12.6	350	2.9	134	2.9	196	3	704	77.5	144	111	0	0		30	MS	30	S	190
8	11.3	383	3.1	37	3.0	196	3	734	79.5	143	101	0	0		2	MR	20	S	198
9	11.8	373	3.0	72	3.0	196	3	649	79.5	143	105	0	0		40	S	50	S	188
10	11.5	378	3.0	72	2.9	307	3	666	79.0	143	108	0	0		80	S	10	S	192
11	14.1	215	2.8	223	3.0	196	4	850	77.5	165	113	0	0		5	S	5	S	208
12	13.5	283	2.9	134	3.0	196	4	748	75.5	151	116	0	0		2	S	70	S	203
13	14.4	184	2.9	134	3.1	87	4	812	76.3	150	112	0	0		1	MS	30	S	200
14	10.8	388	3.3	11	3.1	87	3	1014	76.8	145	132	0	2	5	2	MR	5	S	201
15	12.2	364	3.2	18	3.2	24	3	858	79.3	149	124	0	0		2	MR	0-30	S	197
16	11.3	383	3.2	18	3.1	87	3	946	77.3	148	125	0	0		2	S	10	S	199
17	13.5	283	2.8	223	3.0	196	3	865	77.5	151	124	0	0		1	MR	5	S	198
18	11.0	386	3.2	18	3.1	87	4	706	75.0	154	102	1	0		5	S	10	S	207
19	13.1	319	2.9	134	3.0	196	3	691	77.2	158	97	0	0		5	S	5	S	210
20	13.1	319	3.1	37	3.2	24	3	746	76.0	152	114	0	0		2	S	10	S	196
21	11.3	383	3.5	3	3.5	1	3	854	79.5	156	136	0	0		2	S	20	S	198
22	9.9	397	3.2	18	3.0	196	3	620	77.3	160	127	0	0		0		30	S	206
23	10.5	393	3.2	18	3.1	87	3	798	75.0	157	102	0	0		10	MS	5	S	211
24	12.2	364	3.1	37	3.1	87	3	817	76.8	151	131	0	1	5	t	MS	2	R	194
25	14.1	215	2.9	134	3.0	196	3	694	79.5	140	118	0	0		t	S	t	MS	188
26	10.4	394	3.2	18	3.0	196	3	743	76.5	150	120	0	0		t	MS	10	S	195
27	10.3	395	3.4	8	3.2	24	3	749	77.0	153	132	0	0		0		40	S	198
28	10.2	396	3.2	18	3.0	196	3	916	79.0	153	122	0	0		0		t	MS	199
29	12.6	350	3.0	72	3.0	196	3	672	79.3	142	120	0	0		5	R	5	S	190
30	12.4	358	3.0	72	3.1	87	3	703	74.8	152	84	0	0		30	MS	5	MS	201
31	9.3	402	3.5	3	3.1	87	4	302	68.0	151	93	0	0		20	S	40	S	202
32	10.8	388	3.4	8	3.2	24	4	678	67.8	152	94	0	0		70	S	20	S	200
33	10.6	392	3.5	3	3.3	4	3	590	66.0	151	82	2	2		80	S	2	S	201
34	10.7	390	3.5	3	3.3	4	3	631	69.2	149	84	0	0		90	S	20	MS	201
35	11.6	375	3.1	37	3.0	196	3	714	77.5	152	92	0	0		0		0		197

[1] Yields based on a harvested plot of 1.75 square meters.

[2] t= trace, e= escape.

Table 23. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown under dryland conditions at Bethlehem, South Africa in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Test weight kg/hl	Days to flowering from July 1	Plant height cm	Septoria 1-9	Powdery mildew 0-9	Powdery mildew %	Leaf rust sev. %	Leaf rust resp.	Stem rust sev. %	Stem rust resp.	Days to maturity from planting
36	13.1	319	2.9	134	3.0	196	3	750	77.3	150	123	0	3	20	5	MS	0		195
37	14.4	184	2.9	134	3.1	87	3	744	77.3	151	117	0	0		0		0		194
38	13.9	253	2.9	134	3.1	87	3	731	77.5	150	115	0	0		10	S	0		194
39	14.9	140	2.8	223	3.1	87	3	652	74.0	145	116	0	1	5	2	S	0		192
40	12.0	371	2.8	223	2.8	374	3	864	79.0	144	112	0	0		t	MR	0		194
41	11.5	378	3.2	18	3.2	24	3	778	77.8	145	118	0	2	40	t	MR	30	S	202
42	12.2	364	2.9	134	2.9	307	3	658	78.8	145	108	0	0		t	S	10	S	201
43	14.9	140	2.8	223	3.0	196	3	654	76.8	156	113	0	5	30	0		2	S	199
44	15.8	70	2.7	312	3.0	196	2	543	79.8	158	133	0	5	10	5	S	0		198
45	13.7	270	2.9	134	3.1	87	3	753	76.3	154	126	0	5	10	10	S	20	S	198
46	14.0	236	2.9	134	3.1	87	3	843	77.3	149	124	0	4	10	2	S	t	S	194
47	13.1	319	2.9	134	3.0	196	3	788	77.0	150	120	0	6	10	t	R	2	S	194
48	14.1	215	2.8	223	3.0	196	3	636	77.3	144	123	0	4	10	20	S	10-S	MR-S	200
49	15.5	283	2.8	223	2.9	307	3	798	80.0	145	132	0	0		50	S	70	S	193
50	13.2	308	2.8	223	2.9	307	3	754	76.8	158	114	0	0		30	R	20	S	196
51	13.0	328	2.7	312	2.8	374	3	795	75.5	157	112	0	0		t	S	10	S	202
52	15.8	70	2.7	312	3.0	196	3	697	77.0	146	121	0	0		5	R	0		196
53	15.9	61	2.8	223	3.0	196	3	920	78.5	146	125	0	0		5	S	2	MR	197
54	14.8	150	2.4	401	2.6	402	3	525	77.8	150	115	2	0		5	S	30	S	193
55	15.7	81	2.6	370	2.8	374	3	572	78.3	145	106	1	0		0		0		193
56	16.0	55	2.6	370	2.9	307	3	536	77.0	149	123	1	0		0		0		196
57	15.7	81	2.6	370	2.8	374	3	517	75.0	145	125	2	0		0		0		197
58	13.1	319	2.7	312	2.8	374	3	640	77.3	165	126	0	0		5	S	30	S	211
59	14.2	201	2.8	223	2.9	307	3	525	77.3	146	123	0	0		2	S	t	S	191
60	12.6	350	2.8	223	2.9	307	3	602	76.0	152	124	0	0		20	S	50	S	195
61	11.7	374	2.8	223	2.8	374	3	610	76.3	153	100	0	0		5	S	80	S	207
62	15.3	110	2.7	312	2.9	307	3	624	79.0	141	93	0	0		10	S	5	S	191
63	14.7	140	2.8	223	3.0	196	3	577	72.3	141	95	0	0		10	S	t	S	193
64	15.9	61	2.7	312	2.9	307	3	693	76.3	143	105	0	0		5	MS	t	S	192
65	12.9	253	2.9	134	3.0	196	3	639	74.5	153	120	0	0		2	S	t	S	198
66	13.7	270	2.8	223	3.0	196	3	535	78.0	142	94	0	0		0		0		193
67	15.4	99	2.8	223	3.1	87	3	565	78.0	142	104	0	0		t	MS	0		193
68	16.1	50	2.6	370	2.9	307	3	576	78.5	141	100	0	0		2	MR	2	S	192
69	15.3	110	2.7	312	2.9	307	3	486	76.3	143	105	0	0		0		30	S	190
70	15.8	70	2.8	223	3.0	196	3	634	77.5	140	107	0	0		5	S	10	MS	191
71	12.4	358	3.1	37	3.1	87	3	605	79.8	143	116	0	0		5	S	20	S	190
72	13.2	308	2.8	223	2.9	307	3	678	78.5	144	118	0	0		2	S	20	S	190
73	14.5	171	2.8	223	3.0	196	3	722	77.0	145	114	0	0		2	MS	30	S	190
74	13.1	319	2.8	223	2.9	307	3	770	77.0	145	117	0	0		10	S	20	S	190
75	14.1	215	2.9	134	3.1	87	3	623	75.5	145	114	0	0		10	S	30	S	190

Table 23. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown under dryland conditions at Bethlehem, South Africa in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Test weight kg/hl	Days to flowering from July 1	Plant height cm	Septoria 1-9	Powdery mildew 0-9	Powdery mildew %	Leaf rust sev. %	Leaf rust resp.	Stem rust sev. %	Stem rust resp.	Days to maturity from planting
76	13.4	296	3.0	72	3.1	87	3	831	78.0	152	107	0	0		20	S	10	S	202
77	14.0	236	3.2	18	3.3	4	3	650	75.0	159	113	0	0		t	R	5	S	204
78	13.4	296	2.9	134	3.0	196	3	704	77.8	150	115	0	0		5	S	10	S	204
79	14.1	215	2.8	223	2.9	307	3	639	78.8	160	116	0	0		t	S	2	MS	205
80	14.0	236	2.9	134	3.0	196	3	749	75.3	151	114	0	0		5	S	10	R	197
81	14.0	236	3.0	72	3.2	24	3	754	74.0	149	112	0	0		t	MS	10	S	198
82	13.4	296	3.1	37	3.2	24	3	747	73.0	150	112	0	0		40	S	40	S	199
83	13.8	263	3.0	72	3.1	87	3	724	76.0	153	117	0	0		5	S	40	S	199
84	14.1	215	3.1	37	3.2	24	3	633	75.8	158	118	0	0		5	MS	60	S	200
85	12.1	369	3.1	37	3.1	87	3	855	76.0	150	112	0	0		t	S	20	S	198
86	13.8	263	2.8	223	3.0	196	3	747	72.8	159	120	0	0		10	S	20	MS	200
87	14.4	184	2.9	134	3.1	87	4	545	64.0	159	105	0	0		0		30	S	211
88	14.0	236	2.8	223	3.0	196	3	610	76.5	145	122	0	0		t	S	5	S	198
89	14.0	236	2.9	134	3.0	196	3	566	77.5	145	124	0	0		5	S	t	S	196
90	14.7	156	2.7	312	2.9	307	3	638	77.3	157	132	0	0		5	S	10	S	197
91	15.1	127	2.8	223	3.0	196	3	805	75.5	144	124	0	0		5	S	0		194
92	13.3	303	2.8	23	2.9	307	3	809	78.0	145	120	0	0		0		0		193
93	12.4	358	3.1	37	3.1	87	3	633	73.5	144	120	0	0		t	S	0		192
94	12.4	358	3.1	37	3.1	87	3	756	79.0	145	118	0	0		t	MR	t	S	192
95	15.7	81	2.6	370	2.9	307	3	583	74.3	145	116	0	0		0		0		185
96	16.7	33	2.7	312	2.9	307	3	566	77.3	143	126	0	0		5	S	0		185
97	17.3	10	2.8	223	3.1	87	3	635	77.3	139	110	0	0		2	S	t	S	183
98	17.6	5	2.7	312	2.9	307	3	583	78.0	140	112	0	9	40	0		0		184
99	18.0	3	2.7	312	3.0	196	3	510	79.0	140	105	0	0		t	S	0		185
100	17.4	7	2.6	370	2.9	307	3	596	78.3	141	113	0	0		0		0		185
Centurk	12.7	344	3.0	72	3.1	87	3	812	79.3	145	117	0	0		0		0		196
Lancota	14.7	156	2.6	370	2.8	374	4	829	76.5	146	120	0	0		t	S	0		198
CI13449	11.5	378	3.2	18	3.2	24	5	511	64.3	156	86	0	9	80	20	S	30	S	209
Bonestayn1	14.1	215	2.6	370	2.8	374	3	648	80.0	146	104	0	0		t	R	0		196
105	12.7	344	2.9	134	3.0	196	3	878	78.0	145	120	0	0		0		0		194
106	16.5	37	2.6	370	2.8	374	3	558	74.0	153	130	0	5	10	2	S	0		195
107	16.4	38	2.7	312	3.0	196	3	680	75.3	144	122	1	0		2	S	5	S	190
108	17.2	14	2.6	370	2.9	307	3	688	75.0	146	120	1	0		t	MS	10	S	188
109	14.6	163	2.7	312	2.9	307	3	763	78.8	145	118	0	0		t	S	20	S	188
110	15.3	110	2.7	312	3.0	196	3	605	77.3	144	127	0	0		t	S	0		188
111	15.2	120	2.6	370	2.8	374	3	753	78.5	145	124	0	0		2	R	0		189
112	14.4	184	2.8	223	3.0	196	3	656	76.0	156	123	0	0		10	MS	30	S	197
113	14.1	215	2.7	312	2.8	374	3	782	80.0	144	122	0	0		2	S	10	S	193
114	12.7	344	3.0	72	3.1	87	3	729	79.3	143	115	0	0		2	S	5	S	192
115	15.2	120	2.7	312	3.0	196	3	833	77.5	160	132	0	0		t	MR	0		200

Table 23. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown under dryland conditions at Bethlehem, South Africa in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield kg	Test weight kg/hl	Days to flowering from July 1	Plant height cm	Septoria 1-9	Powdery mildew 0-9	Powdery mildew %	Leaf rust sev. %	Leaf rust resp.	Stem rust sev. %	Stem rust resp.	Days to maturity from planting
116	14.2	201	2.9	134	3.1	87	3	660	77.0	145	95	0	0	0			0		198
117	14.2	201	2.9	134	3.0	196	3	909	79.3	159	129	0	0	0			0		210
118	13.0	328	2.9	134	3.0	196	3	806	78.0	153	134	0	0	0			0		200
119	13.1	319	2.7	312	2.8	374	3	881	77.5	153	126	0	0	0			0		201
120	13.4	296	2.7	312	2.8	374	3	699	77.5	157	134	0	0	2	R		0		201
121	15.2	120	2.6	370	2.8	374	3	795	78.8	151	128	0	0	2	S		t	S	196
122	13.2	308	2.9	134	3.1	87	3	829	77.3	143	115	1	0	0			5	MR	196
123	16.8	28	2.6	370	2.8	374	3	682	76.5	145	120	0	0	0			0		198
124	15.4	99	2.8	223	3.0	196	3	750	76.0	139	122	0	0	t	MR		t	S	188
125	15.9	61	2.7	312	3.0	196	3	603	76.8	141	115	0	0	0			0		190
126	13.9	253	2.8	223	2.9	307	3	834	79.3	152	123	2	0	0			0		198
127	13.9	253	2.7	312	2.8	374	3	782	78.3	151	121	1	0	0			0		198
128	14.1	215	2.9	134	3.1	87	3	766	77.5	150	122	0	0	0			0		197
129	16.0	55	2.7	312	3.0	196	3	761	77.5	145	102	0	0	0			0		196
130	14.8	150	2.7	312	2.9	307	3	694	80.0	152	114	0	0	0			0		200
131	14.8	150	2.8	223	3.0	196	4	690	76.0	149	118	1	0	0			0		196
132	15.1	127	2.8	223	3.0	196	4	625	76.3	143	122	0	0	5	S		10	S	195
133	13.1	319	2.9	134	3.0	196	3	855	76.5	142	120	0	0	2	S		20	S	197
134	14.9	140	2.8	223	3.0	196	3	580	76.0	158	125	0	0	t	S		5	MS	198
135	16.7	33	2.6	370	2.9	307	3	565	78.5	141	117	0	0	e			e		184
136	15.3	110	2.7	312	2.9	307	4	739	76.0	144	107	0	0	t	R		t	R	192
137	13.5	283	2.9	134	3.1	87	4	875	78.5	156	121	0	0	10	S		2	MR	198
138	13.6	275	3.0	72	3.1	87	4	851	77.0	149	118	0	0	t	R		10	S	190
139	13.5	283	2.9	134	3.0	196	3	886	78.0	150	120	0	0	t	R		t	S	196
140	13.4	296	3.0	77	3.1	87	3	905	79.3	153	120	0	0	0			10	R	196
141	16.0	55	2.6	370	2.8	374	3	667	77.0	144	106	3	0	0			0		195
142	15.8	70	2.5	394	2.7	397	3	564	78.5	143	105	4	0	e			e		187
143	16.7	33	2.5	394	2.8	374	3	650	79.5	143	112	0	0	e			e		189
144	15.4	99	2.5	394	2.7	397	3	848	80.0	159	122	0	0	5	S		2	MR	198
145	15.8	70	2.7	312	3.0	196	3	720	80.5	143	105	0	0	o			e		188
146	15.8	70	2.7	312	3.0	196	3	655	78.8	156	122	0	0	t	S		0		196
147	16.9	25	2.5	394	2.8	374	3	622	77.5	142	121	2	0	0			0		196
148	16.3	41	2.5	394	2.8	374	3	705	79.5	143	101	0	0	t	S		0		188
149	15.7	81	2.6	370	2.8	374	3	584	77.3	142	100	5	0	0			0		188
150	13.5	283	3.1	37	3.2	24	3	835	76.5	155	103	0	0	t	R		0		202
151	13.2	308	3.0	72	3.2	24	3	948	75.5	151	103	0	0	t	R		0		202
152	14.9	140	2.6	370	2.8	374	3	851	77.3	145	125	0	0	t	S		5	S	195
153	13.5	283	3.0	72	3.1	87	3	805	75.3	150	112	0	0	t	MR		0		198
154	13.5	283	2.7	312	2.9	307	3	825	78.0	153	115	0	0	2	MS		t	S	200
155	14.1	215	2.8	223	3.0	196	3	735	78.0	150	109	0	0	2	S		10	S	196

Table 23. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown under dryland conditions at Bethlehem, South Africa in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Test weight kg/hl	Days to flowering from July 1	Plant height cm	Septoria 1-9	Powdery mildew 0-9		Leaf rust sev. %	Leaf rust resp.	Stem rust sev. %	Stem rust resp.	Days to maturity from planting
156	14.9	140	2.8	223	3.0	196	3	769	79.3	141	111	1	0		t	S	10	S	187
157	15.4	99	2.7	312	2.9	307	3	736	77.8	140	112	1	0		a		10	S	187
158	15.1	127	2.6	370	2.8	374	3	594	79.8	140	121	1	0		a		a		187
159	15.3	110	2.8	223	3.0	196	3	765	78.0	141	108	1	0		a		a		187
160	14.0	236	2.7	312	2.9	307	3	735	76.3	145	112	1	0		t	S	5	S	192
161	14.2	201	2.8	223	3.0	196	3	775	78.3	144	110	1	0		t	S	10	S	189
162	14.5	171	2.9	134	3.1	87	3	780	76.5	144	111	0	0		t	MR	10	S	194
163	13.2	308	2.8	223	3.0	196	3	807	75.8	144	92	0	4	5	0		30	S	197
164	14.6	163	2.7	312	2.9	307	3	766	79.5	141	112	0	0		t	MR	t	S	200
165	15.7	81	2.7	312	2.9	307	3	758	76.8	142	112	0	0		t	S	60	S	194
166	14.0	236	2.9	134	3.1	87	3	828	80.0	143	123	0	0		2	S	5	S	195
167	14.9	140	2.7	312	2.9	307	3	736	78.0	144	100	0	0		a		a		192
168	14.0	236	2.9	134	3.1	87	3	952	79.0	145	113	0	0		5	MS	t	S	198
169	14.6	163	2.8	223	3.0	196	3	714	80.0	146	110	0	0		t	S	5	MS	196
170	14.5	171	2.9	134	3.1	87	4	524	76.5	139	84	0	0		5	S	30	S	188
171	15.4	99	2.7	312	2.9	307	3	796	76.8	137	90	0	0		2	MS	20	S	190
172	15.6	90	2.6	370	2.9	307	3	593	76.0	138	87	0	0		10	S	t	S	190
173	14.9	140	2.6	370	2.8	374	3	632	77.5	140	106	0	0		a		5	S	185
174	14.7	156	2.8	223	3.0	196	3	728	78.5	142	95	0	0		0		5	S	191
175	14.7	156	2.8	223	3.0	196	3	762	77.0	142	107	0	0		0		0		192
176	14.9	140	2.8	223	3.0	196	3	722	78.0	146	120	0	0		0		5	S	193
177	13.8	263	2.8	223	3.0	196	3	638	78.3	141	106	0	0		a		a		188
178	15.3	110	2.8	223	3.1	87	3	662	79.0	142	110	0	0		a		a		188
179	15.3	110	2.7	312	2.9	307	3	682	77.5	144	102	1	0		t	S	20	S	191
180	13.7	270	2.9	134	3.1	87	3	705	73.0	141	104	0	0		10	S	20	S	188
181	15.4	99	2.7	312	3.0	196	3	725	80.5	142	105	0	0		2	S	2	S	191
182	14.1	215	2.8	223	3.0	196	3	575	77.0	146	93	0	0		2	MR	t	MS	193
183	14.4	184	2.7	312	2.9	307	3	807	77.5	145	115	0	0		0		t	S	192
184	14.3	194	2.9	134	3.1	87	3	749	76.5	146	117	0	0		0		t	S	192
185	14.5	171	2.9	134	3.1	87	3	749	77.0	148	115	0	0		0		0		192
186	14.2	201	2.9	134	3.1	[illegible]	3	809	75.0	146	118	0	0		0		0		192
187	14.1	215	3.1	37	3.3	[illegible]	3	782	77.0	146	118	0	0		0		0		192
188	14.4	184	2.9	134	3.1	87	3	726	77.0	148	120	0	0		0		0		192
189	14.6	163	2.9	134	3.1	87	3	762	77.3	149	117	0	0		0		t	MS	192
190	14.3	194	2.9	134	3.0	196	3	820	76.5	146	119	0	0		0		0		192
191	15.6	90	2.9	134	3.2	24	3	648	78.3	150	120	0	0		2	S	0		192
192	13.5	283	2.8	223	2.9	307	3	813	75.5	152	124	0	0		t	MR	2	MS	197
193	14.5	171	2.7	312	2.9	307	3	815	75.3	153	124	0	0		2	S	0		197
194	15.8	70	2.7	312	3.0	196	3	705	75.5	157	120	1	0		t	R	10	S	199
195	15.4	99	2.6	370	2.8	374	4	798	74.5	152	118	0	0		t	S	10	S	197

Table 23. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown under dryland conditions at Bethlehem, South Africa in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Test weight kg/hl	Days to flowering from July 1	Plant height cm	Septoria 1-9	Powdery mildew 0-9	Powdery mildew %	Leaf rust sev. %	Leaf rust resp.	Stem rust sev. %	Stem rust resp.	Days to maturity from planting
196	13.9	253	2.9	134	3.0	196	3	683	75.5	148	105	0	0		0		5	S	193
197	16.1	50	2.8	223	3.1	87	3	702	74.0	146	95	1	0		5	MS	0		194
198	15.0	131	2.8	223	3.0	196	3	696	79.0	146	105	0	0		0		0		192
199	14.4	184	2.9	134	3.0	196	3	814	78.5	149	104	0	0		0		0		193
200	15.0	131	2.7	312	2.9	307	3	778	79.3	150	97	0	0		0		0		194
Centurk	12.6	350	2.9	134	3.0	196	3	899	79.5	146	104	0	0		0		0		195
Lancota	14.1	215	2.6	370	2.8	374	3	818	77.5	149	118	0	0		0		5	S	196
N213449	10.9	387	3.2	18	3.1	87	5	589	68.0	160	93	0	9	40	10	S	60	S	208
Betastayal	14.2	201	2.5	394	2.7	397	3	744	79.5	146	106	0	0		0		0		193
205	14.4	184	3.0	72	3.2	24	3	794	79.5	148	107	0	0		e		e		192
206	13.7	270	2.8	223	3.0	196	3	840	78.5	141	96	1	0		0		0		188
207	16.0	55	2.9	134	3.1	87	3	557	77.9	152	104	0	0		5	MR	0		194
208	14.0	236	2.9	134	3.1	87	3	622	78.0	159	121	1	0		0		t	MR	193
209	14.4	184	2.8	223	3.0	196	3	691	79.1	158	124	0	0		0		0		199
210	14.7	156	2.8	223	3.0	196	3	739	78.5	147	125	0	0		0		0		195
211	15.2	120	2.7	312	2.9	307	3	763	78.0	155	126	0	0		t	MR	10	S	196
212	15.6	90	2.8	223	3.1	87	3	543	76.5	152	125	1	0		0		10	R	197
213	14.4	184	2.9	134	3.1	87	4	725	76.0	154	120	2	0		0		t	MS	196
214	14.4	184	2.8	223	2.9	307	3	774	78.0	158	118	3	0		10	R	5	R	201
215	14.6	163	2.7	312	2.9	307	3	764	79.0	149	124	0	0		0		0		193
216	13.3	303	2.9	134	3.0	196	3	673	77.8	151	120	0	0		t	MR	t	MR	194
217	13.0	328	3.0	72	3.1	87	3	776	78.0	152	127	0	0		0		0		194
218	13.5	283	2.8	223	2.9	307	3	667	78.5	141	118	0	0		0		10	S	187
219	12.7	344	2.9	134	3.0	196	3	847	78.5	154	132	0	0		0		t	S	197
220	14.0	236	3.0	72	3.2	24	3	731	79.3	155	132	0	0		2	MS	5	MS	195
221	14.1	215	3.0	72	3.1	87	3	857	81.3	143	112	0	0		e		e		186
222	13.8	263	2.9	134	3.1	87	3	632	80.0	143	112	0	0		e		5	S	186
223	13.4	296	3.0	72	3.1	87	3	887	80.0	154	120	0	0		t	R	t	S	198
224	13.5	283	3.1	37	3.2	24	3	718	79.3	155	120	0	0		0		0		197
225	14.5	171	2.8	223	3.0	196	3	842	79.0	154	122	0	0		0		0		197
226	13.9	253	2.9	134	3.1	87	3	831	80.0	158	131	1	0		t	S	t	MS	205
227	12.7	344	3.1	37	3.2	24	3	830	80.0	159	128	2	0		0		0		200
228	14.0	236	2.9	134	3.0	196	3	638	79.3	147	106	2	0		2	MR	0		190
229	14.4	184	2.8	223	3.0	196	3	830	79.3	156	128	1	0		0		0		198
230	15.3	110	2.7	312	2.9	307	3	670	78.3	144	117	0	0		e		e		191
231	14.1	215	2.8	223	3.0	196	3	590	77.0	144	105	0	0		e		e		189
232	15.7	81	2.6	370	2.8	374	3	610	78.0	141	105	0	0		e		e		189
233	15.5	94	2.8	223	3.0	196	3	807	78.8	152	122	0	0		0		0		194
234	15.2	120	2.6	370	2.8	374	3	591	80.8	144	134	0	0		0		0		192
235	14.1	215	3.0	72	3.1	87	3	816	79.0	133	131	0	0		0		0		192

Table 23. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown under dryland conditions at Bethlehem, South Africa in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Test weight kg/hl	Days to flowering from July 1	Plant height cm	Septoria 1-9	Powdery mildew 0-9	Powdery mildew %	Leaf rust sev. %	Leaf rust resp.	Stem rust sev. %	Stem rust resp.	Days to maturity from planting
236	14.9	140	2.7	312	2.9	307	3	524	80.3	143	126	0	0		5	S	5	S	190
237	14.5	171	2.8	223	3.0	196	3	761	81.0	142	131	0	0		30	S	20	S	192
238	15.7	81	2.8	223	3.0	196	3	573	79.5	144	112	0	0		10	S	t	S	192
239	13.9	253	3.0	72	3.2	24	3	747	81.0	150	124	0	0		0		0		194
240	14.5	171	2.8	223	3.0	196	3	758	80.5	146	118	0	0		0		0		194
241	15.2	120	2.7	312	2.9	307	3	747	80.0	146	116	0	0		0		0		194
242	14.0	236	2.9	134	3.1	87	3	864	80.3	159	110	0	0		0		10	S	202
243	14.4	184	2.8	223	3.0	196	3	721	80.3	149	102	0	0		0		0		196
244	12.2	364	3.1	37	3.1	87	3	818	74.8	158	105	3	0		t	S	5	S	209
245	15.2	120	2.8	223	3.0	196	3	772	77.3	142	102	2	0		0		t	MS	188
246	13.7	270	2.8	223	3.0	196	3	715	79.3	138	104	0	0		a		a		194
247	15.6	90	2.7	312	2.9	307	4	705	77.0	146	113	2	0		0		0		195
248	14.1	215	2.9	134	3.0	196	4	786	76.4	145	118	0	0		0		10	S	191
249	14.7	156	2.9	134	3.1	87	3	833	80.0	156	122	0	0		10	S	20	S	198
250	14.5	171	2.8	223	3.0	196	3	662	77.0	141	102	0	0		a		a		189
251	14.9	140	2.8	223	3.0	196	4	687	80.0	142	105	0	0		t	MS	10	S	187
252	15.2	120	2.9	134	3.1	87	4	758	76.0	143	110	0	0		10	S	20	S	195
253	14.0	236	3.0	72	3.1	87	3	828	76.3	143	105	2	0		5	S	0		195
254	16.2	45	2.7	312	2.9	307	3	671	78.8	142	108	0	7	5	5	MS	30	S	194
255	16.1	50	2.6	370	2.8	374	4	792	78.5	142	117	0	0		20	S	0		192
256	14.7	156	2.7	312	2.9	307	3	791	78.3	151	114	0	5	5	5	S	5	S	199
257	15.5	94	2.6	370	2.9	307	4	611	76.5	143	116	0	0		0		0		194
258	16.3	41	2.6	370	2.8	374	3	717	78.0	143	96	0	0		0		0		198
259	16.1	50	2.5	394	2.8	374	3	862	79.0	143	101	0	0		t	MS	30	S	191
260	16.3	41	2.6	370	2.9	307	3	699	80.0	142	94	0	0		0		5	S	192
261	15.6	90	2.5	394	2.7	397	3	779	80.0	141	101	0	0		t	S	40	S	194
262	16.2	45	2.5	394	2.7	397	3	787	80.0	140	100	0	0		0		50	S	193
263	16.7	33	2.4	401	2.7	397	3	783	79.3	146	104	0	0		t	MS	30	S	194
264	15.9	61	3.0	72	3.3	4	3	749	80.3	141	100	0	0		t	MS	t	S	190
265	16.0	55	2.7	312	2.9	307	3	842	80.5	144	100	0	0		0		t	S	192
266	12.7	344	3.1	37	3.2	24	3	838	79.5	144	105	0	0		0		5	S	193
267	14.1	215	2.9	134	3.0	196	3	806	78.8	144	117	0	0		0		0		195
268	15.1	127	2.8	223	3.0	196	3	885	79.3	162	118	0	0		0		0		201
269	14.0	236	2.9	134	3.0	196	3	728	77.3	146	114	0	0		0		0		189
270	14.9	140	2.8	223	3.0	196	3	797	77.0	151	117	0	0		0		0		192
271	13.1	319	3.0	72	3.1	24	3	675	75.5	158	112	0	0		t	MS	10	MS	199
272	12.6	350	3.0	72	3.1	87	3	848	77.0	154	110	0	0		5	S	0		193
273	12.9	334	2.9	134	3.0	196	3	692	79.0	144	97	0	0		0		0		193
274	13.7	270	2.8	223	2.9	307	3	921	77.8	141	108	0	0		0		t	S	198
275	13.4	296	3.0	72	3.1	87	3	738	77.8	153	126	0	0		t	MS	10	S	199

Table 23. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown under dryland conditions at Bethlehem, South Africa in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Test weight kg/hl	Days to flowering from July 1	Plant height cm	Septoria 1-9	Powdery mildew 0-9	Powdery mildew %	Leaf rust sev. %	Leaf rust resp.	Stem rust sev. %	Stem rust resp.	Days to maturity from planting
276	13.7	270	3.0	72	3.1	87	3	688	78.0	153	121	0	0		0		10	S	197
277	12.1	369	3.0	72	3.0	196	3	862	78.0	143	112	0	0		2	MS	20	S	191
278	13.2	308	2.8	223	2.9	307	4	749	76.0	144	115	0	0		t	MS	20	S	197
279	12.7	344	3.1	37	3.2	24	4	701	75.3	152	118	0	0		0		30	S	198
280	14.4	184	2.8	223	3.0	196	4	792	79.3	152	132	0	C		0		t	S	196
281	13.5	283	2.8	223	3.0	196	3	835	80.3	140	108	0	0		e		e		190
282	12.9	334	3.0	72	3.1	87	3	647	80.5	149	120	1	0		5	S	20	S	195
283	13.1	319	2.9	134	3.0	196	3	824	77.8	151	111	0	0		0		5	R	198
284	12.9	334	3.0	72	3.1	87	3	747	78.8	161	120	0	0		t	S	t	MS	207
285	13.2	308	2.9	134	3.1	87	3	683	78.5	159	122	0	0		0		5	MR	208
286	13.9	253	2.9	134	3.1	87	3	606	78.0	148	110	0	0		t	MR	70	S	192
287	14.6	163	2.8	223	3.0	196	3	653	76.5	155	123	0	0		t	S	0		196
288	13.5	283	3.0	72	3.1	87	3	586	76.5	165	123	0	0		0		0		206
289	13.4	296	2.9	134	3.0	196	3	816	78.5	156	130	0	0		0		0		197
290	13.9	253	2.9	134	3.1	87	3	578	76.5	162	125	0	0		0		0		199
291	13.8	263	2.8	223	2.9	307	3	696	77.3	159	130	0	0		0		0		196
292	14.5	171	2.9	134	3.1	87	3	696	78.0	144	112	2	0		e		e		190
293	14.0	236	2.7	312	2.9	307	3	763	79.5	144	108	1	0		e		0		190
294	13.7	270	2.9	134	3.0	196	3	741	79.5	146	106	0	0		0		t	S	189
295	12.9	334	3.0	72	3.1	87	3	721	78.3	155	125	C	0		t	MS	0		198
296	13.0	328	3.1	37	3.2	24	3	805	77.3	150	127	0	0		0		0		192
297	11.5	373	3.1	37	3.1	87	3	928	77.5	152	112	0	0		t	R	5	MR	197
298	12.2	364	3.0	72	3.0	196	3	670	79.3	151	126	0	0		0		t	S	194
299	13.0	328	3.0	72	3.1	87	3	788	79.3	142	116	0	0		t	S	t	S	190
300	12.2	364	3.1	37	3.1	87	3	857	79.5	142	108	0	0		t	R	10	S	195
Centurk	11.2	385	2.8	223	2.7	397	3	836	79.5	148	122	0	0		0		5	MS	195
Lancota	13.1	319	2.7	312	2.8	374	3	901	78.0	150	130	0	0		5	R	10	S	197
CI13449	9.4	401	3.5	3	3.2	24	5	506	66.8	159	94	0	9	20	70	S	90	S	208
Bezostaya1	13.9	253	2.8	223	2.9	307	3	768	79.5	146	101	0	0		0		0		196
305	12.6	350	3.1	37	3.2	24	4	729	77.8	149	98	0	0		0		20	S	198
306	13.2	308	3.0	72	3.1	87	4	894	76.8	151	120	0	0		0		0		195
307	13.7	270	2.8	223	3.0	196	3	751	78.3	146	122	0	0		0		t	MR	193
308	13.0	328	3.1	37	3.2	24	3	786	78.0	152	102	0	0		5	MR	20	S	196
309	14.4	184	2.9	134	3.1	87	3	649	77.3	142	111	0	0		e		40	S	184
310	15.7	81	2.7	312	2.9	307	4	643	77.5	140	107	0	0		t	S	40	S	185
311	14.9	140	2.9	134	3.1	87	4	824	79.3	141	104	0	0		10	S	50	S	187
312	18.1	2	2.8	223	3.0	196	4	524	77.3	142	113	4	0		0		30	S	187
313	15.8	70	2.5	394	2.8	374	4	701	78.0	141	106	3	0		e		40	S	185
314	17.1	18	2.7	312	3.0	196	3	664	77.8	145	104	0	0		0		0		195
315	17.0	21	2.7	312	3.0	196	3	711	78.3	145	102	0	0		0		t	S	195

Table 23. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown under dryland conditions at Bethlehem, South Africa in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Test weight kg/hl	Days to flowering from July 1	Plant height cm	Septoria 1-9	Powdery mildew 0-9	Powdery mildew %	Leaf rust sev. %	Leaf rust resp.	Stem rust sev. %	Stem rust resp.	Days to maturity from planting
316	17.4	7	2.5	394	2.8	374	3	691	79.0	146	100	0	0		0		0		195
317	17.7	4	2.5	394	2.8	374	3	695	79.0	148	106	0	0		0		0		195
318	17.3	10	2.7	312	3.0	196	3	725	78.0	146	104	0	0		0		0		196
319	17.3	10	2.7	312	3.0	196	3	661	78.3	149	104	0	0		0		0		195
320	17.0	21	2.6	370	2.9	307	3	718	78.3	148	100	0	0		0		0		195
321	17.2	14	2.6	370	2.9	307	3	685	77.8	148	103	0	0		0		0		194
322	16.8	28	2.7	312	2.9	307	3	661	77.8	148	102	0	0		0		0		196
323	17.4	7	2.6	370	2.9	307	3	655	77.5	149	104	0	0		0		t	MR	196
324	14.2	201	2.8	223	3.0	196	3	599	80.0	143	105	0	0		e		40	S	189
325	14.7	156	2.7	312	2.9	307	3	714	81.3	141	116	0	0		e		30	S	190
326	16.9	25	2.8	223	3.0	196	4	651	73.5	145	128	0	0		0		30	S	192
327	14.9	140	2.5	394	2.7	397	3	813	79.5	145	102	0	0		0		0		194
328	16.0	55	2.8	223	3.0	196	3	666	77.0	145	116	0	0		2	S	30	S	193
329	12.4	358	3.1	37	3.2	24	3	710	73.0	158	107	0	5	30	30	S	70	S	207
330	16.2	45	2.6	370	2.8	374	4	717	76.3	149	114	0	0		20	S	10	S	196
331	14.0	236	2.7	312	2.9	307	3	610	79.5	145	122	0	0		e		10	S	192
332	14.1	215	2.7	312	2.9	307	4	793	78.0	150	107	0	0		5	S	40	S	195
333	15.[illegible]	99	2.7	312	2.9	307	3	754	79.0	143	114	0	0		2	S	20	S	194
334	14.0	236	2.7	312	2.9	307	3	647	79.3	150	115	0	0		5	S	10	S	195
335	14.3	194	2.7	312	2.9	307	3	772	78.0	151	110	0	0		2	S	20	S	195
336	14.2	201	3.0	72	3.2	24	3	676	79.3	148	118	0	4	5	5	S	t	S	195
337	15.5	94	2.9	134	3.1	87	3	581	78.0	149	123	0	0		2	S	t	S	192
338	15.3	110	3.0	72	3.2	24	3	671	78.0	145	110	0	0		5	S	2	MS	194
339	15.1	127	3.0	72	3.2	24	3	754	77.3	149	117	0	0		0		5	S	197
340	17.2	14	2.7	312	3.0	196	4	569	75.5	142	120	0	0		e		e		185
341	17.0	21	2.7	312	2.9	307	3	563	78.3	143	112	0	0		0		0		185
342	18.9	1	2.8	223	3.0	196	3	441	76.3	146	122	0	0		e		e		187
343	16.2	45	2.7	312	2.9	307	4	505	76.8	143	116	0	0		e		e		188
344	16.7	33	2.7	312	2.9	307	4	515	75.5	144	115	0	0		e		0		185
345	14.9	140	2.9	134	3.1	87	4	695	72.5	145	105	0	0		e		30	S	187
346	13.9	253	3.0	72	3.1	87	4	656	73.3	144	103	0	0		t	S	50	S	188
347	13.9	253	2.9	134	3.1	87	4	678	73.0	144	104	0	0		e		30	S	188
348	14.8	150	2.6	370	2.8	374	4	559	79.0	146	103	0	0		t	S	0		195
349	14.3	194	3.1	37	3.2	24	3	621	76.3	156	103	0	0		10	S	10	MS	199
350	14.0	236	2.8	223	2.9	307	3	668	80.0	150	102	0	0		10	S	10	S	195
351	13.4	296	2.8	223	2.9	307	3	834	78.0	156	126	4	0		0		0		202
352	13.3	303	2.9	134	3.1	87	3	827	77.5	165	123	0	0		2	S	5	S	210
353	12.1	369	2.9	134	2.9	307	3	646	76.0	145	112	0	0		2	S	5	S	192
354	16.1	50	2.8	223	3.0	196	3	859	78.0	144	120	0	0		2	S	5	S	195
355	13.6	275	2.9	134	3.0	196	3	544	78.0	144	113	0	0		10	S	30	S	186

Table 23. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown under dryland conditions at Bethlehem, South Africa in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Adjusted lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Test weight kg/hl	Days to flowering from July 1	Plant height cm	Septoria 1-9	Powdery mildew 0-9	Powdery mildew %	Leaf rust sev. %	Leaf rust resp.	Stem rust sev. %	Stem rust resp.	Days to maturity from planting
356	12.8	339	3.2	18	3.3	4	3	684	77.4	139	115	0	0	0			30	S	186
357	15.3	110	2.8	123	3.0	196	3	637	79.0	140	103	0	0	e			50	S	187
358	13.4	296	2.8	423	2.9	307	3	642	80.3	146	105	2	0	0			0		194
359	14.3	194	2.9	134	3.0	196	3	639	78.0	139	103	0	0	e			20	S	184
360	12.5	354	3.0	72	3.0	196	3	640	78.3	142	82	0	0	e			e		192
361	12.9	334	2.9	134	3.0	196	3	741	78.3	158	114	0	0	t	S		t	S	204
362	12.4	358	2.9	134	3.0	196	3	677	78.5	157	113	0	0	0			2	S	205
363	12.5	354	3.0	72	3.1	87	3	757	78.8	158	116	0	0	0			t	S	204
364	12.9	334	2.8	223	2.9	307	3	636	78.5	139	102	0	0	e			e		183
365	16.2	45	2.7	312	3.0	196	3	678	78.0	150	104	0	0	0			0		194
366	15.3	110	2.8	223	3.1	87	3	716	76.5	150	102	0	0	0			0		194
367	15.7	81	2.9	134	3.1	87	3	679	77.3	150	103	0	0	0			0		194
368	15.9	61	2.7	312	2.9	307	3	630	77.2	150	104	0	0	0			0		194
369	15.3	110	2.7	312	2.9	307	3	626	77.3	150	101	0	0	0			C		194
370	15.7	81	2.8	223	3.0	196	3	535	77.5	150	103	0	0	0			0		194
371	14.3	194	2.9	134	3.1	87	3	563	79.0	140	112	0	0	2	S		0		196
372	15.7	81	2.7	312	2.9	307	3	669	77.8	150	104	0	0	0			0		193
373	15.8	70	2.8	223	3.1	87	3	651	79.0	150	101	0	0	t	R		0		193
374	15.7	81	2.7	312	2.9	307	4	676	78.3	150	105	0	0	0			0		193
375	15.9	61	2.7	312	3.0	196	3	704	79.0	150	102	0	0	0					193
376	16.6	36	2.8	223	3.0	196	3	686	78.3	150	101	0	0	0			0		193
377	15.8	70	2.8	223	3.1	87	3	669	79.0	150	102	0	0	0			0		193
378	16.8	28	2.7	312	2.9	307	3	652	78.0	150	104	0	0	0			0		194
379	16.4	38	2.7	312	2.9	307	3	642	78.3	150	102	0	0	0			0		193
380	17.2	14	2.7	312	2.9	307	3	726	79.0	150	100	0	0	0			0		193
381	16.8	28	2.7	312	2.9	307	3	611	78.2	150	104	0	0	0			0		193
382	16.9	25	2.7	312	3.0	196	3	763	78.5	149	106	0	0	0			0		193
383	17.2	14	2.7	312	3.0	196	3	665	78.0	149	105	0	0	0			0		193
384	17.1	18	2.6	370	2.8	374	3	711	78.3	150	105	0	0	0			0		193
385	17.0	21	2.6	370	2.9	307	3	623	79.0	149	104	0	0	0			0		193
386	17.2	14	2.7	312	2.9	307	3	676	78.3	150	105	0	0	0			0		193
387	15.3	110	2.9	134	3.1	87	3	743	79.0	141	108	0	0	20	S		30	S	192
388	15.8	70	2.8	223	3.1	87	3	744	78.0	141	108	0	0	10	S		30	S	192
389	13.9	253	2.8	223	2.9	307	4	657	78.3	160	127	0	0	t	R		10	S	198
390	13.9	253	2.8	223	2.9	307	4	627	80.3	156	125	0	0	t	S		10	S	198
391	13.5	283	2.7	312	2.8	374	3	559	79.5	149	125	0	0	0			0		195
392	14.1	215	2.9	134	3.0	196	4	750	76.8	155	120	0	0	2	MR		70	VS	196
393	14.0	236	3.0	72	3.2	24	4	608	75.2	155	118	0	0	0			80	VS	196
394	14.8	150	2.8	223	3.0	196	4	569	76.0	155	105	0	0	0			60	VS	196
395	13.1	319	3.0	72	3.1	87	3	700	75.3	156	121	0	0	0			60	VS	197

Table 23. Protein and lysine values together with seed grades for entries in the second high protein-high lysine winter wheat observation nursery grown under dryland conditions at Bethlehem, South Africa in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade: 1-9	Yield g	Test weight: kg/hl	Days to flowering: from July 1	Plant height: cm	Septoria: 1-9	Powdery mildew 0-9	Powdery mildew %	Leaf rust sev. %	Leaf rust resp.	Stem rust sev. %	Stem rust resp.	Days to maturity from planting
396	12.8	339	3.1	37	3.2	24	3	611	79.0	162	112	0	0		t	S	20	VS	206
397	13.4	296	2.8	223	2.9	307	4	699	79.5	162	110	0	0		2	MR	10	S	207
398	15.1	127	2.7	312	2.9	307	4	613	79.0	162	111	0	0		5	R	20	S	207
Centurk	11.6	375	2.9	134	2.9	307	3	632	78.5	150	123	0	0		0		t	S	194
Lancota	14.0	236	3.0	72	3.2	24	3	634	78.5	150	125	0	0		0		t	MS	196
CI13449	9.5	400	3.3	11	2.9	307	4	595	76.0	161	94	0	9	40	20	S	50	S	208
Bezoetsyal	13.1	319	2.8	223	2.9	307	3	665	81.0	149	103	0	0		0		t	R	195
Overall mean	14.3		2.84		3.00		3.1	711.8	77.5	148.4	112.8	0.2	.3	1.2	3.3	R-S	9.9	R-VS	194.9

Correlation Coefficients

Protein	-.77**	-.37**
Lysine/protein		.80**

** Significant at the P=.01 level.

Means of the check varieties

Bezoetsyal	13.6	2.70	2.84
Centurk	11.9	2.94	2.94
CI13449	10.2	3.34	3.12
Lancota	13.6	2.76	2.90
Check mean	12.3	2.94	2.95
$LSD_{.05}$ of check means	0.7	0.16	0.21
Coefficient of variation %	4.0	3.91	5.15

Table 24. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Ankara, Turkey in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield 1/ g	Days to flowering from Jan. 1	Plant height cm	Stripe rust sev. %	Stripe rust resp.
Centurk	13.9	368	2.9	107	3.0	200	3	190	164	74	30	MS
Lancota	15.5	198	2.8	180	3.0	200	2		166	75	30	MS
CI13449	13.7	375	3.1	25	3.2	53	5		171	60	30	S
Bezostaya 1	13.9	368	3.1	25	3.3	21	3		162	78	10	MR
5	13.6	381	3.2	8	3.3	21	4		168	69	10	S
6	12.3	400	3.1	25	3.1	113	4		166	53	10	MR
7	14.3	349	2.9	107	3.1	113	4		162	78	50	S
8	13.5	384	3.0	55	3.1	113	4	136	156	70	10	MS
9	13.7	375	2.9	107	3.1	113	4		165	65	10	S
10	14.0	365	2.9	107	3.1	113	4		163	70	20	MS
11	16.5	81	2.8	180	3.0	200	4		164	63	1	R
12	16.3	98	2.9	107	3.1	113	4		160	67	10	MR
13	17.2	50	2.8	180	3.1	113	4		162	52	—	—
14	12.3	400	3.1	25	3.1	113	3	137	164	68	30	MS
15	12.1	402	3.1	25	3.1	113	3		161	64	20	MS
16	13.1	393	2.9	107	3.1	113	3		166	65	30	MS
17	16.0	126	2.7	267	2.9	293	2		167	74	20	MS
18	15.3	225	2.8	180	3.1	113	3		171	69	5	MR
19	14.9	292	3.0	55	3.2	53	5		175	80	10	S
20	15.0	274	2.9	107	3.1	113	4		167	84	40	S
21	15.6	179	2.9	107	3.1	113	4		167	82	20	S
22	13.2	390	3.0	55	3.1	113	3		166	63	30	S
23	15.2	242	3.0	55	3.2	53	4		170	74	40	S
24	14.6	323	3.2	8	3.4	7	4		166	78	10	MR
25	15.8	149	2.7	267	3.0	200	3		156	90	10	MR
26	14.0	365	2.8	180	3.0	200	3		161	78	5	MR
27	14.9	292	2.8	180	3.0	200	3	198	168	86	10	MS
28	13.7	375	2.9	107	3.0	200	2		166	57	5	MR
29	15.3	225	2.8	180	3.0	200	2		161	68	5	MR
30	15.9	138	3.1	25	3.3	21	5		161	55	40	S
31	13.6	381	3.1	25	3.2	53	5		166	53	30	S
32	14.8	304	3.2	8	3.4	7	5		168	67	30	S
33	15.9	138	3.0	55	3.2	53	5		166	62	40	MS
34	15.4	213	3.3	2	3.5	2	5		166	57	20	S
35	14.7	315	3.1	25	3.3	21	4		169	67	20	MS
36	15.2	242	2.9	107	3.2	53	3		166	69	40	S
37	14.7	315	3.3	2	3.5	2	2		161	73	40	S
38	15.2	242	2.8	180	3.0	200	3		161	75	30	S
39	14.9	292	3.0	55	3.2	53	3		159	70	30	S
40	13.6	381	2.8	180	3.0	200	3		159	72	—	—
41	13.4	386	3.2	8	3.3	21	3		160	80	5	MR
42	15.3	225	2.8	180	3.0	200	3		162	72	10	MR
43	16.2	108	2.7	267	3.0	200	4		165	67	20	S
44	17.3	42	2.5	389	2.8	364	4		165	68	10	MR
45	15.1	259	2.8	180	3.1	113	3		164	82	20	MR
46	15.4	213	2.8	180	3.0	200	3		165	74	10	S
47	13.0	395	3.1	25	3.2	53	3		162	62	10	S
48	16.2	108	2.7	267	2.9	293	3		161	57	10	S
49	15.3	225	2.9	107	3.1	113	2		160	55	10	MR
50	14.3	349	2.8	180	3.0	200	3		164	77	10	MR

1/ Yield data based on a single row of two meters in length of desired plots. Only 40 entries were harvested for yield.

Table 24. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Ankara, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade: 1-9	Yield g	Days to flowering from Jan. 1	Plant height: cm	Stripe rust sev. %	Stripe rust resp.
51	15.6	179	2.9	107	3.1	113	3		166	73	20	MS
52	17.9	18	2.6	345	2.9	293	3		165	73	10	MS
53	18.3	9	2.7	267	2.9	293	3		164	78	30	S
54	14.3	349	2.8	180	2.9	293	2	173	156	90	40	MS
55	16.7	70	2.5	389	2.8	364	3		158	75	30	S
56	15.9	118	2.7	267	2.9	293	3		157	77	20	S
57	15.1	259	2.7	267	2.9	293	3		154	88	20	S
58	15.2	242	2.8	180	3.0	200	3	169	163	86	40	S
59	14.7	315	2.8	180	3.0	200	3		157	72	60	S
60	14.9	292	2.9	107	3.1	113	3		161	76	20	S
61	13.2	390	2.8	180	2.9	293	3		163	74	20	S
62	16.2	108	2.8	180	3.0	200	2		159	66	10	S
63	16.0	126	2.8	180	3.0	200	2		160	70	10	S
64	16.9	62	2.9	107	3.2	53	3		162	68	20	S
65	15.9	138	2.7	267	2.9	293	2		165	95	30	S
66	16.1	117	2.7	267	2.9	293	3		155	67	5	MR
67	15.2	242	2.9	107	3.1	113	2		156	81	—	—
68	17.7	24	2.6	345	2.9	293	2		154	63	5	MS
69	16.5	81	2.7	267	3.0	200	3		156	73	10	S
70	16.6	74	2.7	267	3.0	200	3		154	82	—	—
71	13.4	386	3.0	55	3.1	113	3		156	84	5	MR
72	13.6	381	3.2	8	3.3	21	3		158	90	50	S
73	14.5	331	3.1	25	3.3	21	4		164	79	30	S
74	14.1	362	3.1	25	3.3	21	3		163	78	60	S
75	15.4	213	2.9	107	3.1	113	4		162	82	40	S
76	15.6	179	2.9	107	3.1	113	4	256	166	77	70	S
77	18.5	3	2.8	180	3.1	113	4		167	79	10	S
78	17.5	31	2.7	267	3.0	200	3	156	166	74	20	MS
79	16.9	62	2.8	180	3.0	200	3		166	77	10	S
80	17.9	18	2.8	180	3.0	200	4		165	73	—	—
81	17.6	27	2.8	180	3.0	200	3		163	68	5	MR
82	17.3	42	2.8	180	3.1	113	4	179	163	76	—	—
83	17.8	22	2.7	267	3.0	200	4		163	78	10	S
84	17.2	50	2.7	267	2.9	293	3		165	87	5	MR
85	13.3	388	3.0	55	3.1	113	3		166	85	50	S
86	15.0	274	2.7	267	2.9	293	3		168	87	40	S
87	16.5	81	2.7	267	2.9	293	4		169	62	40	S
88	15.2	242	2.6	345	2.8	364	2		156	86	30	S
89	15.8	149	2.7	267	2.9	293	2		158	83	5	S
90	16.5	81	2.7	267	2.9	293	3		166	78	30	S
91	16.2	108	2.5	389	2.8	364	3		162	80	30	S
92	16.0	126	2.8	180	3.0	200	2		162	83	30	S
93	16.1	117	2.8	180	3.0	200	2		160	87	20	S
94	15.0	274	2.9	107	3.1	113	2		162	76	10	MR
95	17.5	31	2.6	345	2.9	293	2		160	84	10	MR
96	17.9	18	2.6	345	2.8	364	2		160	89	20	MS
97	18.2	11	2.8	180	3.0	200	3		158	64	10	S
98	18.4	6	2.6	345	2.8	364	3		159	76	40	S
99	18.1	13	2.7	267	2.9	293	2		156	75	40	S
100	18.3	9	2.7	267	3.0	200	3		157	78	30	S
Centurk	14.7	315	2.9	107	3.1	113	2	152	163	80	10	MR
Lancota	16.5	81	2.6	345	2.9	293	3		164	78	20	MS
CI13449	14.5	331	3.1	25	3.3	21	5		161	62	30	S
Bezostaya 1	15.0	274	2.7	267	3.0	200	2		161	77	10	MR
105	14.3	349	2.8	180	3.0	200	2	108	157	75	1	R

Table 24. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Ankara, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Head grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Stripe rust sev. %	Stripe rust resp.
106	16.4	89	2.6	345	2.8	364	2		162	97	50	S
107	16.1	117	2.9	107	3.2	53	3	153	161	80	40	S
108	16.2	108	2.7	267	3.0	200	4		160	78	30	S
109	15.4	213	2.8	180	3.0	200	3	166	156	82	30	S
110	16.4	89	2.7	267	3.0	200	4		161	94	40	S
111	16.7	70	2.7	267	3.0	200	4		156	84	80	S
112	17.3	42	2.6	345	2.9	293	3		161	96	70	S
113	16.0	126	2.7	267	2.9	293	2		156	88	50	S
114	15.4	213	2.6	345	2.8	364	3		155	76	10	MR
115	15.6	179	2.8	180	3.1	113	2		162	87	20	MS
116	16.2	108	2.7	267	3.0	200	3	188	163	69	—	—
117	14.2	357	2.7	267	2.9	293	3	241	163	98	20	S
118	14.9	292	2.6	345	2.8	364	3		165	100	30	MS
119	14.2	357	2.7	267	2.8	364	3		167	87	20	S
120	14.6	323	2.7	267	2.9	293	3		165	87	20	MS
121	15.7	161	2.6	345	2.9	293	3		166	90	10	MR
122	15.9	138	2.7	267	2.9	293	3		165	89	5	MR
123	18.4	6	2.5	389	2.8	364	3		168	80	30	S
124	15.6	179	2.8	180	3.0	200	3		161	82	—	—
125	15.6	179	2.9	107	3.1	113	3		162	78	20	MS
126	14.9	292	3.0	55	3.2	53	4		164	80	30	MS
127	14.7	315	3.0	55	3.2	53	3		158	74	5	MR
128	15.5	198	2.9	107	3.2	53	3		161	68	10	MR
129	17.1	55	2.8	180	3.1	113	3		154	82	10	S
130	15.3	225	2.7	267	2.9	293	3		161	84	20	S
131	15.5	198	3.0	55	3.3	21	3		160	77	20	S
132	15.2	242	2.9	107	3.2	53	3		159	83	40	S
133	13.8	371	3.2	8	3.3	21	2		161	87	10	S
134	15.2	242	3.2	8	3.4	7	2		163	84	10	S
135	15.8	149	2.9	107	3.1	113	2		161	72	10	MS
136	15.5	198	3.1	25	3.4	7	3		160	85	5	S
137	13.7	375	3.1	25	3.2	53	2		163	73	10	S
138	15.2	242	3.1	25	3.3	21	3		162	67	5	S
139	14.3	349	3.2	8	3.4	7	3		161	76	10	MS
140	14.6	323	3.1	25	3.3	21	2		161	75	5	MR
141	14.6	323	3.0	55	3.2	53	2		156	63	10	S
142	13.9	368	3.0	55	3.1	113	2		155	62	—	—
143	16.3	98	2.7	267	3.0	200	2		156	74	20	S
144	13.6	381	2.9	107	3.1	113	2	152	163	88	20	MS
145	15.0	274	3.0	55	3.2	53	2		155	73	10	MR
146	14.1	362	3.1	25	3.2	53	2		164	67	30	MS
147	16.5	81	2.9	107	3.2	53	2		162	79	10	MS
148	15.2	242	3.1	25	3.4	7	2		154	68	10	S
149	15.1	239	3.0	55	3.2	53	2		155	64	—	—
150	14.4	339	3.2	8	3.4	7	4		166	77	10	MR
151	14.7	315	3.3	2	3.5	2	2		166	79	5	MR
152	15.8	149	2.8	180	3.0	200	2		165	73	10	MS
153	15.4	213	3.2	8	3.4	7	2	178	164	84	5	MR
154	14.9	292	2.9	107	3.1	113	2		166	87	20	S
155	14.3	349	3.1	25	3.3	21	2	101	162	63	10	S
156	15.2	242	2.9	107	3.1	113	2		160	72	20	MS
157	15.4	213	3.1	25	3.3	21	2	140	160	76	10	MR
158	15.0	274	2.9	107	3.2	53	2		157	82	20	S
159	15.3	225	3.0	55	3.2	53	2		155	74	10	MS
160	14.3	349	3.1	25	3.3	21	2		161	67	5	MR

Table 24. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Ankara, Turkey in 1976. Continued.

Entry no	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade: 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Stripe rust sev. %	Stripe rust resp.
161	13.7	375	3.1	25	3.3	21	2		160	65	10	S
162	15.5	198	3.0	55	3.2	53	2		162	70	—	—
163	14.8	304	3.0	55	3.2	53	2		156	67	5	MR
164	15.0	274	3.0	55	3.2	53	2	161	167	83	20	MS
165	15.2	242	2.9	107	3.2	53	3		156	85	10	S
166	15.5	198	2.8	180	3.1	113	2		158	84	—	—
167	15.3	225	3.0	55	3.2	53	2		156	64	10	MR
168	14.9	292	3.0	55	3.2	53	3		161	68	—	—
169	16.2	108	2.9	107	3.1	113	2		161	70	5	MR
170	14.6	323	3.1	25	3.3	21	2		155	87	20	S
171	16.3	98	3.0	55	3.2	53	3		155	63	—	—
172	16.2	108	3.0	55	3.2	53	3		154	65	—	—
173	15.0	274	2.9	107	3.1	113	2		154	78	—	—
174	17.3	42	3.0	55	3.3	21	3		155	67	5	MR
175	14.9	292	2.7	267	2.9	293	3		157	73	10	MS
176	15.2	242	2.6	345	2.8	364	2		162	68	10	MS
177	15.2	242	2.7	267	2.9	293	2		160	56	20	MS
178	15.8	149	2.6	345	2.9	293	3		162	77	10	S
179	15.0	274	2.6	345	2.8	364	3		162	65	20	S
180	13.7	375	2.9	107	3.0	200	3		160	58	10	S
181	16.3	98	2.6	345	2.8	364	2		164	56	5	MR
182	14.7	315	2.6	345	2.8	364	3		166	63	5	MS
183	15.0	274	2.6	345	2.8	364	3		163	68	10	MR
184	14.4	339	2.8	180	3.0	200	3		162	73	30	MR
185	15.6	179	2.6	345	2.8	364	3		166	70	30	MS
186	14.8	304	2.6	345	2.8	364	3		166	67	10	MS
187	15.4	213	2.6	345	2.8	364	3		164	73	10	MR
188	15.3	225	2.5	389	2.7	397	3		161	82	20	MR
189	15.7	161	2.5	389	2.8	364	3		165	63	5	MR
190	14.8	304	2.8	180	3.0	200	3		164	70	10	MR
191	16.4	89	2.6	345	2.9	293	2		162	76	5	S
192	15.1	259	2.5	389	2.7	397	2		155	74	30	S
193	16.1	117	2.5	389	2.8	364	4		167	69	10	MR
194	17.4	35	2.6	345	2.9	293	4		168	72	10	S
195	17.4	35	2.5	389	2.8	364	4		164	86	1	R
196	16.0	126	2.5	389	2.8	364	3	176	163	74	10	S
197	17.7	24	2.6	345	2.9	293	3		165	67	5	MR
198	14.5	331	2.8	180	2.9	293	3		163	73	1	R
199	15.7	161	2.5	389	2.8	364	2		164	75	—	—
200	14.4	339	2.6	345	2.8	364	2		164	70	—	—
Centurk	12.9	396	2.8	180	2.9	293	2	183	161	77	1	R
Lancota	15.3	225	2.5	389	2.7	397	2		164	75	10	MR
CI13449	12.8	398	2.9	107	3.0	200	4		170	60	50	MS
Bezostaya 1	14.2	337	2.5	389	2.7	397	2		162	80	5	MR
205	15.9	138	2.8	180	3.0	200	2	133	164	67	—	—
206	13.3	388	2.6	345	2.7	397	2		161	56	—	—
207	17.1	55	2.7	267	3.0	200	2		166	53	—	—
208	13.9	368	3.0	55	3.1	113	3	144	165	50	—	—
209	15.6	179	2.5	389	2.7	397	2		158	93	10	S
210	15.9	138	2.5	389	2.7	397	2		165	79	10	S
211	16.7	70	2.5	389	2.7	397	2		165	78	—	—
212	18.5	3	2.6	345	2.8	364	3		167	83	5	MS
213	15.9	138	2.5	389	2.7	397	3		164	80	5	S
214	15.6	179	2.7	267	3.0	200	3		167	82	—	—
215	15.5	198	2.6	345	2.8	364	2		160	84	—	—

Table 24. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Ankara, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Stripe rust sev. %	Stripe rust resp.
216	15.6	179	2.6	345	2.9	293	2		163	85	20	MS
217	15.9	138	2.5	389	2.8	364	2		162	86	5	MR
218	15.0	274	2.6	345	2.8	364	2		156	76	20	S
219	14.5	331	2.7	267	2.9	293	2	205	164	89	20	S
220	15.0	274	2.6	345	2.8	364	2		165	87	30	S
221	14.8	304	2.6	345	2.8	364	2		156	68	30	S
222	15.5	198	2.6	345	2.9	293	2		155	72	1	R
223	14.3	349	2.8	180	3.0	200	3		166	55	20	S
224	15.2	242	2.6	345	2.8	364	2		161	80	20	S
225	15.7	161	2.8	180	3.0	200	2		161	77	30	S
226	15.2	242	2.7	267	2.9	293	3		168	79	30	S
227	14.3	349	2.8	180	2.9	293	3		169	76	5	S
228	14.8	304	2.8	180	3.0	200	3		161	74	10	S
229	15.7	161	2.8	180	3.0	200	2	162	162	82	10	S
230	15.0	274	2.9	107	3.1	113	3		160	70	10	MS
231	14.5	331	2.9	107	3.1	113	3		160	67	20	S
232	16.0	126	2.7	267	3.0	200	3		154	69	10	MS
233	15.5	198	2.7	267	2.9	293	2		156	83	—	—
234	14.7	315	2.6	345	2.8	364	2		156	87	20	S
235	15.2	242	2.9	107	3.1	113	3		158	100	60	S
236	14.8	304	2.7	267	2.9	293	3		158	88	20	S
237	14.6	323	2.7	267	2.9	293	2	153	155	85	40	S
238	15.5	198	2.8	180	3.0	200	3		156	79	10	S
239	15.3	225	2.8	180	3.0	200	2		157	93	—	—
240	15.0	274	2.7	267	2.9	293	3		157	87	—	—
241	15.5	198	2.7	267	2.9	293	2		157	79	10	S
242	14.1	362	2.9	107	3.1	113	2	246	165	94	20	S
243	14.4	339	2.7	267	2.9	293	3		164	82	10	S
244	15.5	384	2.8	180	2.9	293	5		166	70	10	MS
245	15.2	242	2.8	180	3.1	113	3	143	156	75	30	S
246	15.6	179	2.7	267	3.0	200	2		156	67	20	MS
247	15.1	259	2.6	345	2.9	293	3		164	98	10	MR
248	15.1	259	2.6	345	2.8	364	3		163	87	30	S
249	15.2	242	2.8	180	3.0	200	2		166	90	70	S
250	14.3	349	3.0	55	3.2	53	3		161	70	10	S
251	14.5	331	2.7	267	2.9	293	3		156	75	40	S
252	14.9	292	2.7	267	2.9	293	3		155	76	10	S
253	14.1	362	2.8	180	3.0	200	2	215	155	82	20	MR
254	15.7	161	2.5	389	2.8	364	2	151	157	80	30	S
255	17.2	50	2.5	389	2.8	364	2		158	87	10	S
256	15.2	242	2.7	267	3.0	200	2		163	85	60	S
257	15.4	213	2.6	345	2.9	293	2		162	75	30	S
258	15.4	213	2.6	345	2.8	364	2		160	73	20	S
259	15.8	149	2.5	389	2.7	397	2		160	75	30	S
260	15.0	274	2.9	107	3.1	113	2		159	67	10	S
261	15.2	242	2.6	345	2.8	364	2		160	63	10	S
262	15.6	179	2.6	345	2.8	364	2		156	78	30	S
263	16.2	108	2.5	389	2.8	364	2		157	81	10	S
264	15.4	213	2.6	345	2.8	364	2		158	75	20	S
265	16.0	126	2.5	389	2.7	397	3	195	160	83	30	S
266	13.1	393	2.9	107	3.0	200	2	47	156	78	10	S
267	15.0	274	2.8	180	3.0	200	3		156	90	10	MS
268	16.1	117	2.5	389	2.8	364	2		164	92	5	MR
269	15.7	161	2.8	180	3.0	200	3		163	79	20	S
270	15.8	149	2.8	180	3.1	113	4		163	70	20	MS

Table 24. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Ankara, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Stripe rust sev. %	Stripe rust resp.
271	15.5	198	2.7	267	2.9	293	3		161	74	10	MS
272	15.5	198	2.6	345	2.8	364	3		161	80	30	S
273	15.7	161	2.8	180	3.0	200	3		162	74	5	MR
274	16.0	126	2.9	107	3.1	113	2		156	82	10	S
275	15.6	179	2.8	180	3.0	200	2		166	87	30	S
276	15.5	198	3.0	55	3.2	53	3		164	73	20	S
277	15.1	259	2.9	107	3.1	113	2		162	68	40	S
278	15.1	259	2.8	180	3.0	200	3		162	76	40	S
279	14.9	292	3.0	55	3.2	53	3	164	161	77	40	S
280	15.6	179	2.8	180	3.0	200	2	187	163	79	60	S
281	14.3	349	2.8	180	3.0	200	2	193	160	75	50	S
282	12.8	398	2.9	107	3.0	200	3		160	83	—	—
283	15.7	161	2.8	180	3.0	200	3		163	65	20	S
284	14.8	304	2.8	180	3.0	200	3		163	68	10	S
285	15.9	138	2.6	345	2.9	293	3		160	72	20	MS
286	16.2	108	2.6	345	2.8	364	2		161	75	30	S
287	17.2	50	2.7	267	2.9	293	3		164	70	30	S
288	15.5	198	2.7	267	3.0	200	3		163	75	20	S
289	15.7	161	2.7	267	2.9	293	3		162	80	30	MS
290	15.5	198	2.6	345	2.9	293	2		162	82	30	S
291	16.4	89	2.9	107	3.1	113	2		161	85	40	MS
292	17.3	42	2.7	267	2.9	293	2		162	74	1	R
293	17.2	50	2.6	345	2.8	364	2		156	75	5	MR
294	16.0	126	2.8	180	3.1	113	2		156	79	10	MR
295	16.3	98	2.7	267	2.9	293	2		163	77	20	S
296	16.4	89	2.6	345	2.8	364	2		156	75	10	S
297	14.2	357	3.0	55	3.2	53	3	152	156	74	30	S
298	15.7	161	2.9	107	3.1	113	3		156	76	20	S
299	15.7	161	2.7	267	3.0	200	3		155	67	20	S
300	15.2	242	2.7	267	2.9	293	2		156	70	20	MS
Centurk	13.7	375	2.9	107	3.0	200	2		161	73	10	MS
Lancota	15.6	179	2.6	345	2.8	364	2		164	83	20	MR
CI13449	12.9	396	3.0	55	3.1	113	4		168	69	70	MS
Bezostaya 1	13.1	293	3.0	55	3.1	113	2		162	80	10	MR
305	14.5	331	3.0	55	3.2	53	2		161	57	30	S
306	15.4	213	2.7	267	2.9	293	2		161	72	20	MS
307	15.8	149	2.8	180	3.0	200	2		156	83	30	S
308	14.9	292	2.9	107	3.1	113	2		166	53	30	S
309	15.9	138	2.9	107	3.1	113	2		153	84	5	S
310	18.1	13	2.7	267	2.9	293	4		155	87	20	S
311	17.9	18	2.7	267	2.9	293	3		155	69	10	S
312	19.3	1	2.8	180	3.1	113	3		156	65	20	S
313	17.2	50	2.7	267	3.0	200	3		155	68	30	S
314	15.7	161	2.7	267	3.0	200	2		161	73	—	—
315	16.5	81	2.5	389	2.8	364	2		154	80	10	S
316	16.6	74	2.6	345	2.9	293	2		161	75	10	S
317	15.5	198	2.7	267	2.9	293	2		161	69	—	—
318	16.2	108	2.7	267	2.9	293	3		161	82	5	S
319	16.4	89	2.7	267	3.0	200	2		160	67	10	S
320	16.3	98	2.7	267	3.0	200	2		160	75	—	—
321	16.4	89	2.6	345	2.8	364	2		160	77	5	MS
322	16.6	74	2.6	345	2.8	364	2		161	77	—	—
323	16.3	98	2.7	267	2.9	293	2		159	74	—	—
324	16.9	62	2.6	345	2.9	293	3		152	72	10	S
325	15.8	149	2.6	345	2.9	293	2		152	79	—	—

Table 24. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Ankara, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Stripe rust sev. %	Stripe rust resp.
326	16.9	62	2.7	267	3.0	200	2		155	87	10	S
327	15.0	274	2.7	267	2.9	293	3		156	80	5	S
328	15.9	138	2.7	267	3.0	200	3		156	78	5	S
329	14.9	292	2.9	107	3.1	113	3		167	74	20	S
330	15.7	161	2.7	267	2.9	293	2	178	154	76	30	S
331	15.0	274	2.7	267	2.9	293	3		157	85	10	MR
332	14.8	304	2.7	267	2.9	293	2		160	77	10	S
333	16.3	98	2.8	180	3.1	113	3	201	156	84	—	—
334	14.7	315	2.9	107	3.1	113	3	184	158	78	10	S
335	15.1	259	2.9	107	3.1	113	3		162	74	20	S
336	16.0	126	2.7	267	2.9	293	2		156	82	10	S
337	17.5	31	2.7	267	2.9	293	2		155	83	10	S
338	17.4	35	2.9	107	3.2	53	4		158	74	30	S
339	16.8	66	2.8	180	3.0	200	3		159	76	20	S
340	16.4	89	2.8	180	3.0	200	3		159	70	—	—
341	17.1	55	2.6	345	2.8	364	3		155	70	—	—
342	17.6	27	2.6	345	2.8	364	4		156	67	1	R
343	17.1	55	2.7	267	3.0	200	3		154	80	—	—
344	17.6	27	2.7	267	2.9	293	3		156	76	5	MR
345	14.3	349	2.9	107	3.0	200	3		160	57	10	S
346	15.6	179	2.9	107	3.1	113	3		159	62	—	—
347	15.7	161	2.9	107	3.1	113	3		161	50	—	—
348	14.8	304	2.8	180	3.0	200	3		163	53	5	S
349	16.1	117	2.6	345	2.9	293	3		160	55	10	S
350	14.9	292	2.8	180	3.0	200	2		156	70	20	S
351	15.0	274	2.7	267	2.9	293	2		166	72	1	R
352	15.6	179	2.9	107	3.2	53	3		170	67	20	S
353	14.1	362	2.7	267	2.9	293	2		160	60	30	S
354	17.3	42	2.6	345	2.9	293	3		159	72	30	S
355	16.1	117	2.9	107	3.1	113	3		155	68	30	S
356	14.4	339	3.0	55	3.2	53	3		154	77	10	S
357	17.2	50	2.7	267	2.9	293	2		159	63	30	S
358	14.5	331	2.6	345	2.8	364	2		164	71	—	—
359	15.2	242	2.7	267	2.9	293	3		160	73	10	S
360	14.5	331	2.8	180	3.0	200	2		155	50	5	MR
361	14.9	292	2.8	180	3.0	200	3		164	74	—	—
362	15.0	274	2.7	267	2.9	293	3		165	80	—	—
363	14.7	315	2.9	107	3.1	113	3		165	70	—	—
364	15.1	259	2.7	267	3.0	200	3		155	53	30	S
365	15.6	179	2.9	107	3.1	113	2		159	62	—	—
366	14.4	339	2.9	107	3.1	113	3		160	60	—	—
367	17.7	24	2.8	180	3.1	113	2		161	75	5	MR
368	17.9	18	2.7	267	3.0	200	2		160	80	5	MR
369	17.3	42	2.7	267	3.0	200	2		159	82	5	MR
370	16.9	62	2.7	267	3.0	200	2		159	71	20	S
371	17.0	58	2.7	267	3.0	200	2		159	63	20	S
372	15.6	179	2.7	267	3.0	200	2		160	78	1	R
373	15.7	161	2.6	345	2.9	293	2		157	72	—	—
374	17.0	58	2.5	389	2.8	364	2		159	75	5	S
375	18.2	11	2.6	345	2.9	293	2		159	79	—	—
376	18.4	6	2.6	345	2.9	293	2		158	70	—	—
377	18.0	15	2.8	180	3.1	113	2		161	77	5	MR
378	17.5	31	2.8	180	3.1	113	2		158	80	—	—
379	17.3	42	2.8	180	3.1	113	2		160	69	—	—
380	18.4	6	2.7	267	2.9	293	2		158	78	—	—

Table 26. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Ankara, Turkey in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade: 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Stripe rust sev. %	Stripe rust resp.
381	15.9	138	2.8	180	3.0	200	2		158	73	--	--
382	16.7	70	2.8	180	3.0	200	2		160	75	--	--
383	16.6	76	2.7	267	2.9	293	2		157	72	--	--
384	16.3	98	2.9	107	3.1	113	2		158	73	10	S
385	15.5	198	3.0	55	3.2	53	2		159	67	--	--
386	14.3	349	3.1	25	3.3	21	2		161	69	--	--
387	16.9	62	2.9	107	3.1	113	3		160	70	10	S
388	17.3	42	2.9	107	3.2	53	3		158	63	20	S
389	16.5	81	2.7	267	3.0	200	3		161	79	--	--
390	17.6	27	2.7	267	2.9	293	2		161	80	20	S
391	15.1	259	2.8	180	3.0	200	2		161	70	10	S
392	16.5	81	2.9	107	3.2	53	3		168	55	--	--
393	15.5	198	3.0	55	3.2	53	3		166	57	--	--
394	17.9	18	2.9	180	3.1	113	2		167	53	5	S
395	16.8	66	2.9	107	3.2	53	3		168	65	5	MS
396	17.4	[illegible]	2.9	107	3.2	53	3		166	75	20	S
397	16.7	70	2.7	267	3.0	200	2		166	70	20	S
398	19.2	2	2.6	345	2.9	293	3		166	74	10	S
Centurk	14.4	339	3.0	55	3.1	113	2		164	72	--	--
Lancota	16.0	126	2.8	180	3.0	200	2		171	73	10	S
CI13449	15.3	225	2.9	107	3.1	113	4		172	63	50	S
Bezostaya1	14.7	315	2.8	180	3.0	200	2		162	80	10	S
Overall mean	15.6		2.79		3.01		2.7	169.2	161.0	74.6	19.1	

Correlation Coefficients

Protein	- .46**	- .26**
Protein/lysine		.94**

** Significant at the P=.05 level.

Means of the check varieties

Bezosta.	14.2	2.82	3.02
Centurk	13.9	2.90	3.02
CI13449	13.8	3.00	3.14
Lancota	15.8	2.66	2.88
Check mean	14.4	2.85	3.02
$LSD_{.05}$ of check means	0.6	0.16	0.16
Coefficient of variation %	3.1	4.16	3.36

Table 25. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Erzurum, Turkey in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield[1/] g	Days to flowering from Jan. 1	Plant height cm	Seed grade 1-9
Centurk	14.5	303	3.0	144	3.2	152	164	175	86	2
Lancota	15.6	210	2.8	313	3.1	259	168	174	103	2
CI13449	15.8	183	3.0	144	3.3	70	173	179	79	2
Bezostaya 1	13.9	337	3.2	39	3.3	70	94	174	96	2
5	13.0	375	3.2	39	3.3	70	207	179	103	3
6	11.7	396	3.3	14	3.2	152	156	174	89	2
7	13.3	367	2.9	230	3.1	259	180	172	104	2
8	13.3	367	2.9	230	3.0	344	268	172	107	2
9	12.8	381	3.3	14	3.4	22	171	175	104	3
10	13.6	353	3.2	39	3.3	70	132	175	99	3
11	13.5	357	3.2	39	3.4	22	121	175	103	3
12	15.8	183	3.2	39	3.4	22	119	175	95	3
13	16.7	87	3.2	39	3.4	22	96	172	86	3
14	10.8	400	3.7	1	3.6	1	214	175	110	3
15	10.2	401	3.5	2	3.3	70	143	175	104	3
16	11.2	399	3.3	14	3.2	152	150	179	102	3
17	14.0	329	3.2	39	3.4	22	152	175	104	2
18	13.6	353	3.1	80	3.2	152	170	175	83	3
19	13.3	367	3.3	14	3.4	22	231	175	98	3
20	14.5	303	3.1	14	3.5	4	156	175	95	3
21	16.7	87	3.1	80	3.3	70	143	180	111	3
22	14.0	329	3.3	14	3.4	22	167	175	115	3
23	15.2	247	3.2	39	3.4	22	175	174	88	3
24	15.1	253	3.3	14	3.5	4	185	174	100	3
25	15.6	210	3.2	39	3.4	22	210	175	96	2
26	12.3	391	3.4	5	3.4	22	199	171	103	2
27	12.6	385	3.2	39	3.3	70	215	174	117	2
28	13.2	370	3.0	144	3.1	259	164	174	99	2
29	15.6	210	3.0	144	3.2	152	142	174	100	2
30	17.1	52	3.0	144	3.3	70	120	171	72	3
31	15.8	183	3.1	80	3.3	70	159	173	84	3
32	16.4	117	3.?	39	3.4	22	104	175	82	3
33	16.4	117	3.1	80	3.3	70	172	171	76	3
34	15.6	210	3.2	39	3.4	22	159	171	75	3
35	14.0	329	3.1	80	3.3	70	187	175	91	3
36	15.7	194	2.6	396	2.9	386	188	172	108	2
37	14.5	303	2.9	230	3.1	259	119	172	105	2
38	15.7	194	3.1	80	3.3	70	106	171	99	2
39	15.5	223	2.7	372	2.9	386	97	171	103	2
40	13.7	346	2.8	313	2.9	386	168	173	113	3
41	13.4	362	3.1	80	3.3	70	244	176	116	3
42	12.9	377	3.0	144	3.1	259	137	171	103	3
43	13.7	346	3.0	144	3.1	259	131	171	95	2
44	16.3	129	2.8	313	3.1	259	117	172	106	2
45	13.7	346	3.2	39	3.3	70	148	174	102	3
46	13.1	373	3.1	80	3.2	152	140	174	106	3
47	11.6	397	3.3	14	3.2	152	167	174	107	3
48	12.6	385	3.1	80	3.2	152	141	173	104	3
49	13.7	346	3.1	80	3.2	152	153	173	108	2
50	14.2	318	3.0	144	3.2	152	133	174	103	3

1/ Yield data based on a harvested plot size of 0.5 square meters.

Table 25. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Erzurum, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield g	Days to flowering from Jan. 1	Plant height cm	Seed grade 1-9
51	14.9	273	2.8	313	3.0	344	165	178	100	3
52	15.5	223	2.7	372	2.9	386	156	175	119	2
53	15.1	253	2.8	313	3.0	344	127	176	112	3
54	11.9	395	3.1	80	3.1	259	162	176	116	3
55	12.8	381	3.0	144	3.1	259	89	175	111	3
56	13.9	337	3.0	144	3.1	259	173	175	117	5
57	14.6	296	2.9	230	3.1	259	143	175	117	3
58	14.3	313	3.0	144	3.2	152	185	175	118	
59	13.5	357	3.2	39	3.3	70	122	175	119	3
60	14.0	329	3.0	144	3.1	259	90	175	117	3
61	13.7	346	2.9	230	3.0	344	257	180	109	3
62	15.1	253	3.1	80	3.3	70	167	176	109	2
63	15.0	263	3.0	144	3.2	152	167	175	104	2
64	14.4	309	3.1	80	3.3	70	173	175	107	3
65	14.2	318	2.9	230	3.1	259	206	179	111	3
66	14.6	296	3.1	80	3.3	70	143	174	96	3
67	15.4	232	3.0	144	3.3	70	141	174	96	3
68	16.9	71	3.0	144	3.2	152	127	172	87	2
69	17.4	38	3.0	144	3.2	152	147	174	98	2
70	16.0	167	3.1	80	3.4	22	157	175	109	3
71	14.2	318	3.2	39	3.4	22	262	178	108	3
72	14.4	309	3.0	144	3.2	152	195	179	108	3
73	13.4	362	3.2	39	3.3	70	160	175	108	3
74	12.8	381	3.2	39	3.3	70	245	175	110	3
75	14.2	318	3.0	144	3.2	152	180	171	106	3
76	14.6	296	3.1	80	3.3	70	260	175	104	3
77	14.1	323	3.2	39	3.4	22	190	175	100	3
78	14.7	288	3.0	144	3.2	152	186	174	99	3
79	16.3	129	2.8	313	3.1	259	170	174	96	3
80	16.1	157	2.9	230	3.2	152	164	175	103	2
81	16.2	143	3.0	144	3.2	152	150	174	103	2
82	15.8	183	3.0	144	3.2	152	190	174	110	2
83	16.1	157	3.2	39	3.5	4	176	174	104	2
84	15.9	176	3.1	80	3.3	70	175	174	106	2
85	12.5	388	3.3	14	3.4	22	222	175	112	3
86	13.6	353	3.2	39	3.4	22	290	176	118	3
87	14.3	313	3.2	39	3.4	22	202	176	100	3
88	15.0	263	3.1	80	3.3	70	143	173	105	2
89	16.4	117	3.0	144	3.3	70	205	175	110	2
90	17.0	60	3.0	144	3.2	152	138	172	112	2
91	17.0	60	2.9	230	3.2	152	183	174	108	3
92	13.9	337	3.2	39	3.4	22	164	174	111	2
93	13.4	362	3.2	39	3.3	70	154	179	110	2
94	13.2	370	3.2	39	3.4	22	222	175	100	2
95	16.7	87	2.9	230	3.2	152	136	172	106	3
96	16.2	143	2.9	230	3.1	259	163	174	110	3
97	16.6	97	2.9	230	3.2	152	156	172	109	3
98	17.1	52	2.9	230	3.2	152	163	172	109	3
99	17.0	60	3.1	80	3.3	70	175	172	102	2
100	17.9	12	3.0	144	3.2	152	125	172	102	2
Centurk	13.9	337	3.1	80	3.3	70	229	174	100	2
Lencota	15.2	247	2.9	230	3.1	259	162	174	99	2
CI13449	12.2	393	3.2	39	3.3	70	276	173	83	3
Bezostaya 1	13.7	346	3.1	80	3.3	70	195	180	100	2
105	12.3	391	3.4	5	3.3	4	260	174	107	2

Table 23. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Erzurum, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield g	Days to flowering from Jan. 1	Plant height cm	Seed grade 1-9
106	14.4	309	2.9	230	3.1	259	107	173	117	3
107	15.6	210	3.1	80	3.3	70	116	174	116	3
108	14.6	296	2.9	230	3.1	259	69	173	118	3
109	13.4	362	3.2	39	3.3	70	182	174	109	3
110	14.9	273	2.8	313	3.0	344	171	173	118	3
111	15.6	210	2.9	230	3.1	259	172	173	117	3
112	16.5	106	2.9	230	3.2	152	101	174	113	3
113	16.6	97	2.7	372	3.0	344	164	173	115	2
114	16.7	87	2.9	230	3.1	259	193	174	113	2
115	15.3	241	3.0	144	3.2	152	240	176	117	2
116	14.6	296	3.0	144	3.2	152	194	175	87	3
117	12.5	388	3.0	144	3.0	344	229	175	115	2
118	11.6	397	3.2	39	3.2	152	184	173	117	3
119	12.6	385	3.0	144	3.1	259	172	174	116	3
120	13.7	346	3.0	144	3.2	152	179	174	114	3
121	13.6	353	3.2	39	3.3	70	176	175	116	2
122	12.4	390	3.4	5	3.4	22	162	175	112	3
123	13.5	357	3.2	39	3.3	70	189	175	114	3
124	14.2	318	3.3	14	3.4	22	117	172	112	3
125	14.8	281	2.8	313	3.0	344	139	173	106	3
126	14.5	303	2.9	230	3.1	259	224	173	112	3
127	13.1	373	2.9	230	3.0	344	140	174	109	3
128	14.1	323	3.0	144	3.1	259	141	174	105	3
129	18.4	4	2.8	313	3.0	344	141	174	93	2
130	16.4	117	2.8	313	3.0	344	171	175	104	2
131	15.7	194	3.0	144	3.2	152	182	172	97	2
132	16.3	129	2.7	372	3.0	344	200	172	103	3
133	15.1	253	2.9	230	3.1	259	207	174	108	2
134	16.7	87	2.9	230	3.2	152	133	172	110	2
135	16.0	167	2.8	313	3.1	259	158	172	106	2
136	15.0	263	3.1	80	3.3	70	188	174	107	2
137	13.2	370	3.1	80	3.2	152	224	173	108	2
138	15.5	241	3.0	144	3.2	152	148	173	95	2
139	14.8	281	3.0	144	3.2	152	201	174	101	2
140	14.0	329	3.1	80	3.3	70	103	174	101	2
141	16.3	129	2.8	313	3.1	259	145	174	92	2
142	15.6	210	2.7	372	3.0	344	147	174	93	2
143	16.1	157	2.7	372	2.9	386	176	174	100	2
144	14.3	313	2.8	313	2.9	386	185	174	107	2
145	14.8	281	2.9	230	3.1	259	133	174	91	2
146	16.1	157	2.6	396	2.9	386	215	174	95	2
147	17.2	48	2.7	372	2.9	386	181	175	102	2
148	16.2	143	2.8	313	3.0	344	176	175	94	2
149	16.5	106	2.9	230	3.1	259	136	174	91	2
150	15.5	223	2.9	230	3.2	152	219	174	88	3
151	15.6	210	3.0	144	3.2	152	211	174	100	2
152	15.9	176	2.9	230	3.1	259	190	174	103	2
153	15.1	253	2.8	313	3.0	344	162	174	109	2
154	13.9	337	2.8	313	2.9	386	211	174	109	2
155	13.4	362	2.9	230	3.1	259	142	174	106	2
156	14.7	288	3.0	144	3.2	152	166	173	105	2
157	15.6	210	2.9	230	3.1	259	173	173	106	2
158	16.9	71	2.6	396	2.9	386	114	173	103	2
159	16.3	129	2.5	401	2.8	401	169	173	101	2
160	14.7	288	2.9	230	3.1	259	125	173	97	2

Table 25. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Erzurum, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield g	Days to flowering from Jan. 1	Plant height cm	Seed grade 1-9
161	14.7	288	2.8	313	3.0	344	166	173	99	2
162	16.0	167	3.0	144	3.2	152	251	173	97	2
163	15.6	210	2.9	230	3.2	152	188	173	71	3
164	16.0	167	2.8	313	3.1	259	204	174	102	2
165	16.0	167	2.7	372	3.0	344	149	174	97	2
166	16.2	143	2.8	313	3.0	344	207	174	108	2
167	14.9	273	2.8	313	3.0	344	165	173	94	2
168	14.9	273	2.9	230	3.1	259	199	174	101	2
169	17.7	21	2.6	396	2.9	386	144	175	99	2
170	16.5	106	2.7	372	2.9	386	121	174	82	2
171	16.3	129	2.8	313	3.1	259	167	173	90	3
172	17.5	30	2.8	313	3.1	259	127	173	85	3
173	17.2	48	2.6	396	2.9	386	99	173	107	3
174	17.5	30	2.8	313	3.1	259	77	174	83	3
175	16.5	106	2.8	313	3.0	344	181	174	102	3
176	16.7	87	2.8	313	3.0	344	111	174	97	3
177	16.9	71	2.7	372	3.0	344	160	174	92	3
178	16.1	157	2.9	230	3.1	259	169	173	102	3
179	15.5	223	2.8	313	3.1	259	100	173	94	3
180	14.6	296	3.0	144	3.2	152	221	173	96	3
181	15.7	194	2.9	230	3.1	259	180	173	95	2
182	16.1	157	2.9	230	3.2	152	151	173	101	2
183	16.7	87	2.8	313	3.0	344	167	173	99	2
184	16.7	87	2.9	230	3.2	152	200	173	97	2
185	15.1	253	2.9	230	3.2	152	163	174	99	2
186	15.7	194	3.0	144	3.2	152	190	173	97	2
187	15.3	241	3.1	80	3.3	70	181	174	94	2
188	15.6	210	3.0	144	3.3	70	135	173	98	2
189	15.7	194	2.9	230	3.1	259	175	174	99	2
190	14.9	273	3.0	144	3.2	152	197	174	99	2
191	17.7	21	2.9	230	3.2	152	105	175	90	2
192	15.9	176	2.9	230	3.1	259	218	174	94	2
193	16.6	97	2.9	230	3.2	152	176	174	102	2
194	17.0	60	2.8	313	3.1	259	133	173	102	3
195	16.1	157	2.7	372	3.0	344	106	173	103	3
196	15.0	263	3.1	80	3.3	70	208	173	101	3
197	16.2	143	3.0	144	3.3	70	160	173	96	3
198	12.9	377	3.2	39	3.3	70	201	172	90	2
199	13.6	353	3.3	14	3.4	22	156	172	93	3
200	13.8	341	3.1	80	3.2	152	264	173	100	3
Centuk	9.7	402	3.5	2	3.2	152	136	180	75	4
Lancota	12.8	381	3.0	144	3.1	259	182	180	83	3
CI13449	13.5	357	3.3	14	3.4	22	164	181	80	4
Bezostaya 1	14.0	329	3.0	144	3.1	259	171	180	85	3
205	13.0	375	3.2	39	3.3	70	205	180	90	2
206	15.7	194	3.0	144	3.2	152	122	180	80	2
207	15.0	263	3.1	80	3.3	70	149	179	79	3
208	15.4	232	2.8	313	3.1	259	212	175	90	3
209	14.0	329	3.2	39	3.4	22	140	179	96	3
210	13.8	341	3.0	144	3.1	259	89	179	91	3
211	15.3	241	2.8	313	3.1	259	172	179	97	2
212	17.3	45	2.9	230	3.1	259	117	178	106	4
213	14.9	273	2.9	230	3.1	259	159	178	101	3
214	15.5	223	2.7	372	2.9	386	147	177	95	2
215	16.0	167	2.9	230	3.1	259	119	175	94	2

Table 25. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Erzurum, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield g	Days to flowering from Jan. 1	Plant height cm	Seed grade 1-9
216	15.7	194	2.9	230	3.1	259	158	175	105	2
217	15.7	194	2.8	313	3.0	344	170	176	101	2
218	15.6	210	2.9	230	3.1	259	149	176	103	2
219	15.1	253	3.0	144	3.3	70	214	176	111	2
220	15.4	232	3.0	144	3.2	152	147	176	111	2
221	15.9	176	3.0	144	3.2	152	150	177	95	2
222	15.6	210	3.0	144	3.3	70	104	179	81	2
223	15.6	210	2.8	313	3.0	344	184	175	92	2
224	14.3	313	3.0	144	3.2	152	156	176	90	2
225	15.3	241	3.0	144	3.2	152	144	175	85	3
226	13.9	337	3.2	39	3.3	70	148	179	100	2
227	13.1	373	3.3	14	3.4	22	207	175	103	2
228	14.0	329	2.9	230	3.1	259	146	179	96	2
229	14.6	296	3.0	144	3.2	152	154	176	101	3
230	14.7	288	3.0	144	3.2	152	127	175	95	3
231	15.0	263	2.9	230	3.1	259	80	179	71	2
232	16.1	157	2.8	313	3.1	259	133	174	85	2
233	16.5	106	3.0	144	3.2	152	151	174	90	2
234	15.6	210	2.9	230	3.1	259	160	175	96	2
235	16.9	71	2.8	313	3.0	344	101	176	96	2
236	15.6	210	2.8	313	3.1	259	112	175	94	2
237	15.6	210	2.9	230	3.1	259	188	176	102	2
238	15.3	241	3.0	144	3.2	152	104	176	91	2
239	15.3	241	2.9	230	3.1	259	189	176	101	2
240	15.4	232	2.8	313	3.0	344	196	176	106	2
241	16.0	167	2.8	313	3.1	259	170	175	110	2
242	14.7	288	3.1	80	3.3	70	186	176	105	2
243	15.0	263	3.0	144	3.2	152	199	176	95	2
244	13.7	346	3.2	39	3.3	70	166	180	105	3
245	15.5	223	3.0	144	3.2	152	269	180	101	2
246	15.9	176	2.8	313	3.1	259	116	176	80	2
247	16.8	78	2.8	313	3.1	259	118	176	95	2
248	16.3	129	2.8	313	3.1	259	177	176	97	2
249	15.7	194	3.0	144	3.2	152	187	179	101	2
250	14.9	273	3.0	144	3.2	152	82	175	80	3
251	15.7	194	2.8	313	3.1	259	171	177	94	2
252	16.2	143	2.9	230	3.2	152	176	176	90	2
253	14.9	273	3.1	80	3.3	70	198	176	92	2
254	15.7	194	3.0	144	3.2	152	170	175	85	2
255	15.7	194	2.8	313	3.1	259	148	175	105	2
256	14.9	273	2.9	230	3.1	259	186	175	105	2
257	14.6	296	2.8	313	3.0	344	169	175	115	2
258	15.0	263	2.8	313	3.0	344	210	175	104	2
259	15.1	253	2.7	372	2.9	386	178	176	114	2
260	15.7	194	2.8	313	3.0	344	228	175	90	2
261	16.7	87	3.0	144	3.2	152	185	175	81	2
262	16.8	78	2.8	313	3.0	344	225	174	91	2
263	16.3	129	2.9	230	3.2	152	180	175	100	2
264	16.1	157	2.8	313	3.1	259	245	175	94	2
265	16.4	117	2.8	313	3.0	344	154	175	98	2
266	14.2	318	2.8	313	3.0	344	265	174	96	2
267	15.0	263	3.0	144	3.2	152	258	174	101	2
268	16.1	157	2.8	313	3.1	259	169	175	116	2
269	16.2	143	3.1	80	3.3	70	133	175	103	2
270	16.2	143	3.0	144	3.3	70	174	177	105	3

Table 25. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Erzurum, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield g	Days to flowering from Jan. 1	Plant height cm	Seed grade 1-9
271	14.8	281	3.0	144	3.2	152	256	175	85	2
272	13.4	362	3.1	80	3.3	70	218	175	94	2
273	15.9	241	3.2	39	3.4	22	211	175	101	2
274	[illegible]	337	3.0	144	3.2	152	182	175	106	2
275	15.1	253	2.9	230	3.1	259	250	175	111	2
276	16.2	143	3.0	144	3.3	70	205	175	106	2
277	17.4	38	2.7	372	3.0	344	115	176	102	3
278	16.1	157	2.8	313	3.1	259	232	176	99	2
279	16.7	87	2.9	230	3.2	152	153	176	95	2
280	17.4	38	2.7	372	2.9	386	195	175	95	2
281	17.0	60	2.7	372	3.0	344	174	176	90	2
282	16.2	143	2.8	313	3.1	259	211	179	106	2
283	15.9	176	2.7	372	3.0	344	184	176	101	2
284	16.2	143	2.8	313	3.1	259	204	176	99	2
285	16.8	78	2.7	372	3.0	344	175	176	98	2
286	17.5	30	2.7	372	2.9	386	236	176	78	3
287	15.7	194	3.0	144	3.2	152	267	176	90	3
288	16.5	106	2.7	372	2.9	386	174	175	100	2
289	16.4	117	2.9	230	3.1	259	213	176	105	2
290	15.0	263	3.0	144	3.2	152	274	176	94	2
291	16.6	97	2.8	313	3.1	259	151	176	96	2
292	16.3	129	2.8	313	3.0	344	106	174	95	2
293	16.3	129	2.8	313	3.1	259	263	176	91	3
294	15.9	176	2.9	230	3.1	259	120	176	96	3
295	16.2	143	3.0	144	3.2	152	153	175	104	2
296	14.0	329	3.0	144	3.2	152	213	175	100	2
297	14.6	296	3.0	144	3.2	152	122	175	91	2
298	16.0	167	2.9	230	3.1	259	119	175	94	3
299	16.2	143	2.9	230	3.2	152	159	176	91	3
300	15.8	183	2.9	230	3.2	152	191	176	89	3
Centurk	12.6	385	3.1	80	3.1	259	280	179	105	2
Lancota	14.5	303	3.0	144	3.2	152	247	178	105	2
CI13449	12.1	394	3.4	5	3.5	4	235	180	70	3
Besostaya 1	14.1	323	3.1	80	3.3	70	278	179	100	2
305	14.8	281	3.1	80	3.4	22	199	176	84	3
306	15.4	232	3.1	80	3.3	70	262	176	95	3
307	16.9	71	2.9	230	3.2	152	181	174	99	2
308	15.2	247	3.1	80	3.4	22	205	176	70	2
309	16.2	143	3.1	80	3.3	70	209	174	100	3
310	16.3	129	2.9	230	3.2	152	189	174	108	3
311	15.4	232	3.1	80	3.4	22	247	175	94	3
312	18.0	8	2.9	230	3.1	259	126	175	101	3
313	16.9	71	2.9	230	3.2	152	164	175	102	3
314	16.6	97	2.9	230	3.1	259	153	178	97	2
315	17.1	52	2.9	230	3.1	259	224	180	100	2
316	16.4	117	2.9	230	3.2	152	201	180	100	2
317	17.0	60	2.9	230	3.1	259	168	180	102	2
318	17.7	21	2.9	230	3.2	152	178	178	90	2
319	16.4	117	2.8	313	3.1	259	196	178	95	2
320	16.9	71	2.7	372	3.0	344	189	178	95	2
321	17.2	48	2.8	313	3.1	259	210	178	96	2
322	16.6	97	2.9	230	3.1	259	163	178	94	2
323	16.5	106	2.8	313	3.1	259	162	178	96	2
324	17.9	12	2.9	230	3.2	152	135	175	100	2
325	17.6	25	2.7	372	2.9	386	148	176	95	2

Table 25. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Erzurum, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield g	Days to flowering from Jan. 1	Plant height cm	Seed grade 1-9
326	17.6	25	2.7	372	3.0	344	168	176	101	2
327	15.9	176	2.7	372	2.9	386	198	175	84	3
328	16.4	117	2.9	230	3.1	259	152	176	111	2
329	16.1	157	2.8	313	3.1	259	206	178	94	2
330	17.0	60	2.5	401	2.8	401	187	176	90	2
331	16.4	117	2.8	313	3.1	259	164	175	115	3
332	15.5	223	2.8	313	3.1	259	84	177	110	2
333	16.8	78	2.6	396	2.9	386	176	177	108	3
334	15.4	232	2.9	230	3.1	259	118	173	108	2
335	15.0	263	3.0	144	3.2	152	166	178	105	2
336	16.6	97	2.9	230	3.1	259	165	175	105	2
337	17.0	60	2.7	372	3.0	344	216	175	111	2
338	17.7	21	2.9	230	3.1	259	49	176	111	2
339	17.0	60	2.9	230	3.1	259	216	176	110	2
340	17.0	60	2.7	372	3.0	344	151	175	110	2
341	17.5	30	2.7	372	2.9	386	162	177	100	2
342	18.1	6	2.8	313	3.0	344	123	177	92	2
343	16.7	87	2.8	313	3.1	259	131	177	105	2
344	17.4	38	2.7	372	3.0	344	134	177	101	2
345	15.9	176	3.0	144	3.2	152	161	177	95	3
346	17.0	60	2.9	230	3.1	259	140	178	86	3
347	17.5	30	2.9	230	3.2	152	166	178	80	3
348	16.6	97	2.6	396	2.9	386	162	177	95	2
349	16.5	106	3.0	144	3.2	152	234	176	81	3
350	16.9	71	2.8	313	3.1	259	153	177	86	3
351	15.4	232	2.7	372	2.9	386	241	178	105	2
352	14.5	303	3.0	144	3.2	152	106	178	105	3
353	14.4	309	2.9	230	3.1	259	116	178	90	2
354	18.7	2	2.7	372	3.0	344	202	178	101	2
355	16.3	129	2.8	313	3.1	259	195	175	90	3
356	15.5	223	3.1	80	3.3	70	94	175	109	2
357	16.4	117	3.0	144	3.2	152	132	175	95	2
358	15.3	241	2.7	372	3.0	344	111	178	105	2
359	16.9	71	2.8	313	3.1	259	125	177	91	2
360	15.5	223	3.2	39	3.4	22	134	177	75	2
361	14.9	273	3.0	144	3.2	152	206	177	100	2
362	14.8	281	3.0	144	3.2	152	139	177	95	2
363	14.4	309	3.0	144	3.2	152	156	177	100	3
364	16.4	117	2.9	230	3.1	259	201	176	89	2
365	17.9	12	2.9	230	3.2	152	117	178	94	2
366	17.5	30	2.8	313	3.1	259	178	178	101	2
367	17.7	21	2.8	313	3.1	259	172	177	96	2
368	17.2	48	3.0	144	3.2	152	177	178	95	2
369	16.7	87	2.8	313	3.0	344	189	178	96	2
370	17.4	38	2.9	230	3.1	259	157	179	96	2
371	16.4	117	3.0	144	3.2	152	143	177	96	2
372	17.8	16	2.9	230	3.2	152	132	177	95	2
373	17.5	30	2.7	372	2.9	386	190	177	90	2
374	17.7	21	2.7	372	3.0	344	160	177	91	2
375	17.4	38	2.8	313	3.1	259	173	177	100	2
376	17.0	60	2.8	313	3.1	259	181	177	101	2
377	17.3	45	2.8	313	3.1	259	153	177	100	2
378	17.4	38	2.9	230	3.2	152	158	176	101	2
379	17.8	16	2.9	230	3.1	259	146	177	98	2
380	18.0	8	2.7	372	2.9	386	152	177	95	2

Table 25. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Erzurum, Turkey in 1976. Concluded.

Entry no	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Yield g	Days to flowering from Jan. 1	Plant height cm	Seed grade 1-9
381	17.9	12	2.8	313	3.0	344	190	177	94	2
382	17.8	16	2.7	372	3.0	344	149	177	85	2
383	17.4	38	2.8	313	3.1	259	122	177	88	2
384	17.8	16	2.7	372	3.0	344	209	177	90	2
385	17.4	38	2.8	313	3.1	259	193	177	90	2
386	17.1	52	2.8	313	3.0	344	146	176	96	2
387	15.4	232	3.1	80	3.3	70	187	176	97	2
388	16.2	143	3.0	144	3.2	152	156	176	93	2
389	17.4	38	2.8	313	3.0	344	128	176	104	2
390	18.1	6	2.7	372	3.0	344	140	175	95	2
391	17.3	45	2.6	396	2.9	386	180	175	93	2
392	18.6	3	2.8	313	3.1	259	156	176	91	3
393	18.4	4	3.2	39	3.4	22	163	175	96	3
394	17.9	12	3.0	144	3.3	70	156	175	96	2
395	16.5	106	3.1	80	3.3	70	179	175	98	3
396	16.7	87	3.0	144	3.3	70	187	175	89	3
397	16.9	71	3.0	144	3.3	70	223	176	95	3
398	19.0	1	2.7	372	3.0	344	182	176	95	3
Centurk	15.8	183	2.7	372	3.0	344	317	176	101	3
Lancota	16.1	157	2.6	396	2.9	386	200	176	103	3
CI13449	12.8	381	3.2	39	3.3	70	184	179	66	2
Bezostaya 1	14.7	288	2.9	230	3.1	259	349	179	101	2
Overall mean	15.5		2.95		3.16		170.9	175.3	99.2	2.4

Correlation Coefficients

Protein	-.66**	-.40**
Protein/lysine		.90**

** Significant at the P = .01 level.

Means of the check varieties

Bezostaya 1	14.1	3.06	3.22
Centurk	13.3	3.08	3.16
CI13449	13.3	3.22	3.36
Lancota	14.8	2.86	3.08
Check mean	13.9	3.05	3.21
$LSD_{.05}$ of check means	1.8	0.21	0.11
Coefficient of variation %	9.4	4.98	2.59

Table 26. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Eskisehir, Turkey in 1976.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade	Yield 1/	Days to flowering from	Plant height	Rust: Stripe		Rust: Leaf		Rust: Stem	
	%	rank	%	rank	%	rank	1-9	g	Jan. 1	cm	sev. %	resp.	sev. %	resp.	sev. %	resp.
Centurk	11.7	394	3.2	30	3.1	139	3	415	159	90	60	S	t	S	0	
Lencota	14.4	239	2.8	240	3.0	235	3	500	161	90	0		0		t	S
CI13449	11.8	392	3.4	3	3.4	12	4	440	171	65	10	S	t	S	t	S
Bezostaya 1	12.4	372	3.0	99	3.1	139	3	415	163	85	0		0		0	
5	11.6	395	3.2	30	3.1	139	4	615	163	85	0		0		0	
6	12.1	380	3.3	11	3.3	37	4	515	163	80	10	S	5	S	t	S
7	12.8	359	3.1	60	3.1	139	4	430	159	95	50	S	0		t	S
8	12.7	361	3.0	99	3.1	139	4	450	159	90	0		0		t	S
9	11.4	399	3.3	11	3.2	76	4	505	159	85	10	S	0		t	MS
10	12.1	380	3.1	60	3.1	139	4	445	153	80	25	S	0		0	
11	15.0	159	2.8	240	3.0	235	4	450	161	90	0		0		0	
12	16.3	37	2.8	240	3.1	139	4	385	161	90	0		0		t	MS
13	16.4	33	2.8	240	3.1	139	4	330	159	75	[illegible]		t	S	t	S
14	11.5	397	3.2	30	3.1	139	4	475	161	90	[illegible]	S	t	S	0	
15	11.1	401	3.1	60	3.0	235	4	545	158	95	40	S	t	S	0	
16	12.0	387	3.0	60	3.1	139	4	415	161	95	40	S	0		0	
17	13.7	312	2.8	240	2.9	328	3	415	161	90	0		t	S	0	
18	12.5	367	3.1	60	3.1	139	4	435	165	85	10	S	5	S	0	
19	12.6	364	3.1	60	3.1	139	4	445	163	75	25	S	5	S	0	
20	12.4	372	3.1	60	3.1	139	4	400	161	90	100	S	0		0	
21	14.7	201	3.0	99	3.2	76	4	535	165	110	10	S	0		0	
22	11.8	392	3.2	30	3.2	76	4	425	161	95	20	S	0		0	
23	13.5	322	3.1	60	3.2	76	4	330	165	80	80	S	0		10	S
24	13.9	285	3.0	99	3.2	76	4	505	161	100	25	MS	0		0	
25	14.9	175	2.8	240	3.0	235	3	415	159	90	25	S	0		10	S
26	12.1	380	3.1	60	3.1	139	3	425	163	100	0		25	S	10	S
27	13.1	349	3.2	30	3.3	37	3	515	163	105	0		0		0	
28	13.0	355	3.0	99	3.1	139	3	435	161	95	0		0		0	
29	14.2	254	2.9	158	3.0	235	3	410	159	100	0		0		t	S
30	14.9	175	3.2	30	3.4	12	4	270	169	65	80	S	0		0	
31	14.0	273	3.0	99	3.1	139	4	300	161	75	100	S	0		0	
32	14.3	246	3.1	60	3.2	76	5	300	163	65	25	S	10	S	0	
33	15.4	108	3.2	30	3.4	12	5	300	167	70	60	S	0		0	
34	13.9	285	2.9	158	3.1	139	4	245	161	65	25	S	50	S	0	
35	12.2	376	3.2	30	3.2	76	4	330	161	80	60	S	0		0	

1/ Yield based upon 0.8 m^2.

Table 26. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Eskisehir, Turkey in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Rust Stripe sev.	Stripe resp.	Leaf sev.	Leaf resp.	Stem sev.	Stem resp.
36	12.5	367	2.9	158	3.0	235	3	320	161	90	100	S	0		0	
37	11.5	397	3.3	11	3.2	76	3	315	159	85	40	S	0		0	
38	12.1	380	3.2	30	3.2	76	3	365	159	90	10	S	0		0	
39	14.8	190	3.1	60	3.3	37	3	260	157	85	40	S	25	S	0	
40	12.2	376	3.2	30	3.2	76	4	455	159	90	10	S	0		t	S
41	12.0	387	3.3	11	3.3	37	4	500	171	95	0		0		0	
42	12.0	387	3.3	11	3.3	37	4	420	156	90	0		t	MS	t	MS
43	14.7	201	3.0	99	3.2	76	3	430	158	90	10	S	t	S	t	S
44	16.2	41	2.8	240	3.1	139	3	360	159	95	0		t	MS	0	
45	13.8	300	3.1	50	3.3	37	3	405	161	95	0		t	MS	0	
46	13.3	336	3.0	99	3.1	139	3	485	158	95	40	S	25	S	0	
47	12.9	358	3.0	99	3.1	139	3	465	158	95	10	S	10	S	0	
48	13.9	285	2.9	158	3.1	139	3	365	154	95	0		10	S	0	
49	14.5	226	3.1	60	3.3	37	3	470	157	100	0		10	S	t	S
50	14.5	226	3.0	99	3.2	76	3	475	161	90	0		t	S	0	
51	14.5	226	3.1	60	3.3	37	3	580	165	95	10	S	10	S	t	S
52	15.9	57	3.0	99	3.3	37	3	470	161	95	0		0		t	S
53	15.6	85	2.9	158	3.1	139	3	430	163	95	25	S	0		0	
54	13.9	285	2.9	158	3.0	235	3	480	156	95	60	S	t	S	0	
55	15.3	116	2.7	322	2.9	328	3	465	157	85	40	S	0		0	
56	15.2	130	2.8	240	3.1	139	4	430	157	90	60	S	t	S	t	S
57	15.2	130	2.9	158	3.1	139	4	450	157	90	25	S	0		10	S
58	15.0	159	2.9	158	3.2	76	4	555	161	95	25	MS	0		0	
59	15.0	159	2.9	158	3.1	139	4	400	158	95	10	S	0		0	
60	14.8	190	2.9	158	3.1	139	[illegible]	520	161	105	0		t	MS	t	MS
61	13.9	285	3.1	60	3.3	37	[illegible]	[illegible]	[illegible]	85	0		0		t	S
62	16.1	46	3.1	60	3.3	37	4	[illegible]	[illegible]	80	0		t	S	t	S
63	15.4	108	2.9	158	3.1	139	3	[illegible]	[illegible]	85	t	S	t	S	0	
64	16.5	28	3.0	99	3.3	37	3	[illegible]	161	80	10	S	0		0	
65	15.6	85	3.0	99	3.2	76	4	385	161	100	40	S	0		t	S
66	14.5	226	3.0	99	3.2	76	4	415	156	75	0		0		0	
67	15.2	130	2.9	158	3.1	139	3	420	157	85	0		t	S	0	
68	16.6	26	3.0	99	3.2	76	3	300	157	75	0		t	S	0	
69	15.7	73	2.7	322	3.0	235	3	355	157	85	0		t	MS	0	
70	15.4	108	3.0	99	3.2	76	3	410	155	90	0		0		0	
71	12.2	376	3.0	99	3.0	235	4	320	161	90	10	S	t	S	10	S
72	13.5	322	3.2	30	3.3	37	4	505	161	95	40	S	0		10	S
73	13.9	285	3.1	60	3.3	37	3	430	161	100	10	S	t	S	0	
74	13.3	336	3.2	30	3.4	12	3	465	161	95	10	S	10	S	0	
75	13.7	312	3.1	60	3.2	76	3	465	161	95	40	S	10	S	0	

Table 26. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Eskisehir, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Rust Stripe sev.	Rust Stripe resp.	Rust Leaf sev.	Rust Leaf resp.	Rust Stem sev.	Rust Stem resp.
76	13.1	349	3.4	3	3.5	3	4	390	163	90	100	S	0		0	
77	15.2	130	3.1	60	3.3	37	4	400	165	90	10	S	0		0	
78	14.4	239	3.0	99	3.2	76	4	370	163	85	10	S	0		0	
79	14.4	239	3.0	99	3.2	76	3	390	163	85	0		t	S	0	
80	15.6	85	3.0	99	3.2	76	3	320	161	80	0		t	S	t	S
81	14.3	246	3.1	60	3.3	37	4	355	159	80	0		0		0	
82	13.9	285	3.2	30	3.4	12	4	345	161	95	0		0		t	MS
83	14.9	175	3.1	60	3.3	37	4	340	163	80	0		t	MS	t	MS
84	14.7	201	3.1	60	3.3	37	4	260	167	80	10	S	t	S	t	S
85	12.7	361	3.5	1	3.6	1	3	270	167	95	100	S	0		0	
86	13.5	322	3.1	60	3.2	76	4	370	167	105	80	S	0		0	
87	14.0	273	3.0	99	3.2	76	5	270	167	75	80	S	0		0	
88	13.8	300	3.0	99	3.1	139	4	420	157	95	80	S	0		0	
89	13.6	318	3.0	99	3.1	139	4	365	161	100	10	S	t	S	0	
90	13.2	342	3.2	30	3.3	37	4	360	161	95	10	S	25	S	t	S
91	12.7	361	3.2	30	3.3	37	4	370	157	100	80	S	25	S	0	
92	13.0	355	3.3	11	3.4	12	4	325	159	100	t	S	t	S	0	
93	13.0	355	2.8	240	2.9	328	4	425	159	95	25	S	10	S	0	
94	12.6	364	3.3	11	3.4	12	4	390	161	90	10	S	t	S	0	
95	16.0	51	3.0	99	3.3	37	4	305	159	90	0		t	S	t	S
96	15.6	85	3.0	99	3.3	37	3	370	159	95	25	S	0		5	S
97	15.6	85	3.2	30	3.4	12	3	465	157	90	10	S	0		5	S
98	15.9	57	3.0	99	3.2	76	3	475	158	95	25	S	0		0	
99	16.2	41	3.1	60	3.3	37	2	320	158	80	10	S	0		0	
100	15.7	73	3.2	30	3.4	12	3	425	158	85	10	S	0		0	
Centurk	12.1	380	3.2	30	3.3	37	3	570	161	95	10	S	0		0	
Lancota	13.8	300	2.9	158	3.1	139	3	505	161	100	10	S	t	S	0	
CI13449	11.9	391	3.4	3	3.4	12	4	500	167	75	10	S	10	S	t	S
Bezostaya 1	13.1	349	3.0	99	3.1	139	2	460	161	85	0		t	MS	t	MS
103	12.0	387	3.2	30	3.2	76	4	520	159	90	0		t	S	0	
106	14.2	254	2.9	158	3.0	235	4	400	161	110	60	S	0		0	
107	14.9	175	3.3	11	3.5	3	4	450	161	100	40	S	t	S	0	
108	15.6	85	3.1	60	3.3	37	4	465	159	100	60	S	t	S	0	
109	13.8	300	3.2	30	3.4	12	3	520	157	100	40	MS	0		t	MS
110	13.0	159	3.0	99	3.2	76	4	450	159	110	0		0		0	
111	14.5	226	3.1	60	3.3	37	4	470	157	95	25	S	0		t	S
112	13.1	349	3.2	30	3.3	37	4	435	158	100	10	S	0		0	
113	13.4	329	2.9	158	3.1	139	4	540	157	100	10	S	t	S	0	
114	13.5	322	3.1	60	3.2	76	4	405	161	90	0		t	S	t	S
115	12.6	364	3.1	60	3.2	76	2	470	161	105	t	S	0		0	

Table 26. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Eskisehir, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Stripe sev. %	Stripe resp.	Leaf rust sev. %	Leaf rust resp.	Stem rust sev. %	Stem rust resp.
116	13.9	285	3.2	30	3.4	12	3	415	163	65	0		0		0	
117	11.6	395	3.0	99	3.0	235	2	520	165	105	10	S	0		0	
118	11.2	400	3.3	11	3.2	76	3	580	163	105	10	MS	0		t	S
119	12.1	380	2.9	158	2.9	328	3	475	161	105	10	S	t	S	t	S
120	12.0	387	3.2	30	3.2	76	3	555	159	105	t	S	t	S	t	S
121	13.4	329	2.9	158	3.0	235	3	525	163	100	0		0		0	
122	12.4	372	3.2	30	3.2	76	3	455	159	90	0		t	S	0	
123	13.8	300	3.1	60	3.3	37	4	465	167	100	10	MS	0		0	
124	13.7	312	3.0	99	3.2	76	4	390	159	95	0		5	MS	5	MS
125	13.2	342	3.0	99	3.1	139	4	490	159	95	5	S	t	MS	0	
126	13.4	329	2.9	158	3.1	139	4	485	161	95	5	MS	5	MS	0	
127	13.5	372	3.0	99	3.2	76	4	365	159	90	t	S	t	S	t	S
128	13.9	285	2.9	158	3.0	235	4	455	159	90	10	S	t	S	0	
129	14.8	190	2.8	240	3.0	235	3	365	159	75	0		t	S	0	
130	14.8	263	2.6	374	2.8	381	3	500	160	85	0		t	S	0	
131	13.7	312	2.9	158	3.1	139	4	415	157	85	0		t	S	0	
132	14.7	201	2.8	240	3.0	235	4	390	159	80	10	S	t	S	0	
133	12.5	367	3.0	99	3.1	139	4	405	161	90	5	S	t	MS	0	
134	14.1	263	3.0	99	3.2	76	3	425	161	95	0		t	MS	0	
135	14.8	190	2.7	322	2.9	328	4	320	161	90	0		t	S	0	
136	14.2	254	2.9	158	3.1	139	4	380	163	75	0		0		0	
137	13.4	329	2.9	158	3.0	235	3	375	163	80	0		0		0	
138	13.1	349	2.9	158	3.0	235	3	350	163	80	0		t	MS	0	
139	13.7	312	2.9	158	3.1	139	3	405	163	80	0		0		t	S
140	13.2	342	3.0	99	3.2	76	3	330	163	85	0		0		t	S
141	14.8	190	2.9	158	3.1	139	4	330	161	70	0		0		0	
142	14.5	226	2.7	322	2.9	328	4	420	161	75	0		0		0	
143	15.7	73	2.6	374	2.8	381	4	425	159	80	t	S	0		t	S
144	13.7	312	2.8	240	3.0	235	4	425	163	90	t	S	t	S	0	
145	14.9	175	2.7	322	3.0	235	3	270	161	65	10	S	5	S	0	
146	14.1	263	2.6	374	2.8	381	3	380	165	85	10	S	t	S	0	
147	14.4	239	2.8	240	3.0	235	4	400	161	80	0		t	S	0	
148	14.5	226	2.8	240	2.9	328	3	325	161	70	0		t	S	t	S
149	14.2	254	2.8	240	3.0	235	4	330	159	70	0		0		0	
150	14.8	190	2.8	240	3.0	235	4	390	167	80	0		0		0	
151	13.9	285	3.1	60	3.2	76	4	395	158	85	0		0		0	
152	13.8	300	2.7	322	2.9	328	3	300	167	85	0		0		0	
153	13.2	342	2.9	158	3.0	235	3	450	165	90	0		3		0	
154	12.0	387	2.8	240	2.9	328	3	445	163	90	0		0		0	
155	13.3	336	2.9	158	3.0	235	3	325	163	85	0		0		0	

Table 26. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Eskisehir, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Rust Stripe sev. %	Stripe resp.	Leaf sev. %	Leaf resp.	Stem sev. %	Stem resp.
156	13.8	300	2.8	240	3.0	235	3	425	157	90	t	S	t	MS	0	
157	13.9	285	2.9	158	3.1	139	3	395	159	80	10	MS	0		0	
158	13.8	300	2.8	240	3.0	235	3	365	159	85	0		0		0	
159	14.0	273	2.9	158	3.0	235	4	395	159	80	0		t	S	0	
160	13.4	329	2.8	240	3.0	235	4	375	161	80	0		t	S	0	
161	13.3	336	2.9	158	3.0	235	4	360	159	75	0		0		t	S
162	14.7	201	2.9	158	3.1	139	4	295	161	75	0		t	S	0	
163	15.4	108	2.8	240	3.0	235	4	295	163	55	0		t	S	t	S
164	14.0	273	3.0	99	3.2	76	3	365	167	85	0		t	MS	0	
165	15.2	130	2.8	240	3.0	235	3	295	159	80	0		0		t	S
166	14.5	226	2.9	158	3.1	139	3	370	161	80	0		t	S	0	
167	14.7	201	2.8	240	3.0	235	3	280	159	65	0		t	MS	0	
168	14.9	175	2.8	240	3.0	235	4	250	161	75	t	S	t	MS	0	
169	15.7	73	2.6	374	2.9	328	3	335	159	85	0		t	MS	0	
170	15.7	73	2.6	374	2.9	328	3	335	161	70	0		t	MS	0	
171	15.6	85	2.9	158	3.1	139	3	400	157	75	t	S	0		10	S
172	15.6	85	2.7	322	2.9	328	3	360	157	75	0		t	S	t	S
173	16.9	17	2.8	240	3.1	139	3	350	157	95	t	S	t	S	0	
174	15.6	85	2.8	240	3.0	235	4	365	157	80	0		t	S	0	
175	15.5	98	2.7	322	3.0	235	4	460	157	85	0		0		0	
176	15.2	130	2.7	322	3.0	235	3	470	157	90	t	S	0		0	
177	15.0	159	2.8	240	3.0	235	3	430	157	80	0		t	MS	0	
178	15.1	145	2.9	158	3.1	139	3	490	159	90	t	S	t	S	0	
179	15.1	145	2.6	374	2.8	381	3	365	167	70	40	S	0		10	S
180	13.7	312	2.7	322	2.9	328	3	445	159	70	0		0		t	S
181	16.4	33	2.4	400	2.7	397	2	450	159	83	0		t	S	t	S
182	14.9	175	2.9	158	3.1	139	3	325	163	80	10	S	0		t	S
183	14.6	211	2.6	374	2.8	381	3	450	159	90	0		0		0	
184	15.2	130	2.7	322	2.9	328	3	385	159	90	10	MS	t	S	t	S
185	14.2	254	2.5	394	2.7	397	3	415	159	85	0		t	S	0	
186	14.6	211	2.6	374	2.8	381	3	375	159	85	10	MS	0		t	S
187	14.7	201	2.6	374	2.8	381	4	450	159	95	0		t	S	t	S
188	15.1	145	2.8	240	3.0	235	4	540	158	95	5	MS	t	MS	t	S
189	15.2	130	2.8	240	3.1	139	4	465	159	90	10	S	0		0	
190	15.8	65	2.9	158	3.1	139	4	465	159	90	10	MS	0		0	
191	17.1	13	2.9	158	3.1	139	4	535	158	100	0		0		0	
192	16.3	37	2.9	158	3.1	139	4	445	159	95	25	S	t	S	0	
193	17.5	5	2.9	158	3.1	139	3	455	159	100	5	MS	t	S	0	
194	17.6	3	2.7	322	3.0	235	4	520	159	105	0		0		0	
195	17.1	13	2.8	240	3.1	139	3	515	159	100	0		0		25	S

Table 26. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Eskisehir, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Rust Stripe sev.	Rust Stripe resp.	Rust Leaf sev.	Rust Leaf resp.	Rust Stem sev.	Rust Stem resp.
196	16.4	33	2.7	322	2.9	328	4	525	161	85	0		0		0	
197	17.4	8	2.6	374	2.9	328	3	385	161	75	0		0		0	
198	15.8	65	2.7	322	3.0	235	3	505	159	85	0		t	MS	t	MS
199	15.8	65	2.8	240	3.0	235	3	465	159	85	0		0		0	
200	16.1	46	2.7	322	3.0	235	4	420	163	80	0		0		0	
Centurk	14.1	263	2.7	322	2.9	328	3	375	161	90	0		t	MS	0	
Lancota	14.5	226	2.5	394	2.7	397	3	320	159	100	0		t	S	t	S
CI13449	14.3	246	2.9	158	3.1	139	4	420	167	75	5	S	t	S	t	S
Bezostaya 1	14.9	175	2.4	400	2.6	401	3	445	159	90	5	S	0		-	
205	16.0	51	2.6	374	2.9	328	3	460	157	95	0		0		0	
206	14.9	175	2.5	394	2.7	397	3	400	157	75	0		0		0	
207	16.6	26	2.7	322	2.9	328	3	370	159	85	0		0		0	
208	15.9	57	2.5	394	2.8	381	4	360	158	85	0		t	MS	t	MS
209	16.2	41	2.8	240	3.1	139	4	365	167	100	0		0		0	
210	16.8	22	2.7	322	2.9	328	3	435	161	95	t	S	t	MS	0	
211	16.9	17	2.8	240	3.1	139	4	520	159	105	0		40	S	t	S
212	17.5	5	2.7	322	3.0	235	4	330	161	90	0		20	S	t	MS
213	15.7	73	2.8	240	3.0	235	4	520	159	95	0		t	S	0	
214	16.5	28	2.6	374	2.9	328	3	430	161	90	0		t	S	0	
215	16.6	26	2.7	322	3.0	235	3	525	158	93	0		0		t	MS
216	16.9	17	2.7	322	2.9	328	3	370	158	90	0		0		10	S
217	15.3	116	2.9	158	3.1	139	2	480	158	90	0		t	MS	0	
218	16.0	51	2.9	158	3.1	139	3	400	157	85	t	S	0		t	S
219	15.8	65	2.8	240	3.1	139	3	430	158	95	10	S	0		t	S
220	16.2	41	2.7	322	3.0	235	4	530	161	95	0		0		10	S
221	16.4	33	2.9	158	3.1	139	4	510	159	80	t	S	0		25	S
222	16.8	22	2.7	322	3.0	235	4	505	159	80	0		t	S	t	S
223	15.5	98	2.8	240	3.1	139	3	575	159	95	0		0		0	
224	15.1	145	2.7	322	2.9	328	3	550	161	95	0		0		t	S
225	15.4	108	2.7	322	2.9	328	3	535	161	85	10	S	t	S	5	S
226	15.2	130	3.0	99	3.3	37	3	640	163	100	65	S	0		t	S
227	14.3	246	3.0	99	3.2	76	3	575	165	100	0		t	S	t	S
228	15.3	116	2.8	240	3.0	235	3	450	158	80	40	S	25	S	25	S
229	15.3	116	2.6	374	2.9	328	3	550	159	95	0		t	S	0	
230	15.7	73	2.6	374	2.9	328	3	525	157	80	10	S	0		0	
231	14.5	226	2.7	322	2.8	381	3	425	158	75	0		t	S	t	S
232	15.8	65	2.7	322	2.9	328	3	410	157	75	0		0		10	S
233	15.3	116	2.6	374	2.9	328	3	535	157	90	0		0		10	S
234	15.1	145	2.6	374	2.8	381	3	425	157	90	0		t	S	t	S
235	14.3	246	2.8	240	3.0	235	3	485	158	105	80	S	0		0	

Table 26. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Eskisehir, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Rust Stripe sev. %	Rust Stripe resp.	Rust Leaf sev. %	Rust Leaf resp.	Rust Stem sev. %	Rust Stem resp.
236	16.4	33	2.5	394	2.8	381	3	375	157	95	0		t	S	t	S
237	14.4	239	2.8	240	3.0	235	3	430	157	90	t	S	t	S	0	
238	16.1	46	2.7	322	3.0	235	3	460	157	90	0		0		0	
239	14.5	226	2.9	158	3.1	139	3	440	161	95	0		0		0	
240	15.2	130	2.6	374	2.8	381	3	530	159	95	0		0		0	
241	14.9	175	2.8	240	3.0	235	3	445	159	95	0		t	S	0	
242	13.8	300	2.8	240	3.0	235	3	465	165	90	0		0		0	
243	14.9	175	2.7	322	2.9	328	4	345	165	75	0		t	MS	0	
244	13.5	322	2.8	240	3.0	235	3	470	159	75	0		t	MS	t	MS
245	15.5	98	2.9	158	3.1	139	3	520	159	70	25	S	t	MS	t	S
246	15.6	85	2.8	240	3.1	139	3	510	159	70	0		t	MS	t	S
247	15.7	73	2.7	322	2.9	328	3	455	159	85	t	S	0		0	
248	15.1	145	2.8	240	3.0	235	3	355	159	85	10	S	5	S	0	
249	13.0	355	2.9	158	3.0	235	4	340	161	95	10	MS	0		t	S
250	14.5	226	2.9	158	3.1	139	4	430	161	75	0		0		t	S
251	14.8	190	2.7	322	2.9	328	4	490	158	85	0		t	MS	t	MS
252	15.5	98	2.8	240	3.0	235	4	425	155	85	0		0		10	S
253	16.2	254	2.9	158	3.0	235	3	470	157	85	0		t	MS	0	
254	14.9	175	2.9	158	3.1	139	4	460	157	80	25	MS	t	MS	t	MS
255	17.1	13	2.6	374	2.8	381	3	345	159	85	40	S	t	MS	t	MS
256	14.8	190	2.6	374	2.8	381	3	395	161	90	25	S	25	S	10	S
257	14.6	211	2.7	322	2.9	328	3	430	157	80	0		0		t	S
258	13.5	98	2.5	394	2.8	381	4	430	157	70	0		t	MS	t	S
259	15.2	98	2.8	240	3.0	235	3	400	159	80	10	S	0		0	
260	15.5	98	2.7	322	2.9	328	3	395	159	75	0		0		t	MS
261	15.6	85	2.7	322	2.9	328	3	445	157	80	0		t	MS	t	MS
262	16.0	51	2.6	374	2.8	381	3	360	159	80	0		t	MS	0	
263	16.4	33	2.4	400	2.6	401	3	405	161	80	0		t	MS	t	MS
264	14.7	201	2.8	240	3.0	235	3	370	161	75	0		0		0	
265	15.4	108	2.7	322	2.9	328	3	385	161	80	10	S	0		t	S
266	12.4	372	2.8	240	2.8	381	3	500	159	80	0		0		0	
267	13.8	300	2.8	240	2.9	328	3	510	157	95	0		t	MS	0	
268	16.0	51	2.8	240	3.0	235	3	560	165	100	0		t	S	0	
269	14.1	263	3.1	60	3.3	37	4	445	161	95	0		0		0	
270	14.1	263	2.7	322	2.9	328	3	400	161	90	0		t	MS	0	
271	14.6	211	2.7	322	2.9	328	4	450	159	85	0		t	MS	t	MS
272	13.2	342	3.3	11	3.4	12	4	395	161	80	0		t	MS	t	MS
273	13.0	355	3.4	5	3.5	3	4	370	161	75	0		0		5	S
274	14.0	273	2.9	158	3.1	139	3	470	157	90	t	S	0		0	
275	13.9	285	3.0	99	3.1	139	3	500	161	95	10	S	0		0	

Table 26. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Eskisehir, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Rust: Stripe sev. %	Stripe resp.	Leaf sev. %	Leaf resp.	Stem sev. %	Stem resp.
276	13.8	300	2.8	240	3.0	235	4	480	161	80	t	S	0		0	
277	13.8	300	2.7	322	2.8	381	3	445	157	85	65	S	0		t	S
278	13.9	285	2.9	158	3.0	235	3	490	157	80	40	S	0		0	
279	13.3	336	3.2	30	3.3	37	3	570	159	85	40	S	0		0	
280	13.3	336	2.8	240	2.9	328	3	530	161	90	25	S	0		0	
281	13.[illegible]	300	3.0	99	3.1	139	4	420	159	75	65	S	0		S	S
282	12.[illegible]	367	2.9	158	2.9	328	3	520	159	90	0		t	S	t	S
283	14.8	190	3.1	60	3.3	37	3	410	159	75	10	S	0		S	S
284	14.1	263	3.2	30	3.4	12	3	455	159	80	10	S	t	MS	t	MS
285	14.5	226	2.9	158	3.1	139	3	590	159	85	5	S	t	S	t	S
286	15.5	98	2.7	322	2.9	328	3	505	159	80	0		t	MS	0	
287	16.8	22	2.6	374	2.8	381	4	455	159	85	10	MS	0		5	S
288	15.1	145	2.7	322	2.9	328	3	450	159	85	10	MS	0		0	
289	15.5	98	2.8	240	3.0	235	3	405	159	85	0		0		0	
290	15.1	145	2.8	240	3.0	235	3	370	159	85	t	MS	t	MS	0	
291	14.5	226	2.8	240	3.0	235	4	375	159	90	t	MS	t	MS	0	
292	14.5	226	2.7	322	2.9	328	3	350	159	80	0		t	MS	t	MS
293	15.2	130	2.7	322	2.9	328	3	405	159	80	10	S	t	S	0	
294	15.0	159	2.7	322	2.9	328	3	395	159	75	0		t	S	0	
295	14.6	211	2.7	322	2.9	328	3	460	161	85	t	S	t	MS	0	
296	14.5	226	2.7	322	2.9	328	3	360	159	85	0		0		0	
297	13.1	349	2.9	158	3.0	235	3	410	159	80	10	MS	t	S	0	
298	14.3	246	2.8	240	3.0	235	4	330	159	85	40	S	0		0	
299	14.1	263	2.9	158	3.0	235	4	340	157	75	0		t	S	0	
300	13.9	285	2.8	240	3.0	235	4	440	157	75	0		0		0	
Centurk	12.4	372	2.9	158	2.9	328	3	510	159	85	0		t	S	0	
Lancota	14.2	254	2.6	374	2.8	381	3	455	159	90	t	S	0		t	S
CI13449	14.0	273	3.1	60	3.3	37	4	275	171	60	40	S	10	S	S	S
Bezostaya 1	14.7	201	2.6	374	2.8	381	3	355	167	70	0		0		0	
305	13.8	300	2.8	240	2.9	328	3	475	159	65	0		0		0	
306	13.6	318	2.8	240	2.9	328	4	410	159	85	0		0		0	
307	13.4	329	3.0	99	3.1	139	3	305	159	85	0		t	S	0	
308	13.4	329	2.9	158	3.0	235	3	455	161	70	10	S	0		0	
309	13.9	285	3.0	99	3.2	76	3	375	157	80	0		10	S	10	S
310	15.3	116	2.9	158	3.2	76	4	325	157	70	10	S	0		t	MS
311	16.1	46	2.9	158	3.2	76	3	445	161	80	0		t	S	0	
312	18.4	1	2.8	240	3.0	235	3	390	157	80	0		t	MS	0	
313	15.6	85	2.8	240	3.0	235	4	240	157	75	80	S	0		0	
314	15.2	130	2.9	158	3.2	76	3	470	161	75	0		0		0	
315	15.3	116	2.8	240	3.0	235	3	470	161	80	0		t	S	0	

Table 26. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Eskisehir, Turkey in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade	Yield	Days to flowering from Jan. 1	Plant height	Rust: Stripe		Leaf		Stem	
	%	rank	%	rank	%	rank	1-9	g		cm	sev. %	resp.	sev. %	resp.	sev. %	resp.
316	14.5	226	2.8	240	3.0	235	3	420	161	75	0		0		t	S
317	14.9	175	2.8	240	3.0	235	3	390	161	75	0		t	MS	t	MS
318	14.9	175	2.9	158	3.1	139	3	470	161	80	t	S	t	S	0	
319	15.3	116	2.8	240	3.0	235	3	540	161	85	0		t	MS	0	
320	15.3	116	2.9	158	3.1	139	3	440	161	80	10	S	0		0	
321	15.8	65	2.7	322	3.0	235	3	470	161	80	0		0		0	
322	15.0	159	2.8	240	3.0	235	3	535	161	80	0		t	MS	0	
323	15.5	98	2.7	322	2.9	328	3	530	161	80	10	S	t	S	t	S
324	16.1	46	2.8	240	3.1	139	3	360	157	85	10	S	t	MS	0	
325	15.1	145	2.7	322	2.9	328	3	430	157	90	t	MS	0		0	
326	15.8	65	2.8	240	3.0	235	3	390	159	90	25	S	0		10	S
327	14.3	246	2.7	322	2.8	381	4	430	159	70	10	S	0		5	S
328	15.8	65	2.7	322	3.0	235	4	390	159	75	40	S	0		0	
329	13.2	342	2.9	158	3.0	235	3	535	161	85	t	S	0		t	S
330	15.6	85	2.4	400	2.6	401	3	420	157	80	40	S	0		0	
331	14.4	239	2.7	322	2.9	328	4	470	157	95	0		t	S	0	
332	13.8	300	2.8	240	2.9	328	3	450	153	80	25	S	t	S	0	
333	15.1	145	2.7	322	3.0	235	4	370	153	80	0		10	S	5	S
334	13.3	336	2.9	158	3.0	235	4	475	153	80	10	S	t	S	5	S
335	13.8	300	2.9	158	3.1	139	3	430	153	80	80	S	t	S	0	
336	15.4	108	2.6	374	2.9	328	4	430	157	85	60	S	0		0	
337	16.2	41	2.6	374	2.9	328	3	365	157	80	10	S	t	S	t	S
338	15.2	130	2.9	158	3.2	76	3	320	159	75	60	S	10	S	0	
339	14.9	175	2.9	158	3.1	139	3	310	159	80	60	S	0		0	
340	16.9	17	2.7	322	2.9	328	4	365	157	80	0		t	MS	0	
341	17.2	10	2.5	394	2.8	381	4	340	157	90	0		t	MS	0	
342	18.3	2	2.6	374	2.8	381	4	290	158	90	0		t	MS	0	
343	17.5	5	2.6	374	2.9	328	3	330	157	85	0		0		0	
344	17.5	5	2.5	394	2.8	381	3	325	159	90	10	S	t	S	t	S
345	15.6	85	2.7	322	2.9	328	4	335	159	70	40	S	0		t	S
346	15.1	145	2.6	374	2.8	381	4	375	157	75	0		t	S	0	
347	14.6	211	2.8	240	3.0	23[illegible]	3	370	157	70	0		t	S	t	MS
348	15.0	159	2.6	374	2.8	381	3	365	161	70	0		t	S	0	
349	14.8	190	2.8	240	3.0	235	3	390	161	70	0		t	S	10	S
350	15.2	130	2.7	322	2.9	328	3	360	161	70	60	S	t	S	0	
351	15.0	159	2.6	374	2.8	381	3	410	163	95	0		0		0	
352	15.0	159	2.8	240	3.0	235	4	570	163	85	40	S	0		5	S
353	13.7	312	2.8	240	2.9	328	4	390	159	75	60	S	10	S	10	S
354	16.9	17	2.7	322	2.9	328	4	500	159	85	60	S	10	S	10	S
355	15.8	65	2.7	322	3.0	235	3	410	157	85	40	S	25	S	25	S

Table 26. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Eskisehir, Turkey in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Rust Stripe sev.	Rust Stripe resp.	Rust Leaf sev.	Rust Leaf resp.	Rust Stem sev.	Rust Stem resp.
356	15.0	159	2.8	240	3.0	235	3	465	158	85	0		25	S	10	S
357	17.3	9	2.8	240	3.0	235	3	370	157	70	t	S	0		10	S
358	15.2	130	2.7	322	2.9	[illegible]	3	270	—	80	0		t	S	0	
359	14.5	226	2.7	322	2.9	328	3	460	157	80	0		25	S	5	S
360	15.2	130	2.8	240	3.0	235	3	275	157	55	0		t	S	0	
361	15.2	130	2.6	374	2.8	381	3	[illegible]	165	85	0		t	MS	0	
362	14.1	263	2.8	240	3.0	235	3	[illegible]	165	80	0		t	S	t	
363	14.2	254	2.7	322	2.9	328	3	415	165	80	t	S	t	S	t	S
364	15.0	159	2.7	322	2.9	328	3	330	157	75	40	S	0		0	
365	15.6	85	2.7	322	2.9	328	2	365	161	80	0		0		0	
366	15.3	116	2.8	240	3.0	235	2	460	161	80	0		t	S	t	S
367	15.2	130	2.7	322	2.9	328	2	465	159	80	0		t	MS	0	
368	14.8	190	2.8	240	3.0	235	2	360	161	75	0		t	MS	t	S
369	14.8	190	2.7	322	3.0	235	2	440	161	75	0		t	S	t	S
370	14.6	211	2.8	240	3.0	235	2	375	161	80	0		t	S	t	S
371	14.0	273	2.8	240	3.0	235	3	400	158	80	0		t	S	0	
372	14.1	263	2.9	158	3.0	235	2	375	159	80	0		t	S	0	
373	14.9	175	2.7	322	3.0	235	3	400	159	80	t		t	S	t	S
374	15.0	159	2.7	322	2.9	328	2	415	159	80	0		t	MS	0	
375	15.0	159	2.8	240	3.0	235	2	350	161	80	0		t	MS	0	
376	15.0	159	2.9	158	3.1	139	2	440	161	80	0		[illegible]	S	0	
377	14.8	190	2.7	322	2.9	328	2	375	159	85	0		t	MS	0	
378	14.5	226	2.8	240	3.0	235	2	430	159	85	0		t	MS	0	
379	14.3	246	3.0	99	3.2	76	3	445	159	85	0		t	MS	t	MS
380	14.0	273	2.8	240	3.0	235	3	435	159	80	0		t	S	0	
381	14.6	211	2.7	322	2.9	328	3	460	161	80	0		t	MS	[illegible]	
382	15.0	159	2.7	322	2.9	328	2	470	161	80	0		t	S	0	
383	15.1	145	2.7	322	2.9	328	2	430	161	80	0		t	S	t	S
384	15.5	98	2.9	158	3.1	139	3	410	161	80	0		t	S	0	
385	15.9	57	2.7	322	2.9	328	2	420	161	80	0		t	MS	0	
386	16.4	33	3.1	60	3.4	12	3	460	161	80	0		t	MS	0	
387	16.0	51	3.2	30	3.4	12	3	480	161	90	0		t	MS	t	S
388	15.5	98	2.8	240	3.0	235	3	400	161	85	100	S	0		10	S
389	17.2	10	2.6	374	2.9	328	2	470	161	90	0		t	MS	0	
390	16.8	22	2.7	322	2.9	328	2	420	159	100	100	S	10	S	0	
391	14.6	211	2.9	158	3.1	139	2	445	157	90	t	S	0		0	
392	14.6	211	2.9	158	3.1	139	3	350	163	90	25	S	0		0	
393	15.9	57	2.8	240	3.1	139	3	365	163	80	0		t	S	t	S
394	15.9	57	2.8	240	3.0	235	3	355	159	75	10	S	t	S	0	
395	13.6	318	2.8	240	3.0	235	3	415	161	75	10	S	0		10	S

Table 26. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Eskisehir, Turkey in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Days to flowering from Jan. 1	Plant height cm	Rust: Stripe sev. %	Stripe resp.	Rust: Leaf sev. %	Leaf resp.	Rust: Stem sev. %	Stem resp.
396	14.5	226	2.8	240	3.0	235	3	390	161	80	10	S	t	S	t	S
397	14.6	211	2.9	158	3.1	139	3	435	161	80	25	S	0		t	S
398	16.8	22	2.7	322	3.0	235	3	445	161	80	0		t	MS	0	
Centurk	12.0	387	3.3	11	3.3	37	3	465	161	85	0		t	S	0	
Lancota	14.0	273	2.8	240	3.0	235	2	400	159	90	0		t	MS	t	S
CI13449	10.5	402	3.0	99	2.9	328	3	390	167	70	t	S	40	S	0	
Bezostaya 1	13.1	349	2.9	158	3.0	235	2	460	163	85	0		t	S	t	S
Overall mean	14.6		2.9		3.0		3.3	421.8	159.6	85.3	11.9		1.9		1.3	

Correlation Coefficients

Protein	.59**	- .28**
Lysine		.91**

** Significant at the P = .01 level.

Means of the check varieties

Centurk	12.5	3.06	3.10
Lancota	14.2	2.72	2.92
CI13449	12.5	3.16	3.22
Bezostaya 1	13.6	2.78	2.92
Check means	13.2	2.93	3.04
$LSD_{.05}$ of check means	1.0	0.15	0.20
Coefficient of variation %	5.48	3.59	4.66

Table 27. Protein and lysine mean values together with yield and plant height readings for the entries in the second high protein-high lysine winter wheat observation nursery grown in four replications at Yuma, Arizona, USA in 1976.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield		Plant height
	%	rank	%	rank	%	rank	q/ha	rank	cm
5	11.7	228	3.4	5	3.3	16	49.1	23	119
6	11.6	229	3.4	2	3.4	11	55.0	3	107
7	12.7	206	3.1	86	3.1	172	47.9	31	129
11	15.7	6	2.9	205	3.1	188	27.5	222	120
12	13.9	117	3.0	120	3.1	123	45.4	57	121
13	14.0	108	3.2	41	3.3	24	44.7	67	112
14	11.2	230	3.4	3	3.3	27	59.3	1	134
16	12.4	219	3.2	22	3.2	52	53.5	9	138
17	13.2	174	3.0	153	3.1	196	41.4	123	139
18	12.6	213	3.2	32	3.2	64	40.3	142	114
19	13.2	179	3.2	56	3.2	68	49.1	23	107
20	13.3	168	3.2	52	3.2	56	39.2	158	138
21	14.4	77	3.1	71	3.3	41	27.4	223	150
22	12.7	209	3.2	36	3.2	68	48.1	29	150
23	15.4	13	3.1	110	3.2	50	36.3	187	117
24	13.5	148	3.3	12	3.4	7	38.3	170	147
25	14.2	92	2.9	214	3.0	217	43.1	94	121
27	12.9	198	3.3	14	3.3	14	46.3	45	142
28	12.9	197	3.1	59	3.2	93	41.4	123	137
29	13.7	142	3.1	97	3.2	112	42.6	103	128
30	16.0	2	3.3	13	3.4	4	23.4	226	102
31	12.5	216	3.4	7	3.4	6	45.6	56	101
32	12.8	200	3.3	11	3.3	13	42.8	100	98
33	12.8	203	3.5	1	3.6	1	40.8	135	99
34	13.2	179	3.4	6	3.5	2	44.2	83	96
35	13.0	189	3.2	50	3.2	68	35.6	191	103
36	13.1	182	3.1	71	3.2	98	40.9	132	135
42	12.3	224	3.2	48	3.1	115	46.0	52	115
43	15.1	22	3.1	86	3.3	41	35.0	201	126
44	15.8	3	2.9	202	3.1	172	37.6	176	145
45	13.5	151	3.2	36	3.3	30	49.1	22	143
46	13.5	151	3.2	42	3.3	34	45.1	61	141
47	14.1	104	3.1	103	3.2	95	38.5	167	139
48	14.9	38	3.0	179	3.1	136	44.9	64	134
50	13.8	130	3.1	74	3.2	66	29.7	220	133
51	13.4	162	3.1	99	3.1	129	35.2	195	134
61	12.6	211	3.1	108	3.1	191	41.0	131	128
62	13.0	193	3.1	67	3.2	106	44.5	75	123
63	13.5	156	3.1	67	3.2	80	35.2	194	125
64	14.0	107	3.0	140	3.1	139	30.1	218	122
65	14.2	95	3.0	136	3.1	132	32.0	211	141
68	14.0	114	3.0	133	3.1	143	38.3	172	118
75	13.9	122	3.0	184	3.1	191	39.6	153	129
76	14.0	114	3.1	106	3.2	100	43.7	85	120
77	14.7	55	3.1	110	3.2	74	40.2	144	125
78	15.2	19	3.0	164	3.1	143	25.8	224	124
79	13.9	125	3.0	150	3.1	164	37.1	182	128
80	13.5	158	3.1	83	3.2	95	48.5	27	124
81	13.1	186	3.2	20	3.3	24	46.6	44	124

Table 27. Protein and lysine mean values together with yield and plant height readings for the entries in the second high protein-high lysine winter wheat observation nursery grown in four replications at Yuma, Arizona, USA in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield		Plant height
	%	rank	%	rank	%	rank	q/ha	rank	cm
82	13.0	190	3.2	29	3.3	36	54.5	6	122
83	13.7	138	3.2	30	3.3	21	42.6	106	121
84	13.5	148	3.2	45	3.3	36	36.1	197	127
94	11.9	226	3.2	24	3.2	90	43.5	88	131
95	15.7	8	2.8	219	3.0	210	17.8	229	127
97	15.1	24	3.0	182	3.1	136	37.5	177	131
98	15.4	12	3.0	130	3.2	74	37.3	178	131
99	15.7	6	2.9	211	3.1	191	39.2	158	128
100	15.1	23	2.9	194	3.1	175	38.4	169	129
Centurk	12.3	221	3.2	47	3.2	106	39.9	149	135
Lancota	13.0	190	3.1	76	3.2	119	40.1	147	144
CI13449	12.7	206	3.3	14	3.3	19	40.4	140	105
Bezostaya 1	13.0	193	3.0	163	3.0	209	46.9	41	129
116	15.0	29	2.9	195	3.1	178	38.9	161	105
127	13.7	134	3.0	130	3.1	161	41.7	120	142
128	13.2	179	3.1	95	3.1	158	38.8	162	139
129	13.8	129	3.0	126	3.1	136	44.7	68	128
130	13.4	162	2.9	203	3.0	216	32.7	205	136
131	13.1	187	3.2	20	3.3	21	36.7	184	136
133	12.7	205	3.3	8	3.4	9	39.5	155	140
134	14.8	45	3.2	56	3.3	20	31.6	214	142
136	13.5	148	3.1	67	3.2	71	35.1	196	125
138	12.8	203	3.3	16	3.3	17	39.7	152	137
139	12.6	212	3.2	31	3.2	52	45.4	58	135
140	12.5	215	3.2	23	3.3	41	46.1	49	133
141	14.2	98	2.8	219	3.0	222	41.8	119	121
142	13.4	167	3.0	161	3.1	193	48.2	28	120
143	14.9	40	2.8	224	3.0	222	43.0	98	124
144	15.0	27	3.0	157	3.2	102	41.3	126	133
145	15.0	31	2.9	216	3.0	215	43.2	92	115
146	14.8	45	2.8	227	3.0	225	43.2	91	139
147	14.8	43	2.9	198	3.1	183	42.3	111	134
148	14.6	64	2.8	226	3.0	226	37.3	179	121
149	14.2	92	2.8	224	2.9	227	38.6	164	118
150	13.6	144	3.2	52	3.2	45	41.3	125	133
151	13.7	140	3.2	40	3.3	28	38.8	163	134
158	14.3	87	2.9	197	3.1	194	32.4	207	139
159	14.3	89	3.0	147	3.1	125	38.4	168	130
160	12.9	195	3.1	69	3.2	111	42.5	107	128
161	13.9	120	3.0	191	3.1	194	32.2	208	127
162	13.5	156	3.1	60	3.2	63	49.3	21	131
163	14.3	91	3.0	160	3.1	156	41.4	122	106
167	13.7	133	3.1	108	3.2	114	34.3	204	120
168	12.9	195	3.0	133	3.1	199	35.1	197	132
169	13.3	171	3.0	118	3.1	172	40.8	133	132
170	13.5	154	2.9	207	3.0	219	35.0	200	109
171	13.8	131	3.0	148	3.1	181	53.9	7	117
172	13.9	125	3.0	153	3.1	168	49.7	19	111
174	14.5	72	3.1	77	3.2	46	39.1	160	118
178	13.2	176	3.0	114	3.1	174	35.0	199	130

Table 27. Protein and lysine mean values together with yield and plant height readings for the entries in the second high protein-high lysine winter wheat observation nursery grown in four replications at Yuma, Arizona, USA in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield		Plant height
	%	rank	%	rank	%	rank	q/ha	rank	cm
179	13.7	138	3.0	114	3.1	129	32.6	206	125
180	12.3	222	3.1	79	3.1	(183	31.8	212	123
181	14.6	69	2.9	207	3.0	203	42.7	102	117
182	13.0	192	3.1	86	3.1	143	43.3	90	115
196	13.7	136	3.0	136	3.1	168	39.4	157	128
197	14.9	32	3.1	90	3.2	49	34.6	203	124
198	14.1	100	3.1	92	3.2	83	35.7	190	125
199	14.1	101	3.1	79	3.2	61	38.5	166	128
200	13.1	187	3.2	42	3.2	50	42.8	100	124
Centurk	12.1	225	3.2	48	3.1	143	47.5	37	132
Lancota	13.9	122	3.0	150	3.1	161	40.1	147	137
CI13449	13.4	162	3.3	19	3.3	15	42.8	100	104
Bezostaya 1	13.8	132	3.0	184	3.1	196	44.4	79	122
205	14.8	49	3.1	63	3.3	30	40.3	143	130
206	15.5	10	2.8	228	3.0	221	40.6	137	119
221	14.0	108	3.1	61	3.2	46	30.2	217	122
222	13.9	117	3.0	130	3.1	149	32.0	210	117
228	14.5	75	2.9	195	3.1	183	29.2	221	123
230	13.9	117	3.0	136	3.1	152	21.3	228	131
231	13.3	171	3.0	155	3.1	188	36.7	184	127
232	13.9	122	2.9	201	3.0	205	41.6	121	125
242	14.1	104	3.1	79	3.2	64	38.6	164	135
243	13.4	162	3.0	192	3.0	211	50.1	15	122
244	12.3	222	3.3	17	3.3	34	53.7	8	119
245	13.9	125	3.0	179	3.1	185	50.7	14	120
246	13.3	171	3.0	172	3.1	200	44.5	72	114
250	14.1	101	3.0	143	3.1	149	36.1	188	120
251	14.7	59	2.9	199	3.1	186	31.8	213	127
258	15.1	24	2.9	215	3.0	212	37.2	181	116
259	14.7	57	2.9	212	3.0	212	44.1	84	123
260	14.7	57	2.9	208	3.0	203	47.9	33	119
261	14.9	35	2.8	222	3.0	220	44.5	71	121
262	14.4	79	2.8	219	3.0	218	46.0	51	118
263	14.9	35	2.9	199	3.1	180	38.1	173	126
264	15.0	26	2.9	205	3.1	198	35.9	189	120
265	14.3	85	3.0	171	3.1	164	42.4	109	128
269	13.9	125	2.9	203	3.0	214	34.9	202	128
270	15.3	17	3.0	186	3.1	143	29.8	219	127
271	14.3	87	3.1	95	3.2	77	41.3	126	122
272	13.6	145	3.1	70	3.2	77	49.7	17	122
273	12.4	217	3.2	27	3.2	61	51.1	13	123
274	14.0	112	3.1	95	3.2	92	46.1	47	126
275	14.0	110	3.1	74	3.2	54	45.2	59	136
276	14.1	104	3.1	64	3.2	48	37.2	180	136
277	13.5	158	3.1	83	3.2	95	56.8	2	134
278	14.0	111	3.1	88	3.2	82	47.9	32	130
279	14.6	64	3.1	73	3.3	39	49.0	26	132
280	14.2	95	3.1	64	3.2	44	47.4	39	135
281	13.7	138	3.1	103	3.2	116	52.6	10	124
282	13.7	140	3.1	62	3.2	59	40.7	136	131

Table 27. Protein and lysine mean values together with yield and plant height readings for the entries in the second high protein-high lysine winter wheat observation nursery grown in four replications at Yuma, Arizona, USA in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield		Plant height
	%	rank	%	rank	%	rank	q/ha	rank	cm
286	14.6	62	3.0	120	3.2	90	47.8	34	124
297	12.6	214	3.3	10	3.3	12	54.7	5	121
299	13.2	176	3.2	26	3.3	30	47.7	35	128
300	12.8	200	3.2	56	3.2	88	49.6	20	119
Centurk	12.4	218	3.2	38	3.2	86	50.0	16	132
Lancota	13.3	173	3.1	99	3.1	152	48.0	30	138
CI13449	12.7	208	..4	4	3.4	3	46.1	49	102
Bezostaya 1	13.2	175	3.1	99	3.1	152	54.9	4	121
305	13.4	162	3.2	35	3.3	33	47.7	35	101
306	12.8	202	3.2	38	3.2	56	41.8	117	136
309	13.1	182	3.2	27	3.3	30	39.5	154	133
310	13.5	154	3.0	150	3.1	177	31.5	216	123
311	14.3	87	3.2	52	3.3	26	46.8	42	111
312	15.2	18	3.1	112	3.2	59	23.2	227	136
313	13.9	117	3.0	117	3.2	116	25.1	225	125
314	14.9	40	3.0	159	3.2	112	44.4	78	124
315	14.4	77	3.0	138	3.2	116	44.3	81	122
316	14.4	83	3.0	114	3.2	88	44.8	65	119
317	14.8	49	3.0	136	3.2	88	39.8	150	123
318	15.3	15	3.0	126	3.2	74	40.6	138	122
319	14.9	35	3.0	161	3.2	116	43.4	89	123
320	14.9	40	3.0	179	3.1	136	44.8	66	122
321	14.5	72	3.0	179	3.1	168	43.7	86	122
322	14.4	83	3.0	130	3.2	106	47.5	38	124
323	14.8	49	3.0	143	3.2	97	36.5	186	124
327	13.1	182	3.0	143	3.1	188	51.4	12	115
328	14.6	67	3.0	210	3.0	205	46.1	48	122
334	12.7	209	3.1	82	3.1	168	44.5	75	123
335	13.4	165	3.1	103	3.1	143	40.5	139	122
345	16.3	1	2.9	217	3.1	201	42.0	114	117
346	14.8	51	2.8	229	2.9	228	39.8	150	117
347	14.9	35	2.8	230	2.9	229	41.0	130	115
348	14.7	59	2.8	224	3.0	224	41.1	129	120
349	15.7	6	3.0	179	3.2	106	44.4	77	119
350	14.6	62	3.0	166	3.1	129	44.5	74	113
351	13.6	145	3.0	120	3.1	158	43.0	96	142
352	14.3	89	3.0	169	3.1	168	49.7	18	132
353	12.8	200	3.0	157	3.0	207	43.0	97	123
354	15.7	4	2.9	213	3.1	201	32.1	209	139
357	14.2	95	3.0	88	3.2	71	44.5	70	104
358	15.4	165	2.8	221	2.9	230	31.5	213	118
360	12.4	220	3.2	33	3.2	80	45.7	53	85
361	13.7	134	3.1	79	3.2	77	44.3	82	118
362	13.6	143	3.0	126	3.1	161	43.1	95	118
363	14.0	114	3.0	122	3.1	121	45.6	54	119
364	13.3	168	3.0	187	3.0	207	49.1	25	106
365	15.3	15	3.0	143	3.2	85	37.1	183	120
366	15.3	15	3.0	189	3.1	143	37.9	175	121
367	15.0	29	3.0	190	3.1	154	41.9	115	122
368	14.7	57	3.0	183	3.1	154	41.8	117	123

Table 27. Protein and lysine mean values together with yield and plant height readings for the entries in the second high protein-high lysine winter wheat observation nursery grown in four replications at Yuma, Arizona, USA in 1976. Concluded.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield		Plant height
	%	rank	%	rank	%	rank	q/ha	rank	cm
369	14.6	68	3.0	147	3.2	119	45.2	60	121
370	15.0	29	3.0	187	3.1	163	42.1	112	120
372	14.8	45	3.0	192	3.1	176	42.6	104	119
373	14.7	53	3.1	106	3.2	71	42.5	108	120
374	14.4	83	3.0	169	3.1	158	41.1	128	121
375	14.8	45	3.0	175	3.1	143	41.8	116	122
376	14.7	53	3.0	172	3.1	136	44.4	79	119
377	14.9	32	3.0	150	3.2	98	38.3	170	121
378	14.8	51	3.0	155	3.2	109	35.4	192	121
379	14.5	75	3.0	122	3.2	106	42.6	105	120
380	14.6	67	3.1	99	3.2	77	47.1	40	121
381	14.5	72	3.0	138	3.2	109	43.7	86	120
382	14.5	75	3.0	166	3.1	149	44.6	69	120
383	14.9	40	3.0	166	3.1	129	39.4	156	119
384	15.5	11	3.0	143	3.2	84	35.3	193	120
385	15.1	20	3.0	175	3.1	123	40.8	134	121
386	15.1	20	3.0	175	3.1	123	40.2	144	123
387	14.2	98	3.0	116	3.2	102	40.4	141	127
388	14.6	67	3.0	143	3.2	102	46.2	46	122
392	14.2	98	3.2	46	3.3	24	45.1	62	131
393	14.4	79	3.2	25	3.4	10	38.0	174	129
394	14.4	81	3.2	44	3.3	18	43.2	93	131
395	13.8	128	3.2	52	3.3	38	46.7	43	132
396	14.6	61	3.1	93	3.2	59	42.3	110	119
397	14.1	104	3.3	18	3.4	7	44.5	72	121
398	15.5	9	3.1	91	3.3	41	45.0	63	124
Centurk	11.9	227	3.2	33	3.1	129	52.6	10	134
Lancota	13.5	151	3.1	106	3.1	132	45.6	55	138
CI13449	13.1	184	3.3	8	3.4	5	42.1	113	101
Bezostaya 1	13.5	151	3.1	58	3.2	54	40.2	146	116
Mean	13.9		3.1		3.2		41.5		124.2
$LSD_{.05}$ of the means	0.9		0.2		0.1		8.5		7.2
Coefficient of variation %	4.7		3.6		3.1		14.9		4.2
Correlation Coefficients									
Protein			- .58**		- .24**		- .32**		- .01
Unadjusted Lysine/protein					.92**		.22**		- .04
** Significant at the P = .01 level.									
Means of the check varieties									
Centurk	12.2		3.2		3.2		47.5		133.3
Lancota	13.4		3.1		3.1		43.5		139.3
CI13449	13.0		3.3		3.4		42.9		103.0
Bezostaya 1	13.4		3.1		3.1		46.6		122.0
Check means	13.0		3.2		3.2		45.1		124.4
$LSD_{.05}$ of check means	0.6		0.1		0.2		8.6		5.2
Coefficient of variation %	2.0		1.0		2.1		8.5		1.9

Table 28. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Lincoln, Nebraska, USA in 1976.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Winter survival 0-9	Days to heading from Jan. 1	Plant height cm	Yield[1] g
Centurk	18.4	274	2.6	340	2.8	376	3	9	141	117	254
Lancota	18.5	263	2.6	340	2.8	376	3	8	144	120	404
CI13449	19.5	128	3.0	7	3.3	5	7	5	155	80	35
Bezostaya 1	17.6	358	2.6	340	2.9	292	3	2	141	94	134
5	19.8	104	2.8	84	3.1	48	7	9	150	97	256
6	20.4	65	2.9	24	3.1	48	7	8	146	100	113
7	18.0	312	2.7	212	3.0	151	3	8	141	110	372
8	17.4	370	2.7	212	3.0	151	3	7	139	103	304
9	16.2	395	2.8	84	3.1	48	3	9	139	110	430
10	15.8	397	2.8	84	3.1	48	3	8	139	106	377
11	22.1	13	2.6	340	2.8	376	7	7	150	106	138
12	22.0	15	2.7	212	2.9	292	5	8	144	115	222
13	21.0	39	2.7	212	3.0	151	7	9	151	100	190
14	17.2	380	3.0	7	3.2	14	5	9	144	119	248
15	17.7	349	2.8	84	3.1	48	5	7	142	123	186
16	19.3	150	2.8	84	3.1	48	5	8	144	117	257
17	18.9	206	2.6	340	2.8	376	3	9	144	120	391
18	20.4	64	2.9	84	3.2	14	7	7	152	100	128
19	21.1	35	2.8	84	3.0	151	7	8	153	94	137
20	21.1	35	2.8	84	3.0	151	5	9	147	119	230
21	21.3	27	2.6	340	2.9	292	3	9	147	133	228
22	19.9	96	2.7	212	2.9	292	3	8	147	128	250
23	22.2	11	2.6	340	2.9	292	7	9	152	103	75
24	22.3	7	2.7	212	2.9	292	7	9	147	123	244
25	20.1	81	2.6	340	2.8	376	3	6	136	107	250
26	19.9	96	2.8	84	3.0	151	5	7	142	115	220
27	20.6	56	2.7	212	2.9	292	5	8	146	123	250
28	20.6	56	2.7	212	2.9	292	5	7	147	117	258
29	18.9	206	2.7	212	2.9	292	3	7	137	116	268
34[3]	20.4	64	3.0	7	3.3	5	9	1	—	—	15
35	19.1	175	2.7	212	2.9	292	5	8	141	91	303
36	19.4	140	2.6	340	2.9	292	5	9	142	122	308
37	19.1	175	2.7	212	3.0	151	3	9	142	110	252
38	18.9	206	2.6	340	2.9	292	3	9	142	120	295
39	19.0	191	2.7	212	3.0	151	3	9	141	112	266
40	18.1	303	2.7	212	3.0	151	3	8	140	110	290
41	19.1	175	2.8	84	3.0	151	3	8	141	116	233
42	18.0	312	2.7	212	2.9	292	3	9	140	111	293
43	20.1	81	2.7	212	3.0	151	5	8	143	116	175
44	21.6	19	2.6	340	2.8	376	3	8	144	116	185
45	20.7	50	2.8	84	3.0	151	3	9	144	122	224
46	20.7	50	2.7	212	2.9	292	3	8	144	116	213
47	20.3	71	2.6	340	2.9	292	5	9	142	119	190
48	19.7	112	2.7	212	2.9	292	5	9	139	119	270
49	20.7	50	2.6	340	2.9	292	3	9	141	117	230
50	20.3	71	2.7	212	2.9	292	5	8	146	107	194
51	22.3	7	2.7	212	2.9	292	3	9	146	107	163
52	21.2	31	2.6	340	2.8	376	5	9	144	120	270
53	22.2	11	2.6	340	2.8	376	3	9	144	121	286
54	18.6	249	2.6	340	2.9	292	3	5	139	109	193

[1] Grain yields based on eight square feet.

[3] Entries 30-33 were missing.

Table 28. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Lincoln, Nebraska, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Winter survival 0-9	Days to heading from Jan. 1	Plant height cm	Yield g
55	18.8	220	2.6	340	2.9	292	3	5	139	106	238
56	17.8	335	2.7	212	2.9	292	3	7	138	108	318
57	19.1	175	2.6	340	2.9	292	3	7	138	108	138
58	19.9	96	2.6	340	2.9	292	5	9	148	110	164
59	19.9	96	2.6	340	2.8	376	5	9	141	119	310
60	19.7	112	2.6	340	2.9	292	3	9	143	121	223
61	20.5	60	2.6	340	2.8	376	5	9	144	107	206
62	19.5	128	2.7	212	3.0	151	5	4	139	93	181
63	19.1	175	2.8	84	3.1	48	5	4	158	99	283
64	19.5	128	2.8	84	3.1	48	5	4	141	106	99
65	19.5	128	2.7	212	3.0	151	3	9	145	121	327
66	18.2	296	2.7	212	3.0	151	3	9	136	93	252
67	17.9	322	2.7	212	3.0	151	3	9	137	97	340
68	19.2	161	2.7	212	2.9	292	3	9	134	98	300
69	18.7	234	2.7	212	2.9	292	3	9	136	102	275
70	19.0	191	2.6	340	2.9	292	3	8	137	110	261
71	16.8	391	2.9	24	3.1	48	3	9	139	109	353
72	17.8	335	2.7	212	3.0	151	3	9	141	111	300
73	18.8	220	2.8	84	3.0	151	5	9	141	115	310
74	18.0	312	2.8	84	3.1	48	5	9	141	113	280
75	18.5	263	2.9	24	3.1	48	5	8	140	103	264
76	19.0	191	2.7	212	2.9	292	5	9	146	105	184
77	21.2	31	2.6	340	2.9	292	7	9	146	115	184
78	23.1	4	2.6	340	2.8	376	7	8	146	115	241
79	23.9	2	2.5	392	2.7	397	7	8	148	105	132
80	22.2	11	2.6	340	2.9	292	7	9	144	112	248
81	21.3	27	2.7	212	2.9	292	7	9	143	117	259
82	22.3	7	2.8	84	3.0	151	7	9	144	115	150
83	22.1	13	2.6	340	2.9	292	7	9	144	115	234
84	22.3	7	2.6	340	2.8	376	7	9	145	120	186
85	19.4	140	2.7	212	3.0	151	7	9	148	117	155
86	22.9	5	2.6	340	2.8	376	7	9	149	127	213
87	24.7	1	2.5	392	2.8	376	7	9	151	123	136
88	20.3	71	2.7	212	2.9	292	5	8	141	118	201
89	20.6	56	2.6	340	2.8	376	5	9	141	125	205
90	19.4	140	2.7	212	2.9	292	5	9	145	124	211
91	21.1	35	2.5	392	2.8	376	5	7	142	118	208
92	18.3	285	2.8	84	3.0	151	5	9	141	117	249
93	19.1	175	2.7	212	3.0	151	5	9	141	122	285
94	18.7	234	2.8	84	3.1	48	5	8	143	113	274
95	19.3	150	2.7	212	3.0	151	3	8	140	102	176
96	17.8	335	2.9	24	3.1	48	3	8	139	101	245
97	20.1	81	2.8	84	3.0	151	5	7	136	108	203
98	19.5	128	2.7	212	3.0	151	3	7	136	115	321
99	19.8	104	2.9	24	3.1	48	3	7	135	112	237
100	19.9	96	2.7	212	3.0	151	3	8	136	112	275
Centurk	18.0	312	2.8	84	3.0	151	5	9	141	115	349
Lancota	18.6	249	2.7	212	2.9	292	5	8	143	123	367
CI13449	18.9	206	2.9	24	3.2	14	7	4	154	75	35
Besostaya 1	18.0	312	2.7	212	3.0	151	3	2	143	97	118
105	17.8	335	2.8	84	3.1	48	5	9	141	114	413
106	19.9	96	2.6	340	2.9	292	5	8	144	120	247
107	19.3	150	2.8	84	3.0	151	3	8	141	116	208
108	19.2	161	2.7	212	2.9	292	3	9	140	118	302
109	18.4	274	2.8	84	3.0	151	3	9	139	117	310

Table 28. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Lincoln, Nebraska, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Winter survival 0-9	Days to heading from Jan. 1	Plant height cm	Yield g
110	19.0	191	2.7	212	2.9	292	3	7	139	115	181
111	19.4	140	2.7	212	3.0	151	3	7	139	112	235
112	18.8	220	2.7	212	3.0	151	5	9	141	116	329
113	19.2	161	2.8	84	3.0	151	5	8	139	112	239
114	18.7	234	2.8	84	3.0	151	5	8	138	110	217
115	20.8	46	2.7	212	3.0	151	5	9	146	122	241
116	23.7	3	2.9	24	3.2	14	7	7	141	87	112
117	21.4	23	2.6	340	2.8	376	5	9	148	125	324
118	20.4	64	2.7	212	2.9	292	5	9	147	125	210
119	19.7	112	2.6	340	2.9	292	5	9	146	130	171
120	21.4	23	2.5	392	2.8	376	5	9	146	125	295
121	20.2	76	2.7	212	3.0	151	5	8	142	120	203
122	19.2	161	2.8	84	3.1	48	5	8	138	117	213
123	20.9	43	2.5	392	2.8	376	5	8	141	117	226
124	17.7	349	2.7	212	3.0	151	3	8	134	114	316
125	18.2	296	2.9	24	3.2	14	3	8	137	115	278
126	19.7	112	2.7	212	3.0	151	7	7	142	120	195
127	21.0	39	2.6	340	2.8	376	5	7	144	126	185
128	21.3	27	2.5	392	2.8	376	5	9	144	123	281
129	20.9	43	2.6	340	2.9	292	5	7	139	110	221
130	21.2	31	2.6	340	2.8	376	5	8	144	118	145
131	18.8	220	2.8	84	3.0	151	5	9	142	119	263
132	18.7	234	2.8	84	3.0	151	3	8	141	120	308
133	18.9	206	2.8	84	3.0	151	5	7	138	119	176
134	19.9	96	2.8	84	3.1	48	7	9	147	120	209
135	18.8	220	2.8	84	3.0	151	3	7	138	110	225
136	19.0	191	2.7	212	3.0	151	3	9	140	120	276
137	18.5	263	2.8	84	3.0	151	3	9	148	116	334
138	19.2	161	2.8	84	3.0	151	3	8	144	112	229
139	19.5	128	2.7	212	3.0	151	3	8	144	110	235
140	17.7	349	2.9	24	3.1	48	3	9	143	112	323
141	18.7	234	2.8	84	3.0	151	3	9	138	104	250
142	18.0	312	2.7	212	3.0	151	1	8	138	102	221
143	17.9	322	2.6	340	2.9	292	1	8	138	105	194
144	20.3	71	2.6	340	2.9	292	3	9	146	120	345
145	17.9	322	2.7	212	3.0	151	3	9	137	94	219
146	19.6	119	2.6	340	2.9	292	1	9	144	118	308
147	19.4	140	2.6	340	2.9	292	5	8	140	110	249
148	17.5	364	2.7	212	3.0	151	1	9	137	94	281
149	18.5	263	2.7	212	2.9	292	3	9	137	98	247
150	22.0	15	2.7	212	3.0	151	7	6	148	107	208
151	21.9	17	2.8	84	3.0	151	7	6	146	113	120
152	19.0	191	2.7	212	2.9	292	3	9	143	123	318
153	20.1	81	2.8	84	3.0	151	3	9	144	120	305
154	20.0	88	2.7	212	2.9	292	3	9	145	120	250
155	19.0	191	2.7	212	2.9	292	5	9	141	111	205
156	18.1	303	2.7	212	3.0	151	3	7	136	106	285
157	17.4	370	2.9	24	3.2	14	3	7	136	110	318
158	17.3	375	2.7	212	3.0	151	5	7	137	106	290
159	16.9	389	2.9	24	3.1	48	3	8	137	103	328
160	17.9	322	2.7	212	2.9	292	5	8	141	107	280
161	17.2	380	2.7	212	3.0	151	3	9	138	110	390
162	19.2	161	2.6	340	2.9	292	5	6	141	107	258
163	20.4	64	2.7	212	2.9	292	7	9	140	87	232
164	19.7	112	2.6	340	2.9	292	5	8	149	120	192

Table 10. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Lincoln, Nebraska, USA in 1976. Continued.

Entry No.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade	Winter survival	Days to heading	Plant height	Yield
	%	rank	%	rank	%	rank	1-9	0-9	(from Jan. 1)	cm	g
165	17.5	364	2.6	340	2.9	292	5	9	139	117	270
166	18.4	274	2.6	340	2.8	376	5	8	143	117	249
167	17.5	364	2.7	212	2.9	292	5	6	138	100	156
168	18.5	263	2.7	212	3.0	151	5	9	143	113	303
169	18.6	249	2.7	212	3.0	151	5	8	143	118	375
170	18.7	234	2.6	340	2.9	292	5	6	136	93	158
171	19.1	175	2.7	212	2.9	292	5	6	136	96	290
172	18.8	210	2.6	340	2.9	292	5	5	135	95	292
173	16.8	391	2.6	340	2.9	292	3	7	134	96	260
174	18.9	206	2.9	84	3.0	151	5	8	139	100	288
175	18.3	285	2.6	340	2.9	292	5	5	140	110	203
176	18.0	312	2.8	84	3.1	48	5	9	143	117	314
177	18.1	303	2.7	212	2.9	292	3	9	136	100	295
178	17.9	322	2.8	84	3.1	48	5	9	138	110	260
179	19.4	142	2.7	212	2.9	292	5	7	139	101	198
180	17.2	380	2.8	84	3.0	151	5	9	136	111	430
181	18.7	234	2.6	340	2.9	292	5	5	140	106	227
182	20.1	81	2.6	340	2.9	292	7	1	145	93	56
183	17.3	375	2.7	212	3.0	151	5	9	142	106	445
184	17.2	380	2.7	212	3.0	151	3	9	142	106	346
185	17.6	358	2.7	212	3.0	151	3	9	142	112	325
186	17.5	364	2.7	212	2.9	292	5	9	143	106	249
187	18.2	296	2.7	212	3.0	151	5	9	143	104	220
188	18.1	303	2.7	212	2.9	292	5	9	142	112	280
189	18.2	296	2.8	84	3.1	48	5	9	143	105	273
190	18.7	234	2.7	212	3.0	151	7	9	143	109	226
191	19.2	161	2.7	212	3.0	151	5	9	142	120	271
192	19.3	150	2.6	340	2.8	376	7	8	145	120	204
193	19.3	128	2.7	212	2.9	292	3	8	144	126	312
194	20.3	71	2.6	340	2.8	376	5	9	146	115	205
195	20.1	81	2.7	212	2.9	292	5	9	144	119	263
196	19.0	191	2.7	212	2.9	292	5	7	142	116	265
197	19.5	128	2.8	84	3.0	151	7	6	142	106	350
198	18.6	249	2.7	212	3.0	151	5	2	141	100	92
199	18.1	303	2.8	84	3.0	151	7	2	140	105	312
200	19.1	175	2.8	84	3.0	151	7	3	141	106	212
Centurk	17.7	349	2.7	212	3.0	151	5	9	141	116	398
Lancota	18.7	234	2.6	340	2.8	376	5	8	143	120	420
CI13449	18.6	249	3.0	7	3.2	14	7	5	135	78	45
Bancotaya 1	18.2	296	2.6	340	2.8	376	5	3	242	97	182
205	17.9	322	2.7	212	3.0	151	5	3	139	97	330
206	19.2	161	2.7	212	3.0	151	5	3	139	90	221
207	19.3	150	2.7	212	2.9	292	5	7	142	107	260
208	20.7	50	2.7	212	3.0	151	7	8	146	116	148
209	20.1	81	2.6	340	2.8	376	5	8	150	127	230
210	19.8	104	2.6	340	2.9	292	3	9	143	123	236
211	21.3	27	2.6	340	2.9	292	5	9	144	123	274
212	21.3	27	2.6	340	2.8	376	5	8	145	128	190
213	20.1	81	2.7	212	2.9	292	3	9	144	127	235
214	20.6	56	2.5	392	2.7	397	5	8	146	119	239
215	18.5	263	2.7	212	2.9	292	5	7	141	131	229
216	18.9	206	2.6	340	2.8	376	5	9	142	124	293
217	18.5	263	2.6	340	2.9	292	5	8	141	126	286
218	17.6	358	2.8	84	3.1	48	3	9	134	119	290
219	19.2	161	2.7	212	3.0	151	5	9	144	123	295

Table 28. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Lincoln, Nebraska, USA in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade	Winter survival	Days to heading	Plant height	Yield
	%	rank	%	rank	%	rank	1-9	0-9	(from Jan. 1)	cm	g
220	19.5	128	2.6	340	2.9	292	5	9	143	116	258
221	18.3	285	2.7	212	2.9	292	5	9	138	105	234
222	18.2	296	2.7	212	2.9	292	5	7	136	100	249
223	18.3	285	2.5	392	2.8	376	5	9	143	110	277
224	18.4	274	2.5	392	2.8	376	5	8	144	112	537
225	19.1	175	2.6	340	2.8	376	5	9	144	112	317
226	20.6	56	2.7	212	2.9	292	5	9	147	120	257
227	19.8	104	2.6	340	2.9	292	5	8	148	113	226
228	18.5	263	2.6	340	2.9	292	5	9	138	100	212
229	18.7	234	2.6	340	2.9	292	5	9	144	110	302
230	17.0	385	2.7	212	2.9	292	5	7	138	106	233
231	16.9	389	2.7	212	2.9	292	3	7	136	100	283
232	17.7	349	2.8	84	3.0	151	5	7	134	100	237
233	17.7	349	2.7	212	3.0	151	5	9	142	115	369
234	17.0	385	2.7	212	3.0	151	5	7	137	118	245
235	19.9	96	2.7	212	2.9	292	5	8	142	130	279
236	17.4	370	2.6	340	2.9	292	3	7	137	119	256
237	17.0	385	2.7	212	2.9	292	3	7	136	112	328
238	18.3	285	2.8	84	3.1	48	3	6	138	109	301
239	18.0	312	2.7	212	2.9	292	3	6	141	106	336
240	18.2	296	2.6	340	2.8	376	3	6	141	109	311
241	18.3	285	2.8	84	3.0	151	3	3	139	106	277
242	20.0	88	2.6	340	2.9	292	5	9	148	121	313
243	19.5	128	2.6	340	2.9	292	5	3	144	100	116
244	19.0	191	2.9	24	3.1	48	5	8	145	99	239
245	18.8	220	2.7	212	3.0	151	5	8	138	94	309
246	17.8	335	2.7	212	3.0	151	5	7	135	93	259
247	19.9	96	2.6	340	2.9	292	5	9	143	116	276
248	18.4	274	2.6	340	2.9	292	5	8	141	117	294
249	21.6	19	2.8	84	3.0	151	7	9	148	110	187
250	18.4	274	2.7	212	3.0	151	5	8	137	104	243
251	17.7	349	2.8	84	3.1	48	5	9	137	107	189
252	16.7	393	2.9	24	3.1	48	5	9	138	108	337
253	16.1	396	2.8	84	3.0	151	3	9	139	104	335
254	18.8	220	2.7	212	3.0	151	7	8	140	103	184
255	19.9	96	2.7	212	2.9	292	3	7	141	117	330
256	19.0	191	2.7	212	2.9	292	5	6	146	122	217
257	18.4	274	2.6	340	2.8	376	3	6	141	118	320
258	18.0	312	2.7	212	2.9	292	5	4	139	96	199
259	17.9	322	2.5	392	2.8	376	3	3	139	100	250
260	17.4	370	2.7	212	2.9	292	5	3	138	95	263
261	18.0	312	2.6	340	2.9	292	3	3	138	97	309
262	17.8	335	2.6	340	2.9	292	5	2	138	96	264
263	18.2	296	2.5	392	2.8	376	3	2	141	97	235
264	18.3	285	2.7	212	3.0	151	5	3	137	97	294
265	17.8	335	2.7	212	3.0	151	5	3	138	102	261
266	17.8	335	2.7	212	3.0	151	5	3	138	100	215
267	18.1	303	2.7	212	3.0	151	5	8	138	123	250
268	20.9	43	2.6	340	2.8	376	5	9	147	127	262
269	18.6	249	2.8	84	3.0	151	5	8	139	120	510
270	19.7	112	2.6	340	2.9	292	7	7	141	118	235
271	20.9	43	2.7	212	2.9	292	7	9	141	105	194
272	21.1	35	2.7	212	3.0	151	7	8	145	116	287
273	17.7	349	2.7	212	3.0	151	3	3	141	100	154
274	19.4	140	2.8	84	3.0	151	3	7	138	109	290

Table 28. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Lincoln, Nebraska, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Winter survival 0-9	Days to heading from Jan. 1	Plant height cm	Yield g
275	18.8	220	2.8	84	3.0	151	3	8	146	119	268
276	19.5	128	2.7	212	2.9	292	5	8	146	110	246
277	17.9	322	2.7	212	3.0	151	3	8	137	107	240
278	19.1	175	2.7	212	3.0	151	5	7	139	110	201
279	20.0	88	2.7	212	3.0	151	5	9	145	117	251
280	19.5	128	2.7	212	2.9	292	3	7	145	117	305
281	16.5	394	2.9	24	3.2	14	5	6	138	94	228
282	17.7	349	2.7	212	3.0	151	5	5	142	110	156
283	19.7	112	2.7	212	3.0	151	5	5	145	110	240
284	20.3	71	2.7	212	3.0	151	5	8	146	115	262
285	19.5	128	2.6	340	2.9	292	5	8	144	115	220
286	19.5	128	2.7	212	3.0	151	5	6	141	106	173
287	19.7	112	2.7	212	3.0	151	5	7	145	112	213
288	20.3	71	2.8	84	3.0	151	7	9	146	120	223
289	19.0	191	2.8	84	3.1	48	5	9	144	124	231
290	20.0	88	2.8	84	3.0	151	7	9	146	120	186
291	18.9	206	2.6	340	2.9	292	5	9	146	120	284
292	17.7	349	2.9	24	3.2	14	5	6	140	100	136
293	17.0	385	3.1	3	3.4	2	3	6	139	104	316
294	17.8	335	2.8	84	3.0	151	5	5	139	99	202
295	18.6	249	2.8	84	3.0	151	5	8	144	119	234
296	19.8	104	2.7	212	2.9	292	5	7	142	115	206
297	19.1	175	2.9	24	3.2	14	7	9	141	108	146
298	17.8	335	2.5	392	2.8	376	5	9	141	110	329
299	18.6	249	2.8	84	3.1	48	5	9	138	101	229
300	17.6	358	2.8	84	3.0	151	5	9	139	100	275
Centurk	17.8	335	3.0	7	3.2	14	5	9	141	109	274
Lancota	18.4	274	2.7	212	3.0	151	3	8	142	119	417
C113449	18.8	220	3.2	1	3.4	2	7	7	154	78	34
Bezostaya 1	17.8	335	2.6	340	2.9	292	3	2	142	99	46
305	18.2	296	2.9	24	3.1	48	7	9	141	93	329
306	18.6	249	2.6	340	2.9	292	5	8	141	110	264
307	18.6	249	2.6	340	2.9	292	3	7	140	116	297
308	17.8	335	2.7	212	3.0	151	7	9	141	105	306
309	17.2	380	2.8	84	3.1	48	3	6	136	103	223
310	18.6	249	2.7	212	3.0	151	3	5	136	105	238
311	19.1	175	2.8	84	3.1	48	5	7	137	94	290
312	20.6	56	2.6	340	2.9	292	3	4	138	115	200
313	18.8	220	2.7	212	3.0	151	3	4	136	107	287
314	18.5	263	2.7	212	3.0	151	3	3	141	101	238
315	19.3	150	2.7	212	3.0	151	3	2	141	100	191
316	19.2	161	2.8	84	3.0	151	3	3	140	99	280
317	19.0	191	2.7	212	3.0	151	3	3	141	100	263
318	18.9	206	2.7	212	3.0	151	1	2	141	98	183
319	19.1	175	2.7	212	3.0	151	3	2	141	97	285
320	19.3	150	2.7	212	3.0	151	3	1	122	96	168
321	19.4	140	2.7	212	3.0	151	3	3	121	96	284
322	18.9	206	2.7	212	3.0	151	3	2	121	95	170
323	18.9	206	2.7	212	3.0	151	3	2	121	94	190
324	17.4	370	2.9	24	3.2	14	3	9	134	97	307
325	17.3	375	2.8	84	3.0	151	3	8	136	101	333
326	18.9	206	2.8	84	3.0	151	3	7	141	103	257
327	18.5	263	2.7	212	2.9	292	5	8	139	93	264
328	17.7	349	2.9	24	3.1	48	5	7	139	107	210
329	20.3	71	2.8	84	3.0	151	7	9	146	104	183

Table 28. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Lincoln, Nebraska, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Winter survival 0-9	Days to heading from Jan. 1	Plant height cm	Yield g
330	19.5	128	2.6	340	2.9	292	5	7	140	108	323
331	17.7	349	2.7	212	3.0	151	3	7	138	107	331
332	17.7	349	2.8	84	3.0	151	3	7	140	104	312
333	18.3	285	2.8	84	3.1	48	5	6	138	103	201
334	17.3	375	2.8	84	3.1	48	3	8	140	104	283
335	17.9	322	2.8	84	3.0	151	5	7	141	108	239
336	18.7	234	2.7	212	3.0	151	3	8	139	109	283
337	18.4	174	2.7	212	3.0	151	3	7	139	108	229
338	19.7	112	2.9	24	3.2	14	7	8	141	107	145
339	19.6	119	2.8	84	3.1	48	5	8	142	110	194
340	18.9	206	2.8	84	3.1	48	5	8	139	103	257
341	19.2	161	2.8	84	3.1	48	5	7	138	103	230
342	19.6	104	2.7	212	2.9	292	5	7	140	100	203
343	18.4	274	2.7	212	2.9	292	5	7	137	104	258
344	19.5	128	2.7	212	3.0	151	3	9	140	100	281
345	19.3	150	2.9	24	3.1	48	7	7	140	100	225
346	18.0	312	2.8	84	3.1	48	3	8	138	100	237
347	18.3	285	2.8	84	3.1	48	5	8	138	99	229
348	17.9	322	2.6	340	2.9	292	5	7	138	101	255
349	19.9	96	2.8	84	3.1	48	7	9	144	100	272
350	18.8	220	2.8	84	3.1	48	3	7	141	102	268
351	21.8	18	2.6	340	2.8	376	7	7	146	120	256
352	20.9	43	2.7	212	2.9	292	7	9	149	112	207
353	20.7	50	2.7	212	3.0	151	7	7	141	105	177
354	20.8	46	2.6	340	2.9	292	5	9	142	116	363
355	17.2	380	2.8	84	3.0	151	5	4	139	110	190
356	14.8	398	3.1	3	3.3	5	3	4	136	106	240
357	17.5	364	2.8	84	3.1	48	3	4	136	87	219
358	17.4	370	2.7	212	2.9	292	3	5	141	108	250
359	16.9	389	2.7	212	3.0	151	3	5	136	100	229
360	17.5	364	2.9	24	3.1	48	5	9	137	88	251
361	19.3	150	2.7	212	2.9	292	5	9	148	109	265
362	19.7	112	2.6	340	2.9	292	5	9	149	110	247
363	19.0	191	2.6	340	2.8	376	3	8	146	111	271
364	18.3	285	2.7	212	2.9	292	5	3	135	89	220
365	19.1	173	2.7	212	3.0	151	3	3	141	96	269
366	19.3	150	2.7	212	3.0	151	3	1	141	96	178
367	18.9	206	2.9	24	3.2	14	3	1	141	95	233
368	19.3	150	2.7	212	3.0	151	3	1	141	95	241
369	18.7	234	2.7	212	3.0	151	1	2	141	95	287
370	19.1	173	2.7	212	3.0	151	3	2	141	95	242
371	18.8	220	2.9	24	3.1	48	3	2	138	97	247
372	19.1	175	2.8	84	3.0	151	3	4	140	96	336
373	17.8	335	2.9	24	3.1	48	3	3	141	96	285
374	18.4	274	2.8	84	3.0	151	1	2	141	97	225
375	18.9	206	2.7	212	3.0	151	1	2	141	97	243
376	19.1	175	2.7	212	3.0	151	1	2	141	95	229
377	19.1	175	2.7	212	3.0	151	1	2	141	95	272
378	18.7	234	2.8	84	3.1	48	3	2	141	95	180
379	18.8	220	2.7	212	3.0	151	3	2	141	94	199

Table 28. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Lincoln, Nebraska, USA in 1976. Concluded.

Entry No.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Winter survival 0-9	Days to heading from Jan. 1	Plant height cm	Yield g
380	18.6	249	2.8	84	3.1	48	1	2	141	94	264
381	18.3	285	2.8	84	3.0	151	3	2	141	94	318
382	18.6	249	2.8	84	3.0	151	3	1	141	93	153
383	18.7	234	2.8	84	3.0	151	1	2	141	96	254
384	18.6	249	2.8	84	3.0	151	1	2	140	97	323
385	18.6	249	2.8	84	3.1	48	3	2	140	97	263
386	18.5	263	2.8	84	3.1	48	3	2	141	96	166
387	17.8	335	3.0	7	3.2	14	5	9	137	103	333
388	18.3	285	2.9	24	3.2	14	5	9	138	107	277
389	19.6	119	2.7	212	3.0	151	5	9	145	111	214
390	20.1	81	2.6	340	2.9	292	5	8	141	113	257
391	20.4	64	2.6	340	2.9	292	5	8	140	112	194
392	21.1	35	2.9	24	3.1	48	5	9	146	116	294
393	21.5	21	2.7	212	2.9	292	5	9	145	112	219
394	21.1	35	2.8	84	3.0	151	5	9	144	112	261
395	20.6	56	2.7	212	3.0	151	5	9	146	109	250
396	20.5	60	2.7	212	3.0	151	5	8	146	108	205
397	20.0	88	2.6	340	2.9	292	5	9	145	106	228
398	21.4	23	2.8	84	3.0	151	5	8	145	100	178
Centurk	17.6	358	2.7	212	3.0	151	5	9	142	109	288
Lancota	18.6	249	2.6	340	2.9	292	3	8	144	120	429
CI13449	19.0	191	3.1	3	3.4	2	7	5	154	73	42
Bonostaya 1	17.5	364	2.7	212	2.9	292	5	2	142	92	92
Overall mean	19.1		2.7		3.0		4.5	7.1	141.1	108.7	246.7

Correlation Coefficients

Protein	- .31**	- .35**
Lysine/protein		.89**

** Significant at the P=.01 level.

Means of the check varieties

Bonostaya 1	17.8	2.64	2.90
Centurk	17.9	2.76	3.00
CI13449	19.0	3.04	3.30
Lancota	18.6	2.64	2.88
Check mean	18.3	2.77	3.02
$LSD_{.05}$ of check means	0.4	0.12	0.11
Coefficient of variation %	1.5	3.23	2.72

Table 29. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Stillwater, Oklahoma, USA in 1976.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade	Yield[1]	Plant height
	%	rank	%	rank	%	rank	1-9	g	cm
Centurk	17.7	303	2.7	92	2.9	151	3	260	72
Lancota	19.0	139	2.5	297	2.8	261	3	230	75
CI13449	16.8	370	2.9	16	3.2	11	4	40	63
Bezostaya 1	18.6	200	2.7	92	3.0	59	3	120	52
5	19.1	128	2.9	16	3.1	21	5	115	73
6	17.2	348	2.7	92	3.0	59	4	175	69
7	16.2	245	2.9	16	3.2	11	4	180	65
8	17.6	315	2.7	92	3.0	59	4	205	68
9	17.6	315	2.7	92	3.0	59	4	205	68
10	17.2	348	2.9	16	3.1	21	4	230	64
11	21.7	3	2.3	395	2.5	401	4	130	73
12	21.5	5	2.5	297	2.8	261	5	175	80
13	21.0	12	2.7	92	3.0	59	5	150	73
14	15.3	402	2.9	16	3.1	21	3	265	71
15	17.5	322	2.8	32	3.0	59	3	220	72
16	16.7	373	2.8	32	3.0	59	4	245	77
17	18.0	265	2.5	297	2.8	261	4	190	77
18	16.8	370	2.8	32	3.1	21	4	185	78
19	19.8	68	2.7	92	3.0	59	4	90	71
20	19.5	91	2.7	92	3.0	59	4	155	73
21	20.0	47	2.6	193	2.8	261	4	190	82
22	18.2	245	2.7	92	3.0	59	4	170	77
23	18.5	210	2.6	193	2.8	261	4	165	77
24	19.0	139	2.8	32	3.1	21	4	220	78
25	19.9	57	2.5	297	2.7	346	3	180	64
26	17.6	315	2.7	92	3.0	59	3	220	70
27	17.9	276	2.8	32	3.0	59	3	220	86
28	17.8	288	2.8	32	3.0	59	3	155	77
29	17.7	303	2.7	92	2.9	151	4	255	86
30	19.8	68	3.1	2	3.4	1	5	35	70
31	16.2	390	3.1	2	3.3	5	4	85	73
32	17.2	348	3.0	8	3.3	5	4	125	69
33	18.7	184	3.0	8	3.3	5	4	80	64
34	16.9	366	3.1	2	3.4	1	4	80	64
35	19.0	139	2.7	92	3.0	59	4	220	65
36	19.0	139	2.5	297	2.8	261	4	200	76
37	19.3	107	2.7	92	2.9	151	5	185	74
38	19.9	57	2.5	297	2.8	261	5	210	71
39	18.6	200	2.7	92	2.9	151	5	160	75
40	17.8	288	2.5	297	2.8	261	5	210	68
41	18.0	265	2.6	193	2.9	151	4	190	71
42	18.0	265	2.5	297	2.8	261	4	175	63
43	20.0	47	2.5	297	2.8	261	4	180	70
44	12.0	12	2.4	368	2.6	389	4	130	71
45	20.3	28	2.6	193	2.8	261	4	175	76
46	20.0	47	2.5	297	2.7	346	4	190	73
47	19.0	139	2.5	297	2.7	346	4	170	74
48	18.6	200	2.4	368	2.7	346	4	220	73
49	18.3	231	2.5	297	2.8	261	3	185	74
50	19.8	68	2.7	92	2.9	151	5	220	69

[1] Yields based on 8 ft^2.

Table 29. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Stillwater, Oklahoma, USA in 1976. Continued.

Entry No.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm
51	19.8	68	2.6	193	2.9	151	5	175	69
52	20.0	47	2.5	297	2.8	261	3	215	76
53	20.7	17	2.6	193	2.9	151	3	205	76
54	19.0	139	2.4	368	2.7	346	4	180	68
55	18.9	153	2.4	368	2.7	346	5	185	65
56	19.3	107	2.5	297	2.8	261	5	190	69
57	18.9	153	2.5	297	2.7	346	5	160	69
58	17.6	315	2.5	297	2.8	261	4	180	78
59	17.8	288	2.5	297	2.7	346	4	240	75
60	19.6	84	2.4	368	2.7	346	4	145	80
61	17.5	322	2.5	297	2.8	261	4	165	66
62	19.4	98	2.5	297	2.7	346	4	190	55
63	19.1	128	2.4	368	2.7	346	4	185	58
64	19.0	139	2.5	297	2.7	346	4	195	60
65	19.2	120	2.6	193	2.9	151	4	155	77
66	19.6	84	2.4	368	2.7	346	4	160	60
67	21.3	7	2.4	368	2.7	346	4	130	67
68	21.6	4	2.6	193	2.8	261	4	90	50
69	19.9	57	2.5	297	2.8	261	4	100	54
70	21.1	10	2.4	368	2.6	389	4	115	60
71	18.2	243	2.7	92	2.9	151	4	180	65
72	18.6	200	2.6	193	2.9	151	4	170	67
73	18.3	231	2.6	193	2.9	151	4	220	70
74	18.2	245	2.7	92	2.9	151	4	200	65
75	18.9	153	2.6	193	2.8	261	4	245	65
76	18.1	255	2.7	92	3.0	59	4	105	78
77	20.2	34	2.6	193	2.9	151	4	130	77
78	19.8	68	2.6	193	2.9	151	4	160	78
79	20.0	47	2.6	193	2.9	151	3	135	75
80	19.5	91	2.7	92	3.0	59	5	205	78
81	20.1	40	2.6	193	2.9	151	5	210	75
82	20.2	34	2.7	92	2.9	151	5	195	74
83	18.7	184	2.8	32	3.0	59	4	190	75
84	18.6	200	3.0	8	3.2	11	4	205	78
85	16.7	373	2.9	16	3.1	21	4	210	77
86	20.2	34	2.5	297	2.7	346	6	175	75
87	19.2	120	2.7	92	3.0	59	5	135	70
88	17.7	303	2.5	297	2.8	261	5	170	76
89	18.1	255	2.5	297	2.8	261	5	135	75
90	17.7	303	2.6	193	2.9	151	4	170	86
91	18.1	255	2.5	297	2.8	261	4	220	74
92	16.8	370	2.7	92	3.0	59	3	260	75
93	17.1	356	2.5	297	2.8	261	3	230	77
94	16.5	378	2.6	193	2.8	261	3	285	70
95	18.9	153	2.5	297	2.8	261	3	165	60
96	18.2	245	2.5	297	2.8	261	3	190	66
97	20.2	34	2.6	193	2.8	261	4	180	60
98	20.4	23	2.6	193	2.8	261	4	180	63
99	21.2	9	2.5	297	2.7	346	3	145	63
100	21.3	7	2.6	193	2.8	261	4	140	68
Centurk	17.2	348	2.6	193	2.9	151	3	240	70
Lancota	18.0	265	2.5	297	2.7	346	4	230	77
CI13449	15.8	400	3.0	8	3.2	11	4	75	62
Bezostaya 1	16.5	378	2.7	92	2.9	151	2	180	60
105	16.0	397	2.6	193	2.9	151	2	355	72

Table 29. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Stillwater, Oklahoma, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm
106	19.0	139	2.7	92	3.0	59	4	180	78
107	17.7	303	2.6	193	2.9	151	4	190	68
108	18.9	153	2.5	297	2.8	261	4	175	73
109	18.5	210	2.5	297	2.7	346	4	170	72
110	21.0	12	2.4	368	2.7	346	4	145	77
111	20.3	28	2.5	297	2.7	346	3	160	70
112	19.1	128	2.5	297	2.8	261	3	155	75
113	17.9	276	2.5	297	2.8	261	2	175	64
114	17.9	276	2.7	92	3.0	59	3	140	75
115	17.5	322	2.7	92	2.9	151	2	240	83
116	17.7	303	2.7	92	3.0	59	3	155	55
117	17.6	315	2.5	297	2.8	261	3	240	80
118	17.2	348	2.5	297	2.7	346	2	190	84
119	16.4	383	2.5	297	2.8	261	3	215	83
120	18.5	210	2.4	368	2.7	346	3	170	77
121	18.5	210	2.5	297	2.7	346	2	190	70
122	19.4	98	2.5	297	2.7	346	3	175	69
123	20.9	14	2.4	368	2.6	389	3	165	73
124	20.4	23	2.6	193	2.9	151	3	100	65
125	20.5	19	2.6	193	2.8	261	3	115	67
126	17.3	341	2.6	193	2.9	151	2	235	75
127	18.8	167	2.4	368	2.7	346	4	205	76
128	18.7	184	2.4	368	2.7	346	4	225	80
129	19.0	139	2.4	368	2.7	346	3	225	70
130	18.3	231	2.7	92	3.0	59	3	255	81
131	17.1	356	2.7	92	3.0	59	4	245	76
132	17.4	331	2.5	297	2.8	261	4	205	77
133	17.4	331	2.7	92	3.0	59	3	205	82
134	18.3	231	2.7	92	3.0	59	2	285	84
135	20.0	47	2.6	193	2.8	261	3	160	70
136	18.8	167	2.6	193	2.9	151	3	190	68
137	17.8	288	2.7	92	3.0	59	3	230	76
138	16.4	383	2.8	32	3.1	21	3	280	76
139	17.4	331	2.7	92	3.0	59	3	290	78
140	18.0	265	2.7	92	2.9	151	3	265	75
141	18.4	219	2.5	297	2.8	261	3	155	67
142	18.7	184	2.6	193	2.9	151	3	170	63
143	17.9	276	2.6	193	2.9	151	3	225	60
144	17.3	341	2.7	92	3.0	59	3	200	75
145	17.9	276	2.7	92	3.0	59	2	185	56
146	17.4	331	2.7	92	2.9	151	3	210	68
147	18.5	210	2.5	297	2.7	346	3	170	69
148	18.4	219	2.5	297	2.7	346	3	165	54
149	18.8	167	2.3	395	2.6	389	4	185	58
150	18.5	231	2.7	92	2.9	151	4	205	77
151	18.2	245	2.8	32	3.0	59	4	170	76
152	17.7	303	2.7	92	3.0	59	3	215	80
153	18.3	231	2.7	92	2.9	151	3	200	73
154	18.2	245	2.6	193	2.9	151	3	215	75
155	18.7	184	2.6	193	2.8	261	3	215	68
156	18.8	167	2.8	32	3.0	59	4	135	65
157	19.2	120	2.7	92	3.0	59	4	170	63
158	18.3	231	2.6	193	2.9	151	4	185	70
159	18.3	231	2.7	92	2.9	151	4	175	62
160	19.6	84	2.5	297	2.8	261	5	230	65

Table 29. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Stillwater, Oklahoma, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm
161	19.3	107	2.6	193	2.9	151	5	165	57
162	18.7	184	2.6	193	2.8	261	4	235	69
163	18.8	167	2.7	92	3.0	59	4	250	73
164	17.9	276	2.6	193	2.9	151	5	220	80
165	17.0	361	2.6	193	2.9	151	4	220	77
166	17.3	341	2.6	193	2.9	151	4	305	80
167	16.4	383	2.7	92	2.9	151	4	135	60
168	17.4	331	2.6	193	2.9	151	4	315	72
169	18.8	167	2.5	297	2.7	346	4	270	73
170	22.2	1	2.4	368	2.6	389	6	90	52
171	18.9	153	2.5	297	2.7	346	4	170	64
172	18.5	210	2.5	297	2.8	261	5	115	65
173	18.0	265	2.5	297	2.8	261	4	140	65
174	17.7	303	2.7	92	2.9	151	4	200	65
175	19.5	91	2.6	193	2.8	261	4	230	78
176	18.6	200	2.6	193	2.9	151	4	215	82
177	20.0	47	2.7	92	2.9	151	4	170	64
178	19.2	120	2.6	193	2.9	151	4	175	66
179	19.6	84	2.7	92	2.9	151	5	115	60
180	18.7	184	2.5	297	2.8	261	4	175	60
181	17.0	361	2.6	193	2.9	151	3	160	62
182	16.1	393	2.8	32	3.0	59	4	210	64
183	16.5	378	2.8	32	3.0	59	4	220	74
184	16.9	366	2.8	32	3.0	59	4	215	75
185	17.4	331	2.5	297	2.8	261	4	205	76
186	17.7	303	2.6	193	2.9	151	4	210	78
187	17.4	331	2.8	32	3.0	59	4	235	74
188	18.2	245	2.6	193	2.8	261	4	190	78
189	18.4	219	2.6	193	2.9	151	4	200	74
190	18.9	153	2.6	193	2.9	151	4	205	75
191	18.9	153	2.7	92	2.9	151	4	165	80
192	18.7	184	2.5	297	2.7	346	4	225	86
193	18.9	153	2.5	297	2.8	261	4	240	86
194	19.4	98	2.5	297	2.8	261	4	155	85
195	20.1	40	2.5	297	2.7	346	4	190	84
196	19.9	57	2.6	193	2.9	151	4	150	70
197	20.4	23	2.7	92	2.9	151	4	165	75
198	18.1	255	2.6	193	2.9	151	4	180	68
199	19.7	78	2.6	193	2.8	261	4	170	73
200	17.8	288	2.6	193	2.9	151	4	210	75
Centurk	16.7	373	2.6	193	2.9	151	3	410	78
Lancota	17.1	356	2.5	297	2.8	261	3	245	86
CI13449	15.9	399	3.0	8	3.3	5	4	100	70
Bezostaya 1	16.3	387	3.0	8	3.3	5	3	270	68
205	18.2	245	2.7	92	3.0	59	4	220	75
206	17.6	315	2.5	297	2.8	261	4	205	66
207	18.6	200	2.6	193	2.9	151	4	155	78
208	16.9	366	2.7	92	3.0	59	4	200	88
209	16.9	366	2.7	92	2.9	151	3	220	86
210	17.1	356	2.5	297	2.8	261	3	185	83
211	17.9	276	2.6	193	2.8	261	3	210	93
212	18.8	167	2.6	193	2.9	151	3	170	90
21	19.0	139	2.6	193	2.8	261	3	200	85
214	19.0	139	2.6	193	2.9	151	3	140	85
215	17.4	331	2.5	297	2.8	261	3	245	88

Table 29. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Stillwater, Oklahoma, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm
216	17.3	341	2.5	297	2.7	346	3	250	86
217	17.8	288	2.3	395	2.6	389	2	285	88
218	18.0	265	2.5	297	2.8	261	3	220	87
219	17.4	331	2.6	193	2.8	261	3	210	85
220	18.9	153	2.5	297	2.8	261	3	250	88
221	18.0	265	2.7	92	3.0	59	3	170	66
222	18.1	255	2.8	32	3.0	59	3	220	64
223	16.3	387	2.6	193	2.9	151	2	235	76
224	16.0	397	2.6	193	2.9	151	2	300	75
225	16.4	383	2.6	193	2.9	151	2	240	78
226	18.3	231	2.8	32	3.1	21	2	190	74
227	18.3	231	2.7	92	3.0	59	2	225	78
228	19.2	120	2.7	92	3.0	59	3	150	60
229	18.2	245	2.7	92	2.9	151	2	265	78
230	18.3	231	2.6	193	2.8	261	3	225	68
231	18.8	167	2.7	92	3.0	59	3	175	70
232	19.7	78	2.6	193	2.9	151	3	155	64
233	19.3	107	2.7	92	2.9	151	3	275	85
234	17.9	276	2.7	92	2.9	151	2	225	77
235	19.3	107	2.5	297	2.8	261	3	295	90
236	17.8	288	2.5	297	2.8	261	2	205	72
237	17.8	288	2.7	92	3.0	59	2	165	73
238	19.5	91	2.6	193	2.8	261	2	155	62
239	18.2	245	2.4	368	2.7	346	2	240	71
240	18.3	231	2.4	368	2.7	346	2	210	69
241	17.9	276	2.6	193	2.8	261	2	180	65
242	18.2	245	2.5	297	2.8	261	2	195	83
243	17.3	341	2.5	297	2.8	261	3	215	66
244	16.3	387	2.5	297	2.7	346	3	185	78
245	17.9	276	2.5	297	2.8	261	2	175	66
246	16.9	366	2.6	193	2.8	261	2	185	67
247	18.7	184	2.3	395	2.6	389	3	225	78
248	17.1	356	2.4	368	2.7	346	3	230	78
249	18.5	210	2.2	402	2.5	401	2	215	89
250	18.8	167	2.3	395	2.6	389	3	205	62
251	18.4	219	2.3	395	2.6	389	3	190	62
252	17.7	303	2.6	193	2.9	151	3	215	69
253	16.5	378	2.5	297	2.8	261	4	220	70
254	18.6	200	2.5	297	2.7	346	3	170	69
255	19.7	78	2.3	395	2.5	401	2	170	72
256	17.2	348	2.3	395	2.6	389	3	220	81
257	17.6	315	2.3	395	2.6	389	3	190	72
258	18.4	219	2.4	368	2.7	346	3	170	63
259	17.7	303	2.3	395	2.6	389	2	190	66
260	17.7	303	2.6	193	2.9	151	2	170	65
261	17.5	322	2.4	368	2.6	389	2	230	65
262	17.5	322	2.4	368	2.7	346	2	235	67
263	17.3	341	2.3	395	2.6	389	2	220	68
264	18.4	219	2.5	297	2.7	346	2	175	64
265	18.0	265	2.4	368	2.7	346	2	210	73
266	16.5	378	2.7	92	2.9	151	2	215	60
267	17.2	348	2.7	92	2.9	151	2	220	85
268	18.8	167	2.3	395	2.6	389	3	255	88
269	18.4	219	2.4	368	2.7	346	3	150	73
270	19.0	139	2.4	368	2.7	346	3	185	72

Table 29. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Stillwater, Oklahoma, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm
271	20.3	28	2.5	297	2.7	346	4	130	65
272	17.8	288	2.4	368	2.6	389	3	255	87
273	16.4	383	2.9	16	3.1	21	4	190	65
274	17.9	276	2.4	368	2.7	346	4	200	76
275	17.4	331	2.5	297	2.7	346	4	245	83
276	18.7	184	2.5	297	2.8	261	4	230	76
277	17.2	348	2.4	368	2.7	346	4	205	77
278	17.1	356	2.4	368	2.7	346	4	225	75
279	17.7	303	2.7	92	2.9	131	4	265	80
280	17.1	356	2.6	193	2.8	261	4	240	78
281	17.4	331	2.6	193	2.9	131	4	115	51
282	17.4	331	2.4	368	2.6	389	4	195	73
283	17.0	361	2.5	297	2.7	346	4	225	62
284	17.3	322	2.4	368	2.7	346	4	215	73
285	17.8	288	2.5	297	2.7	346	4	185	69
286	19.7	78	2.4	368	2.7	346	4	185	64
287	18.4	219	2.4	368	2.6	389	4	205	73
288	18.9	153	2.6	193	2.9	131	4	210	80
289	17.8	288	2.7	92	3.0	39	4	210	76
290	18.6	200	2.8	32	3.0	39	4	205	83
291	18.0	265	2.6	193	2.9	131	4	245	80
292	19.0	139	2.7	92	3.0	39	4	140	66
293	19.3	107	2.5	297	2.8	261	4	185	65
294	18.3	231	2.5	297	2.8	261	4	205	62
295	18.6	200	2.6	193	2.9	131	3	210	78
296	17.8	288	2.5	297	2.8	261	2	315	76
297	17.8	288	2.6	193	2.8	261	3	245	72
298	18.5	210	2.5	297	2.7	346	3	285	74
299	19.2	120	2.5	297	2.7	346	3	230	64
300	18.7	184	2.5	297	2.8	261	3	255	67
Centurk	17.7	303	2.5	297	2.7	346	4	320	75
Lancota	19.5	91	2.4	368	2.7	346	4	205	83
CI13449	15.6	401	3.1	2	3.3	5	4	75	64
Bezostaya 1	18.2	245	2.5	297	2.7	346	3	180	64
305	18.3	231	2.6	193	2.9	131	4	225	67
306	19.1	128	2.5	297	2.8	261	4	240	77
307	20.0	47	2.5	297	2.8	261	4	235	78
308	20.2	34	2.6	193	2.9	131	4	160	70
309	19.4	98	2.9	16	3.2	11	4	135	63
310	19.2	120	2.7	92	2.9	131	3	180	62
311	18.1	255	2.6	193	2.9	131	3	255	73
312	20.2	34	2.6	193	2.8	261	3	185	84
313	18.7	184	2.7	92	2.9	131	4	210	63
314	20.8	13	2.6	193	2.8	261	4	170	66
315	19.7	78	2.7	92	3.0	39	3	160	63
316	19.9	57	2.7	92	2.9	131	3	185	65
317	19.4	98	2.7	92	2.9	131	3	170	64
318	18.8	167	2.7	92	3.0	39	3	200	64
319	18.1	255	2.7	92	2.9	131	3	245	63
320	19.0	139	2.8	32	3.1	21	3	190	63
321	19.0	139	2.7	92	2.9	131	3	205	62
322	19.8	68	2.7	92	2.9	131	3	190	63
323	19.2	120	2.7	92	3.0	39	3	175	64
324	20.2	34	2.7	92	2.9	131	3	135	63
325	19.6	84	2.6	193	2.8	261	4	140	62

Table 29. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Stillwater, Oklahoma, USA in 1976. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade	Yield	Plant height
	%	rank	%	rank	%	rank	1-9	g	cm
326	21.9	2	2.7	92	2.9	151	4	135	67
327	19.8	68	2.5	297	2.8	261	4	160	66
328	17.8	288	2.6	193	2.8	261	4	200	68
329	18.3	231	2.6	193	2.9	151	4	180	78
330	20.3	28	2.3	395	2.6	389	4	230	75
331	19.2	120	2.6	193	2.8	261	3	165	70
332	18.7	184	2.5	297	2.8	261	4	225	74
333	19.8	68	2.6	193	2.8	261	4	130	67
334	19.2	120	2.6	193	2.9	151	4	185	68
335	19.2	120	2.5	297	2.8	261	4	185	74
336	18.9	153	2.6	193	2.9	151	3	195	83
337	18.5	210	2.5	297	2.7	346	3	200	80
338	20.0	47	2.7	92	2.9	151	3	135	78
339	20.0	47	2.6	193	2.9	151	3	125	74
340	18.6	200	2.6	193	2.9	151	4	175	65
341	19.2	120	2.4	368	2.7	346	3	115	58
342	21.4	6	2.4	368	2.6	389	3	135	69
343	19.7	78	2.5	297	2.8	261	4	130	65
344	20.8	15	2.6	193	2.8	261	3	105	66
345	19.7	78	2.6	193	2.9	151	4	185	63
346	20.1	40	2.5	297	2.8	261	4	165	64
347	20.1	40	2.5	297	2.7	346	4	190	62
348	18.7	184	2.4	368	2.7	346	4	180	63
349	20.4	23	2.5	297	2.8	261	3	190	70
350	19.8	68	2.5	297	2.8	261	4	155	68
351	18.7	184	2.5	297	2.8	261	3	270	80
352	17.0	361	2.7	92	2.9	151	4	225	75
353	17.5	322	2.4	368	2.7	346	3	175	68
354	20.1	40	2.5	297	2.8	261	4	285	80
355	17.3	341	2.6	193	2.9	151	4	155	59
356	17.7	303	2.6	193	2.9	151	4	145	65
357	19.8	68	2.5	297	2.7	346	4	105	60
358	17.7	303	2.4	368	2.7	346	4	190	66
359	18.4	219	2.5	297	2.8	261	4	160	62
360	18.0	265	2.6	193	2.9	151	4	135	56
361	16.1	393	2.7	92	2.9	151	4	195	83
362	16.3	387	2.9	16	3.1	21	4	210	82
363	16.2	390	2.7	92	2.9	151	4	185	84
364	18.8	167	2.5	297	2.8	261	2	115	63
365	18.7	184	2.7	92	3.0	59	2	215	65
366	18.7	184	2.6	193	2.9	151	2	190	64
367	18.8	167	2.5	297	2.8	261	2	190	65
368	18.7	184	2.6	193	2.9	151	2	215	65
369	19.3	107	2.6	193	2.9	151	2	205	66
370	19.0	139	2.8	32	3.0	59	2	210	68
371	19.5	91	2.6	193	2.9	151	2	140	63
372	19.9	57	2.7	92	2.9	151	2	155	62
373	19.8	68	2.7	92	2.9	151	2	165	62
374	19.3	107	2.7	92	2.9	151	2	200	65
375	19.0	139	2.7	92	2.9	151	4	260	65
376	18.7	184	2.7	92	3.0	59	2	200	65
377	18.8	167	2.7	92	3.0	59	2	200	66
378	19.2	120	2.9	16	3.1	21	2	160	64
379	19.3	107	2.7	92	2.9	151	2	180	63
380	19.5	91	2.6	193	2.9	151	2	175	64

Table 29. Protein and lysine values together with agronomic data for entries in the second high protein-high lysine winter wheat observation nursery grown at Stillwater, Oklahoma, USA in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Yield g	Plant height cm
381	19.5	91	2.6	193	2.8	261	2	185	63
382	19.3	107	2.7	92	2.9	151	2	205	64
383	19.3	107	2.7	92	3.0	59	2	195	65
384	20.5	19	2.6	193	2.9	151	2	170	62
385	20.6	18	2.6	193	2.9	151	2	170	63
386	20.4	23	2.6	193	2.8	261	3	175	66
387	19.6	84	2.7	92	3.0	59	3	215	67
388	19.9	57	2.6	193	2.9	151	3	180	64
389	19.8	68	2.4	368	2.7	346	4	190	83
390	19.3	107	2.5	297	2.8	261	3	160	79
391	18.1	255	2.7	92	3.0	59	3	210	74
392	18.8	147	2.7	92	2.9	151	2	180	83
393	19.9	57	2.8	32	3.0	59	4	220	76
394	19.4	98	2.6	193	2.8	261	4	270	75
395	18.7	184	2.7	92	3.0	59	4	240	74
396	19.9	57	2.6	193	2.9	151	4	210	76
397	20.4	23	2.5	297	2.8	261	4	255	77
398	19.8	68	2.7	92	2.9	151	4	215	79
Centurk	16.1	393	2.8	32	3.0	59	2	335	75
Lancota	16.6	375	2.7	92	3.0	59	2	270	83
CI13449	16.1	393	3.0	8	3.2	11	3	45	65
Besostaya 1	16.0	397	2.8	32	3.1	21	3	255	62
Overall mean	18.5		2.60		2.86		3.4	193.1	71.3

Correlation Coefficients

Protein	- .27**	- .30**
Lysine/protein		.94**

** Significant at the P=.01 level.

Means of the check variaties

Besostaya 1	17.1	2.74	3.00
Centurk	17.1	2.64	2.88
CI13449	16.0	3.00	3.24
Lancota	18.0	2.52	2.80
Check mean	17.1	2.73	2.98
$LSD_{.05}$ of check means	0.8	0.16	0.16
Coefficient of variation %	3.6	4.20	3.97

Table 30. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Corvallis, Oregon, USA in 1976.

Entry no.[1]	Protein		Lysine/protein		Adjusted lysine/protein		Seed grade	Days to flowering	Plant height	Stripe rust	
	%	rank	%	rank	%	rank	1-9	from Jan. 1	cm	sev. %	resp.
Centurk	10.9	383	3.1	97	3.0	232	4	134	120	80	S
Lancota	13.2	276	2.7	326	2.8	363	4	136	125	80	S
CI13449	9.9	393	3.4	16	3.1	159	4	---	100	60	S
Besostaya 1	10.7	387	2.9	197	2.8	363	3	136	120	60	S
5	9.9	395	3.5	7	3.2	102	3	---	125	80	S
6	9.4	396	3.5	7	3.1	159	4	---	115	80	S
7	12.1	351	3.5	7	3.5	10	6	134	130	80	S
8	10.8	385	3.1	97	3.0	232	4	124	130	80	S
9	11.0	379	3.8	1	3.7	3	6	133	125	80	S
10	11.9	356	3.5	7	3.5	10	6	134	130	80	S
11	11.4	369	3.1	97	3.1	159	5	---	125	80	S
12	11.3	373	3.1	97	3.0	232	5	137	130	80	S
13	11.2	376	3.2	53	3.2	102	6	133	120	80	S
14	10.6	389	3.4	16	3.2	102	5	133	130	80	S
15	11.0	379	3.2	53	3.1	159	5	135	135	10	MR
16	10.6	389	3.1	97	3.0	232	5	136	135	40	MS
17	12.6	321	2.9	197	2.9	308	5	137	130	60	S
18	9.6	394	3.3	29	3.0	232	5	---	125	80	S
19	10.3	391	3.3	29	3.1	159	4	---	110	80	S
20	11.7	365	2.9	197	2.9	308	4	---	135	80	S
21	11.7	365	3.3	29	3.2	102	4	---	160	80	S
22	10.9	383	3.2	53	3.1	159	4	---	150	80	S
23	11.6	367	3.0	147	2.9	308	3	---	140	---	TR
24	11.3	373	3.3	29	3.2	102	4	---	145	80	S
25	13.8	213	2.7	326	2.8	363	3	126	135	20	M
26	12.3	339	3.2	53	3.3	52	6	137	135	80	S
27	10.3	391	3.4	16	3.2	102	5	---	140	80	S
28	10.9	383	3.1	97	2.9	308	4	---	130	60	MS
29	10.7	387	3.0	147	2.8	363	4	124	145	60	MS
30	11.8	361	3.3	29	3.3	52	4	---	100	80	S
31	11.3	373	3.2	53	3.1	159	4	136	110	80	S
32	12.9	296	3.1	97	3.2	102	4	---	110	80	S
33	11.9	356	3.4	16	3.3	52	5	136	110	80	S
34	11.2	376	3.5	7	3.4	21	5	137	110	80	S
36	13.2	276	3.4	16	3.5	10	7	139	150	80	S
37	13.7	225	3.0	147	3.2	102	6	---	150	80	S
38	13.4	255	3.0	147	3.2	102	6	135	145	80	S
39	12.9	296	3.3	29	3.4	21	6	131	150	80	S
40	12.9	296	2.9	197	3.0	232	6	131	145	80	S
41	11.0	379	3.4	16	3.3	52	6	131	150	80	S
42	12.3	339	3.1	97	3.1	159	6	122	140	80	S
43	14.0	196	2.9	197	3.0	232	5	137	135	80	S
44	14.0	196	2.8	260	3.0	232	5	137	140	80	S
45	12.6	321	3.2	53	3.2	102	6	136	145	80	S
46	11.8	361	3.2	53	3.2	102	6	134	150	80	S
47	11.9	356	3.4	16	3.4	21	6	135	145	80	S
48	14.4	157	3.4	16	3.6	5	8	130	140	80	S
49	14.0	196	3.2	53	3.4	21	6	131	135	80	S
50	13.4	255	3.0	147	3.1	159	6	---	135	80	S
51	13.4	255	3.2	53	3.3	52	6	---	140	80	S

[1] Entry numbers 35, 54, 79, 99, 302 and 378 are missing.

Table 30. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Corvallis, Oregon, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm	Stripe rust sev. %	Stripe rust resp.
52	14.0	196	3.0	147	3.2	102	6	--	140	80	S
53	13.4	255	3.2	53	3.3	52	6	--	145	80	S
55	13.4	255	2.8	260	3.0	232	4	128	135	80	S
56	12.9	296	2.9	197	5.0	232	4	127	140	80	S
57	13.4	255	2.8	260	2.9	308	4	127	135	80	S
58	13.3	266	2.8	260	2.9	308	4	--	140	80	S
59	12.6	321	3.0	147	3.0	232	5	135	145	80	S
60	12.7	311	3.1	97	3.1	159	5	139	145	80	S
61	11.3	373	3.1	97	3.0	232	4	139	125	80	S
62	14.3	166	2.9	197	3.1	159	4	124	120	80	S
63	14.[illegible]	157	3.1	97	3.3	52	5	124	120	80	S
64	14.6	136	3.1	97	3.3	52	5	127	115	10	MR
65	12.8	302	3.5	7	3.5	10	5	--	150	80	S
66	14.3	166	3.1	97	3.3	52	5	124	125	80	S
67	15.0	92	3.1	97	5.4	21	5	123	135	80	S
68	17.8	2	2.9	197	3.2	102	5	122	115	80	S
69	16.1	26	3.1	97	3.3	52	5	120	130	80	S
70	16.6	8	3.0	147	3.2	102	5	120	140	80	S
71	14.5	146	3.7	2	3.9	1	6	133	135	80	S
72	14.5	146	3.7	2	3.9	1	6	132	135	80	S
73	15.0	92	3.4	16	3.7	5	7	132	145	80	S
74	14.4	157	3.4	16	3.6	5	7	133	140	80	S
75	15.4	60	3.3	29	3.5	10	7	133	135	80	S
76	14.6	136	3.3	29	3.5	10	7	--	135	80	S
77	12.6	321	3.2	53	3.3	52	6	--	140	80	S
78	13.4	255	3.0	147	3.1	159	6	--	125	80	S
80	13.6	237	3.0	147	3.2	102	6	--	130	80	S
81	12.7	311	3.1	97	3.2	102	6	--	140	80	S
82	11.8	361	3.2	53	3.2	102	6	--	135	80	S
83	12.4	334	3.3	29	3.3	52	6	--	135	80	S
84	12.7	311	3.4	16	3.4	21	6	--	140	80	S
85	12.4	334	3.5	7	3.5	10	5	--	145	80	S
86	11.3	373	3.2	53	3.1	159	5	--	155	80	S
87	12.2	345	3.0	147	3.0	232	6	--	120	80	S
88	12.3	339	3.1	97	3.1	159	6	131	150	80	S
89	13.4	255	3.0	147	3.1	159	6	132	150	80	S
90	12.4	334	3.1	97	3.1	159	6	--	145	80	S
91	14.4	157	3.2	53	3.3	52	6	131	145	80	S
92	14.2	176	3.2	53	3.4	21	6	132	140	80	S
93	14.8	118	3.0	147	3.2	102	6	132	145	80	S
94	13.4	255	3.0	147	3.1	159	6	--	135	40	MS
95	16.6	8	3.0	147	3.3	52	6	127	135	80	S
96	15.7	41	3.0	147	3.2	102	6	129	145	80	S
97	15.7	41	2.8	260	3.0	232	4	126	145	80	S
98	16.4	13	2.6	370	2.8	363	4	126	145	80	C
100	16.4	13	2.6	370	2.9	308	4	125	145	80	S
Canturk	12.6	321	2.9	197	3.0	232	5	133	140	80	S
Lancota	15.5	53	2.5	390	2.7	391	5	--	145	80	S
CI13449	12.1	391	3.3	29	3.3	52	5	--	105	80	S
Bezostaya 1	14.0	196	2.7	326	2.9	308	3	--	135	80	S
105	12.3	339	3.1	97	3.2	102	4	--	145	80	S
106	16.1	26	2.5	390	2.8	363	4	--	155	80	S
107	15.4	60	2.8	260	3.0	232	5	133	150	80	S
108	14.8	118	3.1	97	3.3	52	5	132	135	80	S
109	13.7	225	3.2	53	3.3	52	5	130	150	80	S

Table 30. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Corvallis, Oregon, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm	Stripe rust sev. %	Stripe rust resp.
110	14.5	146	3.0	147	3.2	102	5	130	165	80	S
111	15.9	32	2.9	197	3.2	102	5	128	145	80	S
112	12.7	311	3.1	97	3.2	102	5	—	140	80	S
113	13.8	213	3.0	147	3.2	102	5	129	140	80	S
114	12.9	296	2.9	197	3.0	232	5	127	140	80	S
115	13.2	276	2.9	197	3.0	232	5	—	155	80	S
116	13.6	237	2.8	260	3.0	232	4	131	110	—	TR
117	12.3	339	3.0	147	3.0	232	4	—	160	80	S
118	12.2	345	3.0	147	3.0	232	4	—	165	80	S
119	12.5	329	2.8	260	2.9	308	5	—	160	80	S
120	14.2	345	2.9	197	2.9	308	5	—	145	80	S
121	14.4	157	2.7	326	2.9	308	5	—	150	20	MR
122	13.6	237	2.8	260	2.9	308	5	131	140	80	S
123	14.2	176	3.1	97	3.3	52	6	133	140	80	S
124	12.8	302	3.1	97	3.2	102	5	127	155	80	S
125	13.8	213	3.1	97	3.2	102	5	129	135	80	S
126	12.7	311	2.9	197	3.0	232	5	—	150	80	S
127	13.5	245	2.7	326	2.9	308	4	—	145	80	S
128	12.7	311	2.9	197	3.0	232	4	—	150	80	S
129	15.4	60	2.8	260	3.0	232	5	124	135	80	S
130	14.6	136	2.8	260	3.0	232	5	131	150	80	S
131	15.3	69	2.8	260	3.1	159	5	—	150	80	S
132	15.1	85	3.0	147	3.2	102	6	—	150	80	S
133	12.7	311	3.2	53	3.3	52	5	130	160	80	S
134	17.1	3	2.7	326	3.0	232	5	—	150	80	S
135	15.8	35	2.8	260	3.0	232	5	124	145	40	MS
136	14.7	127	2.6	370	2.8	363	5	130	145	80	S
137	13.5	245	3.2	53	3.3	52	6	—	145	80	S
138	13.1	286	3.2	53	3.3	52	6	—	140	80	S
139	13.2	276	3.1	97	3.3	52	6	—	135	80	S
140	12.5	329	3.3	29	3.4	21	5	—	140	80	S
141	14.9	105	2.6	370	2.8	363	4	129	125	80	S
142	14.9	105	2.8	260	3.0	232	4	123	130	80	S
143	14.9	105	2.6	370	2.8	363	4	125	140	80	S
144	13.3	266	2.7	326	2.8	363	5	—	155	80	S
145	15.4	60	3.1	97	3.3	52	6	122	130	80	S
146	14.7	127	2.8	260	3.0	232	5	—	140	80	S
147	14.9	105	2.8	260	3.0	232	5	124	150	80	S
148	14.9	105	3.1	97	3.3	52	5	122	135	80	S
149	14.7	127	2.8	260	3.0	232	5	124	130	80	S
150	12.9	296	3.1	97	3.2	102	5	—	140	20	MR
151	13.0	290	3.1	97	3.2	102	5	—	140	20	MR
152	14.1	186	2.9	197	3.1	159	5	—	145	60	S
153	14.1	186	2.9	197	3.1	159	4	—	160	80	S
154	12.1	351	3.0	147	3.0	232	5	—	160	80	S
155	13.2	276	2.9	197	3.1	159	5	133	135	80	S
156	15.2	77	2.9	197	3.2	102	5	127	130	80	S
157	15.4	60	2.9	197	3.1	159	5	129	135	80	S
158	15.7	41	2.7	326	2.9	308	4	128	135	80	S
159	15.4	60	2.9	197	3.2	102	5	129	140	80	S
160	13.8	213	2.9	197	3.0	232	5	134	135	80	S
161	13.6	237	2.6	370	2.8	363	5	130	135	80	S
162	14.1	186	2.8	260	3.0	232	5	132	145	80	S
163	15.6	49	3.0	147	3.2	102	5	133	115-170	80	S
164	13.2	276	3.1	97	3.2	102	4	—	165	80	S

Table 30. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Corvallis, Oregon, USA in 1976. Continued.

Entry No.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm	Stripe rust sev. %	Stripe rust resp.
165	14.9	105	3.0	147	3.2	102	5	129	155	80	S
166	13.6	49	3.0	147	3.3	52	5	--	150	80	S
167	14.9	105	3.2	53	3.4	21	5	131	130	80	S
168	16.2	20	3.1	97	3.4	21	6	--	155	80	S
169	16.8	6	2.8	260	3.1	159	5	--	145	80	S
170	14.9	105	2.8	260	3.0	232	5	123	115	80	S
171	15.4	60	2.8	260	3.0	232	5	122	125	80	S
172	14.9	105	2.8	260	3.1	159	5	121	120	80	S
173	16.3	16	2.8	260	3.1	159	5	121	130	80	S
174	15.8	35	2.7	326	2.9	308	5	126	130	80	S
175	15.3	69	2.7	326	3.0	232	5	129	150	80	S
176	15.8	35	3.1	97	3.3	52	6	124	150	80	S
177	16.4	13	2.9	197	3.2	102	5	130	135	80	S
178	14.8	118	3.1	97	3.3	52	5	130	145	80	S
179	14.9	105	2.9	197	3.1	159	5	126	130	80	S
180	14.2	176	3.2	53	3.3	52	5	125	130	80	S
181	15.2	77	2.9	197	3.1	159	5	132	125	40	MS
182	14.1	186	3.1	97	3.3	52	5	--	130	40	MS
183	13.8	213	3.3	29	3.4	21	6	--	150	80	S
184	14.4	157	3.2	53	3.3	52	5	--	150	80	S
185	14.0	196	3.2	53	3.4	21	5	--	145	80	S
186	14.8	118	3.1	97	3.3	52	5	--	140	80	S
187	12.8	302	3.0	147	3.1	159	5	--	140	80	S
188	14.0	196	3.0	147	3.2	102	5	--	145	80	S
189	12.7	311	3.3	29	3.3	52	5	--	150	80	S
190	13.6	237	3.1	97	3.2	102	5	--	150	80	S
191	14.9	105	2.9	197	3.1	159	5	--	155	80	S
192	14.2	176	2.9	197	3.1	159	5	--	140	80	S
193	14.8	118	2.8	260	3.0	232	5	--	150	80	S
194	13.7	225	2.8	260	2.9	308	5	--	155	80	S
195	14.6	136	2.8	260	3.0	232	5	--	170	80	S
196	14.5	148	2.8	260	3.0	232	5	--	140	80	S
197	15.1	85	2.5	390	2.7	391	5	133	120	20	MR-MS
198	14.1	186	2.8	260	2.9	308	5	132	140	20	MR-MS
199	13.9	203	2.9	197	3.0	232	5	132	140	20	MR-MS
200	14.2	176	2.7	326	2.9	308	5	133	125	20	MR-MS
Centurk	12.1	351	3.1	97	3.1	159	5	134	140	60	S
Lancota	15.1	85	2.8	260	3.0	232	5	--	145	60	S
CI13449	12.2	345	3.2	53	3.2	102	5	--	110	80	S
Benetaya 1	14.6	136	2.6	370	2.8	363	5	--	135	60	S
205	14.3	166	2.8	260	3.0	232	3	131	130	20	MS
206	15.2	77	2.5	390	2.8	363	4	130	120	20	MS
207	16.5	10	2.7	326	3.0	232	4	--	145	80	S
208	16.0	30	2.8	260	3.1	159	4	--	150	80	S
209	16.9	5	2.7	326	2.9	308	4	--	145	40	MS
210	15.4	60	2.7	326	2.9	308	4	--	150	40	MS
211	16.7	26	2.6	370	2.8	363	4	--	165	40	MS
212	18.6	1	2.5	390	2.8	363	6	--	170	40	MS
213	15.1	85	2.8	260	3.0	232	5	--	160	40	MS
214	15.5	53	2.7	326	2.9	308	5	--	155	40	MS
215	14.7	127	2.8	260	3.1	159	5	132	160	80	S
216	13.6	237	3.0	147	3.1	159	5	--	160	80	S
217	14.4	157	3.2	53	3.3	21	6	--	160	80	S
218	15.2	77	3.0	147	3.2	102	6	120	140	80	S
219	13.7	225	3.2	53	3.3	52	6	--	155	80	S

Table 30. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Corvallis, Oregon, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm	Lodging sev. %	Lodging rank resp.
220	13.9	205	3.1	97	3.3	52	5	—	160	80	S
221	13.3	266	3.2	53	3.3	52	6	130	135	80	S
222	13.8	213	2.9	197	3.0	232	5	122	140	80	S
223	14.9	105	3.0	147	3.2	102	6	—	140	80	S
224	15.0	92	2.9	197	3.1	159	5	—	140	80	S
225	13.2	77	3.0	147	3.3	52	5	—	135	80	S
226	16.1	26	2.6	370	2.9	308	5	—	150	80	S
227	15.1	85	2.9	197	3.1	159	5	—	155	80	S
228	14.4	157	2.8	260	3.0	232	5	133	135	80	S
229	14.0	196	2.9	197	3.0	232	5	134	155	80	S
230	15.2	77	2.9	197	3.1	159	5	127	135	80	S
231	13.7	225	3.0	147	3.2	102	5	125	130	80	S
232	15.6	49	2.8	260	3.0	232	5	120	125	80	S
233	17.0	4	2.7	326	3.0	232	5	—	130	80	S
234	15.1	85	2.8	260	3.0	232	5	130	160	80	S
235	13.8	213	3.1	97	3.2	102	5	—	165	80	S
236	13.2	276	2.8	260	3.0	232	5	128	145	80	S
237	13.9	205	3.0	147	3.2	102	5	123	150	80	S
238	16.2	20	2.7	326	3.0	232	4	130	140	80	S
239	15.6	49	2.6	370	2.8	363	4	133	145	80	S
240	14.7	127	2.5	390	2.7	391	4	134	140	80	S
241	14.4	157	2.8	260	3.0	232	5	133	145	80	S
242	14.7	127	2.8	260	3.0	232	4	—	145	80	S
243	14.0	196	2.6	370	2.8	363	4	—	125	80	S
244	11.8	361	3.1	97	3.1	159	5	—	135	80	S
245	14.4	157	2.7	326	2.9	308	4	132	125	80	S
246	14.5	146	3.0	147	3.2	102	5	122	120	80	S
247	14.7	127	2.7	326	2.9	308	5	—	135	80	S
248	14.6	136	2.9	197	3.1	159	5	132	125	80	S
249	13.1	286	3.1	97	3.2	102	5	—	140	80	S
250	13.2	276	2.9	197	3.0	232	5	125	120	80	S
251	13.2	276	3.1	97	3.2	102	5	126	130	80	S
252	15.0	92	3.1	97	3.3	52	6	—	140	80	S
253	15.4	60	3.1	97	3.3	52	6	—	140	80	S
254	14.7	127	3.1	97	3.3	52	6	132	135	80	S
255	15.2	77	2.8	260	3.0	232	5	130	145	80	S
256	14.9	105	2.9	197	3.2	102	5	—	145	80	S
257	13.5	245	2.7	326	2.9	308	5	133	130	80	S
258	15.0	92	2.6	370	2.8	363	4	130	125	40	MS
259	14.0	196	2.5	390	2.7	391	4	130	125	60	S
260	14.3	166	2.6	370	2.7	391	4	128	125	60	S
261	14.2	176	2.7	326	2.9	308	4	128	125	60	S
262	15.3	69	2.5	390	2.8	363	4	127	125	80	S
263	14.6	136	2.7	326	2.9	308	4	132	125	80	S
264	13.7	225	3.0	147	3.2	102	5	122	125	80	S
265	14.2	176	2.7	326	2.9	308	4	131	140	80	S
266	14.2	176	2.6	370	2.8	363	4	130	130	80	S
267	15.2	77	2.7	326	2.9	308	5	130	140	80	S
268	13.7	225	2.9	197	3.1	159	4	—	140	80	S
269	11.6	367	3.1	97	3.0	232	5	132	140	80	S
270	13.7	225	2.8	260	3.0	232	5	—	135	80	S
271	14.0	196	2.8	260	3.0	232	5	130	125	20	MR
272	12.8	302	3.1	97	3.2	102	5	—	130	20	MS
273	13.1	286	2.9	197	3.0	232	5	133	130	20	MS
274	13.7	225	2.8	260	3.0	232	5	129	140	80	S

Table 30. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Corvallis, Oregon, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm	Stripe rust sev. %	Stripe rust resp.
275	12.3	266	3.0	147	3.1	159	5	--	150	80	S
276	12.7	311	3.0	147	3.1	159	5	--	135	80	S
277	12.6	321	2.8	260	2.9	308	5	129	125	80	S
278	12.8	302	3.1	97	3.1	159	5	130	140	80	S
279	13.4	255	3.1	97	3.2	102	5	--	135	80	S
280	13.6	237	3.0	147	3.1	159	6	--	140	80	S
281	14.4	157	3.2	53	3.4	21	6	132	130	80	S
282	14.5	146	2.8	260	3.0	232	5	--	150	80	S
283	14.9	105	2.9	197	3.1	159	5	--	140	--	TR
284	14.4	157	2.6	370	2.8	363	5	--	150	80	S
285	14.9	105	2.7	326	2.9	308	5	--	140	80	S
286	15.7	41	2.7	326	2.9	308	5	133	140	80	S
287	16.2	20	2.7	326	2.9	308	5	--	145	80	S
288	15.7	41	2.8	260	3.0	232	5	--	145	80	S
289	15.6	49	2.7	326	2.9	308	5	--	155	80	S
290	15.3	69	3.0	147	3.3	52	6	--	145	80	S
291	16.2	20	2.9	197	3.2	102	6	--	150	80	S
292	16.2	20	2.6	370	2.8	363	5	128	135	80	S
293	16.2	20	2.6	370	2.8	363	5	128	145	80	S
294	15.2	77	2.7	326	3.0	232	5	128	130	80	S
295	13.7	225	2.8	260	2.9	308	5	--	135	80	S
296	16.6	8	2.8	260	3.0	232	5	--	130	80	S
297	13.0	290	2.8	260	2.9	308	6	--	130	80	S
298	15.1	85	2.7	326	2.9	308	6	--	140	80	S
299	14.6	136	2.8	260	3.0	232	6	126	120	80	S
300	13.6	237	2.9	197	3.1	159	5	130	120	80	S
Centurk	15.3	69	2.7	326	2.9	308	5	--	135	60	S
CI13449	11.8	361	3.4	16	3.4	21	5	--	110	60	S
Basostaya 1	14.7	127	2.6	370	2.8	363	3	--	135	60	S
305	13.3	266	2.9	197	3.0	232	4	--	115	80	S
306	13.2	276	2.9	197	3.0	232	4	--	140	80	S
307	15.0	92	2.9	197	3.1	159	4	133	145	80	S
308	13.7	225	2.8	260	3.0	232	4	--	125	80	S
309	13.8	213	2.9	197	3.1	159	3	119	130	80	S
310	14.3	166	3.0	147	3.1	159	3	123	125	80	S
311	14.0	196	3.2	53	3.4	21	3	129	125	80	S
312	15.7	41	2.8	260	3.0	232	4	128	145	80	S
313	12.6	321	3.1	97	3.2	102	4	123	130	80	S
314	16.1	26	2.7	326	2.9	308	3	132	120	80	S
315	15.3	69	2.5	390	2.8	363	3	133	125	80	S
316	15.7	41	2.6	370	2.9	308	3	133	120	80	S
317	16.0	30	2.5	390	2.8	363	3	133	125	80	S
318	14.9	105	2.8	260	3.0	232	4	133	120	80	S
319	14.8	118	2.7	326	2.9	308	4	134	125	80	S
320	15.9	32	2.8	260	3.0	232	3	133	120	80	S
321	14.5	146	2.7	326	2.9	308	3	133	120	80	S
322	14.8	118	2.7	326	2.9	308	3	134	120	80	S
323	14.8	118	2.7	326	2.9	308	3	134	120	20	MR
324	16.4	13	3.0	147	3.2	102	5	120	125	80	S
325	14.5	146	2.9	197	3.1	159	4	128	135	80	S
326	13.1	284	3.0	147	3.2	102	5	130	145	80	S
327	12.5	329	2.8	260	2.8	363	3	131	115	10	MR
328	15.4	60	2.8	260	3.0	232	5	132	145	80	S
329	13.8	237	2.9	197	3.0	232	5	--	125	80	S
330	13.4	255	2.9	197	3.1	159	5	134	135	80	S

Table 30. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Corvallis, Oregon, USA in 1976. Continued.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering from Jan. 1	Plant height cm	Stripe rust sev. %	Stripe rust resp.
331	13.6	237	2.8	260	2.8	308	4	130	150	80	S
332	15.5	39	2.6	370	2.8	363	4	132	135	80	S
333	13.3	268	2.8	260	2.9	308	4	127	130	80	S
334	13.7	225	2.7	326	2.9	308	4	132	135	80	S
335	15.0	92	2.6	370	2.8	363	4	--	135	80	S
336	14.2	176	3.1	97	3.3	52	5	132	140	80	S
337	14.0	196	2.9	197	3.0	232	5	132	140	80	S
338	11.9	336	3.3	29	3.3	52	5	133	135	80	S
339	12.6	321	3.1	97	3.1	159	5	--	140	80	S
340	15.7	41	2.8	260	3.0	232	5	130	145	80	S
341	16.2	20	2.7	326	3.0	232	5	122	150	80	S
342	16.4	13	2.7	326	3.0	232	6	131	150	80	S
343	14.5	146	2.8	260	3.0	232	5	126	145	80	S
344	16.1	26	2.7	326	2.9	308	5	131	130	80	S
345	13.2	276	2.8	260	2.9	308	3	129	120	80	S
346	13.7	225	2.7	326	2.9	308	3	125	125	80	S
347	13.8	213	2.8	260	3.0	232	3	125	115	80	S
348	14.2	176	2.5	390	2.7	391	3	128	125	80	S
349	12.9	296	2.7	326	2.8	363	3	--	115	80	S
350	12.7	311	2.8	260	2.9	308	3	133	125	40	MS
351	12.6	321	2.7	326	2.7	391	3	--	155	20	MR
352	13.1	286	2.7	326	2.8	363	3	--	130	40	S
353	11.8	341	2.9	197	2.9	308	3	128	120	80	S
354	13.2	276	2.9	197	3.0	232	4	--	140	80	S
355	13.4	255	3.2	53	3.3	52	6	131	140	80	S
356	12.3	339	3.0	147	3.1	159	5	127	130	80	S
357	12.1	351	2.9	197	3.0	232	5	--	115	80	S
358	12.8	302	2.7	326	2.8	363	3	--	130	40	MS
359	13.4	255	2.5	390	2.6	396	4	120	115	20	MR
360	12.2	345	3.1	97	3.1	159	4	129	95	80	S
361	12.6	321	2.8	260	2.9	308	3	--	140	10	MR
362	13.0	290	2.7	326	2.8	363	4	--	135	10	MR
363	13.8	213	2.7	326	2.8	363	3	--	135	10	MR
364	13.8	237	3.2	53	3.3	52	6	124	115	80	S
365	14.8	118	2.6	370	2.8	363	4	134	120	40	MS
366	14.2	176	2.6	370	2.8	363	4	134	120	60	MS-S
367	15.3	69	2.6	370	2.8	363	4	134	125	60	MS-S
368	14.0	196	2.8	260	3.0	232	4	134	135	60	MS-S
369	14.5	146	2.6	370	2.8	363	3	134	125	60	MS-S
370	14.5	146	2.8	260	3.0	232	3	134	125	60	S
371	13.3	266	2.7	326	2.9	308	3	122	125	40	MS
372	15.7	41	2.6	370	2.8	363	3	132	115	40	MS
373	15.0	92	2.7	326	2.9	308	3	133	115	60	MS-S
374	13.9	205	2.7	326	2.8	363	4	134	125	40	MS
375	14.2	176	2.6	370	2.8	363	3	134	120	40	MS
376	13.2	276	2.8	260	2.9	308	5	--	115	60	MS-S
377	13.4	253	2.7	326	2.8	363	3	134	120	60	S
379	14.7	127	2.7	326	2.9	308	3	134	115	40	MS
380	13.2	276	2.7	326	2.8	363	4	134	115	60	S
381	12.7	311	2.7	326	2.8	363	3	134	115	60	S
382	14.2	176	2.7	326	2.9	308	3	135	120	60	S
383	14.2	176	2.7	326	2.9	308	4	--	115	60	S
384	14.2	176	2.6	370	2.7	391	4	--	115	60	P
385	13.8	213	2.7	326	2.8	363	4	134	120	60	S
386	14.1	186	2.7	326	2.9	308	4	134	120	60	S

Table 30. Protein and lysine values together with agronomic and disease data for entries in the second high protein-high lysine winter wheat observation nursery grown at Corvallis, Oregon, USA in 1976. Concluded.

Entry no.	Protein %	Protein rank	Lysine/protein %	Lysine/protein rank	Adjusted lysine/protein %	Adjusted lysine/protein rank	Seed grade 1-9	Days to flowering (from Jan. 1)	Plant height cm	Stripe rust sev. %	Stripe rust resp.
387	15.7	41	2.9	197	3.1	159	5	126	125	80	S
388	14.9	105	2.9	197	3.1	159	5	128	130	80	S
389	13.6	237	2.8	260	2.9	308	4	---	140	80	S
390	12.2	345	2.8	260	2.9	308	4	---	155	80	S
391	13.4	255	2.7	326	2.8	363	4	131	130	80	S
392	12.5	329	3.0	147	3.1	159	3	--	135	80	S
393	12.5	329	3.0	147	3.1	159	3	--	135	60	S
394	15.3	53	2.7	326	2.9	308	4	--	130	60	S
395	13.0	290	2.8	260	2.9	308	3	--	130	60	S
396	12.1	351	3.2	53	3.3	52	5	--	125	80	S
397	11.4	369	3.2	53	3.2	102	4	--	125	80	S
398	12.5	329	2.9	197	3.0	232	4	--	120	80	S
Centurk	11.0	379	3.1	97	3.0	232	4	--	125	40	S
Lancota	13.5	245	2.8	260	2.9	308	5	--	130	40	S
CI13449	10.7	387	3.2	53	3.1	159	5	--	105	60	S
Bezostaya 1	12.4	334	2.7	326	2.7	391	3	---	125	60	S
Overall mean	13.9		2.93		3.07		4.7	126.6	133.7	70.9	

Correlation Coefficients

Protein	- .53**	- .13**
Lysine/protein		.88**

** Significant at the P=.05 level.

Means of the check varieties

Bezostaya 1	13.3	2.70	2.80
Centurk	11.4	2.98	3.00
CI13449	11.3	3.30	3.22
Lancota	14.3	2.70	2.85
Check mean	12.8	2.93	2.97
$LSD_{.05}$ of check means 2/	1.4	0.20	0.14
Coefficient of variation %	7.7	4.85	3.48

2/ LSD and CV values are approximate due to missing data for Lancota.

Table 31. Means and ranks of protein, lysine/protein and adjusted lysine/protein for 382 experimental lines and 4 check varieties grown at 9 sites in the second high protein-high lysine winter wheat observation nursery in 1976 with yield data from Yuma, Arizona.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield[1/]	
	%	rank	%	rank	%	rank	q/ha	rank
342	18.1	1	2.7	383	2.9	372		
312	17.9	2	2.8	284	3.0	208	23.2	227
344	17.8	3	2.7	358	3.0	279		
341	16.9	4	2.6	396	2.9	393		
354	16.9	5	2.8	100	3.0	208	24.1	225
68	16.9	6	2.8	314	3.0	258	38.3	169
343	16.8	7	2.7	377	2.9	345		
99	16.8	8	2.8	193	3.1	130	39.2	156
100	16.8	8	2.9	139	3.1	60	38.4	166
314	16.8	10	2.8	284	3.0	208	44.4	77
98	16.7	11	2.9	127	3.1	83	37.3	175
365	16.7	11	2.8	314	3.0	234	37.1	180
255	16.7	13	2.6	399	2.9	393		
326	16.6	14	2.8	193	3.1	130		
368	16.6	15	2.7	358	2.9	345	41.8	116
380	16.6	15	2.7	383	2.9	363	47.1	40
212	16.6	17	2.8	325	3.0	279		
370	16.6	17	2.8	314	3.0	234	42.1	110
340	16.6	19	2.8	284	3.0	208		
97	16.6	20	3.0	64	3.2	30	37.5	174
369	16.6	21	2.7	377	3.0	317	45.2	59
95	16.5	22	2.8	300	3.1	130	17.8	229
367	16.5	22	2.7	369	3.0	317	41.9	113
320	16.5	24	2.8	325	3.0	187	44.8	65
330	16.5	25	2.6	399	2.9	395		
378	16.5	26	2.8	236	3.1	150	35.4	183
324	16.4	28	2.9	176	3.1	83		
383	16.4	28	2.7	369	3.0	299	39.4	153
384	16.4	28	2.8	268	3.0	187	35.3	190
321	16.4	30	2.7	358	3.0	299	43.7	85
398	16.4	30	2.8	193	3.1	150	45.0	62
70	16.4	32	2.8	236	3.1	110		
337	16.4	33	2.7	358	3.0	317		
375	16.4	33	2.7	358	3.0	299	41.8	114
96	16.4	35	2.8	284	3.0	234		
53	16.4	35	2.9	156	3.1	110		
323	16.4	38	2.8	325	3.0	258	36.5	183
385	16.4	38	2.7	358	3.0	299	40.8	131
315	16.4	38	2.8	325	3.0	258	44.4	80
44	16.3	40	2.7	348	3.0	299	37.6	173
386	16.3	40	2.9	176	3.1	110	40.2	141
376	16.3	42	2.7	337	3.0	279	44.4	79
338	16.3	42	2.9	105	3.1	48		
372	16.3	44	2.7	348	3.0	317	42.6	102
318	16.3	46	2.8	193	3.1	110	40.6	135
382	16.3	46	2.8	300	3.0	258	44.6	68
388	16.3	46	3.0	61	3.2	17	46.2	46
191	16.3	48	2.8	234	3.1	150		
317	16.3	48	2.8	325	3.0	299	39.8	147
313	16.2	50	2.9	139	3.1	69	25.1	224

1/ Yields based upon 4 replications grown at Yuma, Arizona, USA. Only 229 of the 402 entries were harvested at Yuma.

Table 31. Means and ranks of protein, lysine/protein and adjusted lysine/protein for 382 experimental lines and 4 check varieties grown at 9 sites in the second high protein-high lysine winter wheat observation nursery in 1976 with yield data from Yuma, Arizona. Continued.

Entry	Protein		Lysine/protein		Adjusted lysine/protein		Yield	
no.	%	rank	%	rank	%	rank	q/ha	rank
287	16.2	51	2.7	377	2.9	372		
322	16.2	51	2.8	284	3.0	258	47.5	38
366	16.2	53	2.8	323	3.0	234	37.9	172
374	16.2	53	2.7	383	2.9	363	41.1	126
52	16.2	56	2.8	254	3.0	170		
197	16.2	56	2.8	268	3.0	187	34.6	200
373	16.2	56	2.8	314	3.0	258	42.5	106
319	16.2	58	2.8	300	3.0	187	43.4	88
379	16.2	58	2.8	284	3.0	258	42.6	103
13	16.2	60	2.9	127	3.1	56	44.7	66
129	16.2	61	2.7	348	3.0	299	44.7	67
69	16.1	62	2.8	212	3.1	130		
316	16.1	63	2.8	300	3.0	208	44.8	64
64	16.1	64	2.9	139	3.1	83	30.1	217
310	16.1	65	2.8	236	3.0	170	31.5	214
377	16.1	65	2.8	268	3.0	170	38.3	168
381	16.1	67	2.8	325	3.0	317	43.7	86
194	16.0	68	2.7	369	3.0	332		
387	16.0	68	3.1	29	3.3	6	40.4	138
108	16.0	70	2.9	156	3.1	69		
357	16.0	70	2.8	254	3.0	208	44.5	69
110	15.9	72	2.9	156	3.1	69		
238	15.9	73	2.8	314	3.0	234		
339	15.9	74	2.9	176	3.1	150		
328	15.9	75	2.8	268	3.0	208	46.1	48
325	15.9	76	2.8	254	3.0	208		
87	15.9	77	2.8	212	3.1	150		
170	15.9	78	2.7	337	3.0	317	35.0	197
171	15.9	78	2.8	284	3.0	258	53.9	7
172	15.8	80	2.8	300	3.0	258	49.7	19
311	15.8	80	2.8	193	3.1	94	46.8	42
123	15.8	82	2.8	236	3.0	208		
135	15.8	83	2.8	300	3.0	258		
394	15.8	84	2.9	156	3.1	130	43.2	92
207	15.8	85	2.8	236	3.0	170		
248	15.7	86	2.7	390	2.9	383		
234	15.7	87	2.8	268	3.0	208		
371	15.7	88	2.8	193	3.1	110		
345	15.7	89	2.8	284	3.0	279	42.0	112
147	15.7	90	2.7	369	2.9	345	42.3	109
143	15.7	90	2.7	387	2.9	378	43.0	96
111	15.7	93	2.9	156	3.1	130		
288	15.7	93	2.8	314	3.0	279		
233	15.7	93	2.8	300	3.0	279		
292	15.7	93	2.7	337	3.0	332		
393	15.6	96	3.0	56	3.2	39	38.0	171
80	15.6	97	2.8	236	3.0	187	48.5	27
286	15.6	98	2.7	337	3.0	332	47.8	34
293	15.6	98	2.7	390	2.9	383		
174	15.6	100	2.8	193	3.1	130	39.1	157

Table 31. Means and ranks of protein, lysine/protein and adjusted lysine/protein for 382 experimental lines and 4 check varieties grown at 9 sites in the second high protein-high lysine winter wheat observation nursery in 1976 with yield data from Yuma, Arizona. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield	
	%	rank	%	rank	%	rank	q/ha	rank
232	15.6	101	2.8	268	3.0	208	41.6	119
193	15.6	101	2.8	268	3.0	234		
25	15.5	103	2.8	193	3.0	170	43.1	93
63	15.5	105	2.8	212	3.0	187	35.2	191
260	15.5	105	2.7	377	2.9	372	47.9	33
336	15.5	105	2.9	139	3.1	94		
390	15.5	105	2.8	314	2.9	345		
169	15.5	108	2.8	314	3.0	299	40.8	130
333	15.5	109	2.8	314	3.0	299		
389	15.5	110	2.7	348	2.9	354		
148	15.5	113	2.8	284	3.0	258	37.3	176
149	15.5	113	2.8	300	3.0	279	38.6	161
262	15.5	113	2.8	396	2.8	397	46.0	51
347	15.5	113	2.8	254	3.0	234	30.8	215
346	15.5	113	2.8	300	3.0	317	39.8	148
179	15.5	117	2.7	348	2.9	354	32.6	204
12	15.5	117	2.9	116	3.1	94	45.4	56
81	15.5	117	2.8	212	3.0	187	46.6	44
192	15.5	117	2.8	300	3.0	332		
91	15.4	120	2.9	156	3.1	83		
265	15.4	121	2.7	390	2.9	393	42.4	107
107	15.4	121	2.9	84	3.2	39		
181	15.4	123	2.7	387	2.8	378	42.7	100
177	15.4	125	2.8	268	3.0	234		
211	15.4	125	2.7	348	3.0	332		
238	15.4	125	2.6	399	2.8	398	37.2	178
62	15.4	127	2.9	156	3.0	150	44.3	74
158	15.4	127	2.7	358	3.0	332	33.4	205
53	15.4	129	2.7	387	2.9	383		
247	15.4	129	2.7	369	2.9	354		
21	15.4	131	3.0	45	3.2	21	27.4	222
84	15.4	131	3.0	45	3.2	30	35.1	194
141	15.3	133	2.8	284	3.0	234	41.8	117
39	15.3	134	2.9	103	3.1	69		
11	15.3	136	2.8	236	3.0	234	27.5	221
291	15.3	136	2.8	254	3.0	208		
348	15.3	136	2.7	390	2.9	388	41.1	127
195	15.3	136	2.7	358	2.9	378		
83	15.3	140	3.0	64	3.2	39	42.6	104
222	15.3	140	2.8	236	3.1	150	32.0	208
335	15.3	140	2.9	156	3.1	94		
178	15.3	142	2.8	236	3.0	187	35.0	196
252	15.3	144	2.9	94	3.1	56		
263	15.3	144	2.8	402	2.8	401	38.1	170
235	15.3	144	2.9	176	3.1	150		
264	15.2	148	2.7	377	2.9	372	35.9	186
159	15.2	148	2.9	176	3.1	150	38.4	165
90	15.2	149	2.9	139	3.1	150		
43	15.2	149	2.8	212	3.0	208	35.0	198
77	15.2	149	2.9	84	3.1	48	40.2	142

Table 31. Means and ranks of protein, lysine/protein and adjusted lysine/protein for 382 experimental lines and 4 check varieties grown at 9 sites in the second high protein-high lysine winter wheat observation nursery in 1976 with yield data from Yuma, Arizona. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield	
	%	rank	%	rank	%	rank	q/ha	rank
137	15.2	149	2.9	94	3.1	69		
209	15.2	152	2.8	325	3.0	317		
261	15.2	153	2.6	398	2.8	398	44.5	70
142	15.2	153	2.7	358	2.9	363	48.2	28
145	15.2	155	2.8	236	3.1	150	43.2	91
397	15.2	155	2.9	127	3.1	110	44.5	72
56	15.2	157	2.7	358	2.9	354		
396	15.2	157	2.9	94	3.1	60	42.3	108
214	15.2	159	2.7	337	3.0	332		
230	15.2	159	2.8	254	3.0	234	21.3	228
106	15.1	161	2.8	254	3.0	299		
173	15.1	163	2.7	337	2.9	345		
294	15.1	163	2.8	300	3.0	279		
349	15.1	163	2.9	139	3.1	130	44.4	76
307	15.1	163	2.8	284	3.0	279		
251	15.1	168	2.7	337	2.9	345	31.8	211
350	15.1	168	2.8	314	3.0	332	44.5	73
125	15.1	168	2.9	139	3.0	150		
236	15.1	168	2.7	337	3.0	317		
130	15.1	168	2.7	358	2.9	354	32.7	203
290	15.1	171	2.8	212	3.0	170		
210	15.1	171	2.7	377	2.9	388		
289	15.1	173	2.8	193	3.0	187		
136	15.1	173	2.9	136	3.1	110	35.1	193
175	15.1	175	2.8	254	3.0	258		
331	15.1	175	2.8	236	3.0	187		
259	15.1	178	2.6	401	2.8	401	44.1	83
234	15.1	178	2.8	300	3.0	317		
270	15.1	178	2.7	348	2.9	345	29.8	218
248	15.1	178	2.8	284	3.0	279		
65	15.1	181	2.8	193	3.0	208	32.0	209
213	15.1	181	2.8	236	3.0	299		
75	15.1	183	2.9	116	3.1	94	39.6	150
359	15.1	183	2.7	369	2.9	372		
156	15.0	185	2.9	127	3.1	110		
196	15.0	186	2.9	176	3.0	187	39.4	154
66	15.0	187	2.8	236	3.0	234		
57	15.0	188	2.7	348	2.9	372		
134	15.0	190	2.9	105	3.1	60	31.6	212
351	15.0	190	2.7	348	2.9	363	43.0	94
112	15.0	190	2.9	74	3.1	48		
79	15.0	192	2.8	193	3.0	234	37.1	179
82	15.0	193	2.9	74	3.1	60	54.5	6
327	15.0	194	2.7	383	2.9	398	51.4	12
146	14.9	195	2.8	300	3.0	296	43.2	90
163	14.9	196	2.8	268	3.0	258		
176	14.9	197	2.9	176	3.0	170		
229	14.9	197	2.8	236	3.0	208		
38	14.9	200	2.9	94	3.1	83		
216	14.9	200	2.7	337	2.9	363		

Table 31. Means and ranks of protein, lysine/protein and adjusted lysine/protein for 382 experimental lines and 4 check varieties grown at 9 sites in the second high protein-high lysine winter wheat observation nursery in 1976 with yield data from Yuma, Arizona. Continued.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield	
	%	rank	%	rank	%	rank	q/ha	rank
89	14.9	200	2.8	212	3.0	208		
256	14.9	202	2.7	369	2.9	363		
220	14.9	203	2.8	268	3.0	279		
240	14.9	204	2.7	369	2.9	378		
243	14.9	205	2.9	139	3.1	110	50.7	14
132	14.9	205	2.8	236	3.0	208		
188	14.8	207	2.9	176	3.0	170		
221	14.8	207	2.9	116	3.1	110	30.2	216
241	14.8	209	2.7	337	2.9	363		
131	14.8	211	2.9	156	3.1	94	36.7	181
215	14.8	211	2.8	325	2.9	363		
228	14.8	211	2.8	236	3.0	208	29.2	220
217	14.8	211	2.8	325	2.9	354		
189	14.8	214	2.9	127	3.1	110		
190	14.8	214	2.8	212	3.0	234		
218	14.8	217	2.8	254	3.0	317		
49	14.8	217	2.9	116	3.1	94		
257	14.8	217	2.7	383	2.9	383		
184	14.8	219	2.9	105	3.1	83		
121	14.8	221	2.8	300	2.9	345		
309	14.8	221	3.0	31	3.2	12	39.5	151
332	14.8	221	2.8	284	3.0	299		
164	14.8	224	2.9	176	3.0	170		
335	14.8	224	2.8	268	3.0	299	40.5	136
280	14.8	224	2.9	156	3.0	187	47.4	39
364	14.8	224	2.8	212	3.0	234	49.1	25
186	14.7	228	2.9	176	3.1	150		
239	14.7	228	2.8	268	3.0	299		
293	14.7	228	2.9	116	3.1	150		
358	14.7	228	2.7	393	2.9	393	31.5	213
124	14.7	233	2.9	84	3.1	83		
73	14.7	233	3.0	67	3.1	48		
246	14.7	233	2.8	325	3.0	317	44.5	71
299	14.7	233	2.8	212	3.0	208	47.7	35
392	14.7	233	2.9	74	3.1	110	45.1	61
183	14.7	233	2.9	176	3.1	150		
36	14.7	238	2.8	193	3.0	170	40.9	129
166	14.7	238	2.9	176	3.0	170		
199	14.7	238	2.8	193	3.0	279	38.5	163
250	14.7	238	2.9	156	3.1	150	36.1	185
205	14.7	242	2.9	156	3.1	150	40.3	140
48	14.7	242	2.9	94	3.1	83	44.9	63
152	14.7	242	2.8	236	3.0	258		
243	14.7	242	2.7	358	2.9	372	50.1	15
78	14.7	245	2.9	127	3.1	130	25.8	223
87	14.7	245	2.9	176	3.0	170		
37	14.7	247	3.0	45	3.2	39		
271	14.7	247	2.8	193	3.0	234	41.3	125
226	14.7	249	2.9	116	3.1	110		
30	14.7	249	3.2	12	3.3	2	23.4	226

Table 31. Means and ranks of protein, lysine/protein and adjusted lysine/protein for 382 experimental lines and 4 check varieties grown at 9 sites in the second high protein-high lysine winter wheat observation nursery in 1976 with yield data from Yuma, Arizona. Continued.

Entry	Protein		Lysine/protein		Adjusted lysine/protein		Yield	
no.	%	rank	%	rank	%	rank	q/ha	rank
162	14.7	251	2.9	94	3.1	110	49.3	21
38	14.6	253	2.8	212	3.0	234		
Lancota	14.6	253	2.8	236	3.0	279	45.6	54
269	14.6	253	2.8	212	3.0	258	34.9	199
163	14.6	253	2.9	139	3.1	110	41.4	120
249	14.6	257	2.9	156	3.0	187		
360	14.6	257	2.8	236	3.0	279	34.3	202
198	14.6	257	2.8	268	3.0	299	35.7	187
113	14.6	260	2.8	236	3.0	279		
Lancota	14.6	260	2.8	212	3.0	234		
225	14.6	260	2.8	236	3.0	234		
231	14.6	262	2.9	176	3.0	187	36.7	182
285	14.6	262	2.8	300	3.0	332		
183	14.6	265	2.9	156	3.0	170		
31	14.6	265	2.9	94	3.1	94	35.2	192
395	14.6	265	2.9	74	3.1	69	46.7	43
59	14.6	268	2.8	236	3.0	299		
30m	14.6	268	2.9	84	3.1	83		
237	14.6	268	2.8	212	3.0	208		
253	14.6	270	2.9	105	3.1	94		
109	14.6	270	2.9	156	3.0	208		
187	14.5	272	2.9	116	3.1	130		
223	14.5	272	2.8	254	3.0	279		
274	14.5	274	2.8	254	3.0	279	46.1	47
358	14.5	274	3.0	51	3.2	25		
150	14.5	276	3.0	67	3.1	69	41.3	123
329	14.5	276	2.9	105	3.1	110		
128	14.5	279	2.9	176	3.0	234	38.8	159
168	14.5	279	2.9	127	3.1	110	35.1	195
276	14.5	279	2.9	105	3.1	130	37.2	177
88	14.4	281	2.8	212	3.0	234		
46	14.4	281	2.9	105	3.1	130	45.1	60
45	14.4	283	3.0	56	3.2	39	49.1	22
208	14.4	283	2.7	377	2.9	388	40.6	134
279	14.4	285	3.0	64	3.1	69	49.0	26
334	14.4	285	2.8	284	3.0	317	44.5	75
114	14.4	287	2.9	74	3.1	83		
200	14.4	287	2.8	284	3.0	332	42.8	99
20	14.4	290	3.0	45	3.2	30	39.2	155
86	14.4	290	2.9	84	3.1	130		
144	14.4	290	2.7	337	2.9	363	41.3	124
60	14.4	292	2.8	193	3.0	258		
208	14.4	293	2.9	127	3.1	110		
30	14.4	295	2.9	84	3.1	110	29.7	219
Lancota	14.4	295	2.7	337	2.9	378	40.1	144
306	14.4	293	2.9	94	3.1	130	41.8	115
72	14.3	297	3.1	24	3.3	7		
296	14.3	297	2.9	156	3.0	234		
273	14.3	299	2.9	127	3.0	234	45.2	58
76	14.3	299	3.0	61	3.1	36	43.7	84

Table 31. Means and ranks of protein, lysine/protein and adjust lysine/protein for 382 experimental lines and 4 check varieties grown at 9 sites in the second high protein-high lysine winter wheat observation nursery in 1976 with yield data from Yuma, Arizona. Continued.

Entry	Protein		Lysine/protein		Adjusted lysine/protein		Yield	
no.	%	rank	%	rank	%	rank	q/ha	rank
160	14.3	301	2.8	212	3.0	258	42.5	105
167	14.3	301	2.9	94	3.1	110	34.3	201
224	14.3	303	2.8	314	2.9	345		
92	14.3	304	3.0	56	3.1	48		
151	14.3	306	3.0	31	3.2	17	38.8	160
242	14.3	306	2.9	156	3.0	170	38.6	162
153	14.3	306	3.0	39	3.2	34		
391	14.3	306	2.8	212	3.0	299		
122	14.3	309	2.9	94	3.1	150		
Bezostaya	14.3	310	2.7	369	2.9	388	44.4	78
54	14.3	312	2.8	325	2.9	388		
182	14.3	312	2.9	156	3.0	187	43.3	89
219	14.3	312	2.8	268	3.0	299		
116	14.2	315	2.9	74	3.1	69	38.9	158
Lancota	14.2	315	2.7	393	2.8	401	40.1	145
278	14.2	315	2.8	236	3.0	299	47.9	32
161	14.2	317	2.9	105	3.1	130	32.2	207
298	14.2	317	2.9	139	3.0	258		
283	14.2	319	2.9	176	3.0	234		
93	14.2	320	2.9	156	3.0	234		
281	14.2	321	2.9	74	3.1	83	52.6	10
74	14.2	322	3.0	39	3.2	25		
Bezostaya	14.2	323	2.8	236	3.0	299	54.9	4
332	14.1	324	2.9	84	3.1	130	49.7	18
300	14.1	325	2.8	212	3.0	299	49.6	20
33	14.1	327	3.2	7	3.3	3	40.8	132
267	14.1	327	2.9	139	3.0	258		
127	14.1	327	2.8	212	3.0	317	41.7	118
126	14.1	329	2.9	116	3.0	170		
361	14.1	330	2.8	236	3.0	332	44.3	81
353	14.0	331	2.8	212	3.0	279	43.0	95
115	14.0	331	2.9	74	3.1	83		
155	14.0	333	2.9	116	3.1	150		
Lancota	14.0	334	2.8	284	2.9	363	48.0	30
17	14.0	335	2.8	212	3.0	299	41.4	121
277	14.0	335	2.8	268	2.9	363	56.8	2
363	14.0	337	2.9	156	3.0	208	45.6	53
19	14.0	337	3.1	28	3.2	25	49.1	24
137	13.9	339	3.0	45	3.1	48		
180	13.9	339	2.9	74	3.1	110	31.8	210
284	13.9	341	2.9	139	3.0	208		
139	13.9	342	3.0	45	3.2	39	45.4	57
133	13.8	344	3.0	45	3.2	39	39.5	152
272	13.8	344	2.9	116	3.0	208	49.7	17
362	13.8	344	2.9	139	3.0	187	32.3	206
138	13.8	346	3.0	39	3.2	39	39.7	149
227	13.8	346	3.0	56	3.1	69		
24	13.8	349	3.2	9	3.3	4	38.3	167
29	13.8	349	2.9	74	3.0	208	42.6	101
303	13.8	349	2.9	94	3.1	130	47.7	36

Table 31. Means and ranks of protein, lysine/protein and adjusted lysine/protein for 382 experimental lines and 4 check varieties grown at 9 sites in the second protein-high lysine winter wheat observation nursery in 1976 with yield data from Yuma, Arizona. Continued.

Entry	Protein		Lysine/protein		Adjusted lysine/protein		Yield	
no.	%	rank	%	rank	%	rank	q/ha	rank
273	13.8	351	3.0	56	3.1	83	51.1	13
Bezostaya	13.8	352	2.8	212	3.0	332	40.2	143
47	13.8	354	3.0	51	3.1	69	38.5	164
71	13.8	354	3.1	17	3.2	17		
140	13.8	354	3.0	39	3.1	56	46.1	49
40	13.8	356	2.8	236	2.9	345		
7	13.8	356	3.1	24	3.2	12	48.0	31
32	13.7	358	3.2	14	3.2	8	42.8	98
154	13.7	359	2.9	127	3.0	208		
23	13.7	360	3.0	31	3.1	48	36.3	184
33	13.6	361	3.1	19	3.2	12	35.6	188
Bezostaya	13.6	361	2.9	176	3.0	258	46.9	41
Bezostaya	13.6	363	2.9	84	3.0	187		
42	13.6	364	2.9	94	3.0	258	46.0	52
94	13.4	365	3.0	35	3.1	48	43.5	87
120	13.4	366	2.9	176	2.9	345		
9	13.4	367	3.2	12	3.3	3		
10	13.4	368	3.1	24	3.2	30		
282	13.4	368	2.9	105	3.0	279	40.8	133
Centurk	13.4	370	3.0	45	3.1	94		
34	13.3	371	3.3	1	3.3	1	44.2	82
61	13.3	372	2.8	193	3.0	332	41.0	128
297	13.3	373	3.0	35	3.1	69	54.7	5
27	13.3	374	3.1	19	3.2	30	46.3	45
Centurk	13.3	374	3.0	35	3.2	39	39.9	146
18	13.2	376	3.0	64	3.1	150	40.3	139
266	13.2	376	2.9	116	3.0	258		
Centurk	13.2	378	3.0	56	3.1	130	52.6	11
41	13.1	379	3.1	21	3.2	25		
22	13.1	380	3.1	24	3.1	48	48.1	29
8	13.0	381	3.0	51	3.1	130		
117	13.0	382	2.9	116	3.0	332		
26	13.0	382	3.1	24	3.1	48		
244	13.0	384	3.0	61	3.1	150	53.7	8
28	12.8	385	3.0	39	3.1	150	41.4	122
Centurk	12.8	386	3.0	56	3.0	170	47.5	37
105	12.7	387	3.0	31	3.1	69		
119	12.7	387	2.9	176	2.9	383		
Centurk	12.7	389	2.9	84	2.9	354	50.0	16
118	12.7	390	2.9	74	3.0	332		
CI 13449	12.7	390	3.1	19	3.1	56	42.8	97
85	12.6	392	3.2	9	3.2	9		
15	12.6	393	3.2	12	3.2	30		
CI 13449	12.6	394	3.1	15	3.2	25	40.4	137
5	12.5	395	3.2	7	3.2	17	49.1	23
31	12.5	395	3.3	2	3.2	12	45.6	55
16	12.5	397	3.1	24	3.1	69	53.5	9
CI 13449	12.4	398	3.2	6	3.2	21		
CI 13449	12.2	399	3.1	16	3.1	110	42.1	111
6	12.1	400	3.2	4	3.2	17	55.0	3

Table 31. Means and ranks of protein, lysine/protein and adjusted lysine/protein for 382 experimental lines and 4 check varieties grown at 9 sites in the second high protein-high lysine winter wheat observation nursery in 1976 with yield data from Yuma, Arizona. Concluded.

Entry no.	Protein		Lysine/protein		Adjusted lysine/protein		Yield	
	%	rank	%	rank	%	rank	q/ha	rank
CI 13449	12.0	401	3.2	4	3.2	12	46.1	50
14	11.9	402	3.2	4	3.2	21	59.3	1
Mean	14.9		2.9		3.0		41.3	
LSD .05 of the means	0.9		0.1		0.1		8.5	
LSD .01 of the means	1.2		0.2		0.2		11.2	
Coefficient of variation %	6.6		5.3		4.8		14.9	
			Means of the check varieties					
Lancota	14.4		2.8		2.9		43.5	
Bezostaya 1	13.9		2.8		3.0		46.6	
Centurk	13.1		3.0		3.1		47.5	
CI13449	12.4		3.2		3.2		42.9	
Mean	13.4		2.9		3.0		45.1	
LSD .05 of check means	0.6		0.1		0.1		7.5	
Coefficient of variation %	5.9		4.6		4.1		8.5	