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10 Years of Collaborative Research
on Beans and Cowpeas

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TRAINING REPORT



THE BEAN/COWPEA COLLABORATIVE RESEARCH SUPPORT PROGRAM

An international community of persons, institutions, agencies and governments committed to collectively strengthening health and nutrition in developing countries by improving the availability and utilization of beans and cowpeas.

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I. INTRODUCTION

INTRODUCTION

The following tables and charts provide information on the number of students, technicians and researchers receiving training under Bean/Cowpea CRSP auspices during the FY 80-90 grant period. Information is provided on degree and non-degree training in the US and Host Countries. Included are people who received CRSP financial support as well as those who worked on CRSP research under the direction of CRSP investigators but whose training was paid from other sources. The project training charts in Part V indicate the level of CRSP financial support for all students and trainees during the FY 80-90 grant period.

A total of 219 degree programs were completed during the FY 80-90 grant period; 66 were undergraduate and 153 were graduate. Of these, 162 were from Host Countries and other developing countries and 57 were from the US. Of the degrees granted, there were 66 BS, 97 MS and 56 PhDs. There were 899 people who participated in non-degree programs during FY 80-90. The majority, 826, were from Host Countries and other developing countries. There were 73 from the US.

Appendix A is guidelines from the Technical Committee concerning student training. Appendix B lists the non-degree training categories and Appendix C lists acronyms used in this report. The CRSP conducted a survey of CRSP graduates to see how effective the training was and to see if there were things which could be done to improve the training of the Bean/Cowpea CRSP. These results are reported in Appendix D.

II. FY 80-90 STUDENT TRAINING TABLES

BEAN/COWPEA CRSP
DEGREES COMPLETED BY SEPTEMBER 30, 1990

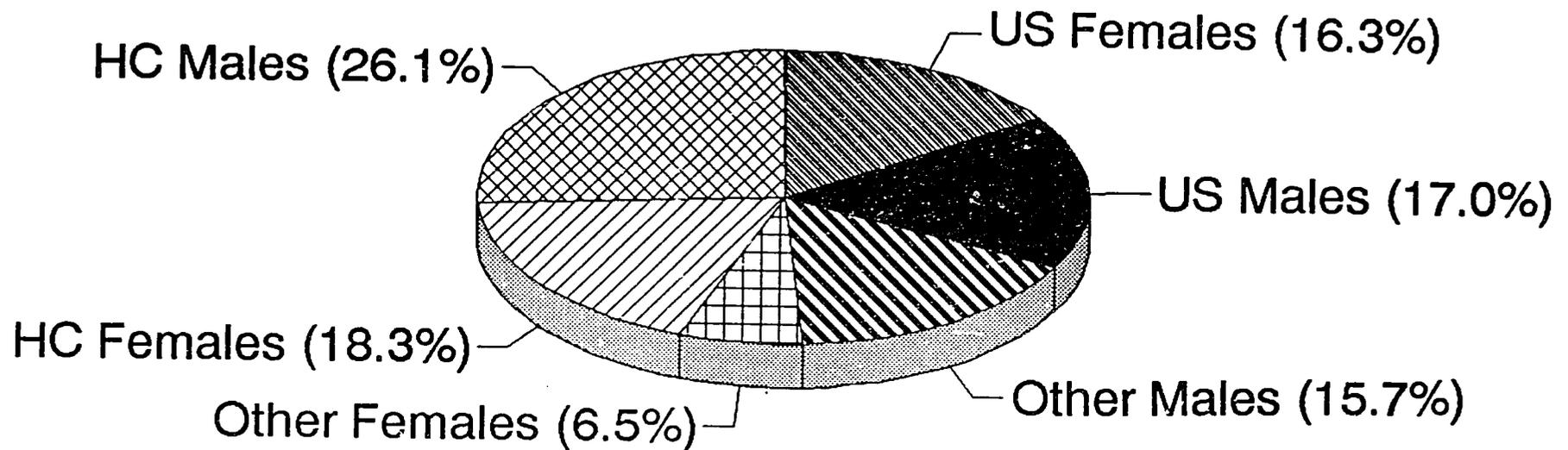
DEGREE	US			HC			OTHERS			TOTAL			
	M	F	T	M	F	T	M	F	T	M	F	T	%
BS	4	2	6 (9%)	25	33	58 (88%)	2	0	2 (3%)	31	35	66 (100%)	(31%)
MS	15	14	29 (30%)	31	20	51 (52%)	11	6	17 (18%)	57	40	97 (100%)	(44%)
PhD	11	11	22 (40%)	9	8	17 (30%)	13	4	17 (30%)	33	23	56 (100%)	(25%)
TOTAL	30	27	57 (26%)	65	61	126 (58%)	26	10	36 (16%)	121	98	219 (100%)	(100%)

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BEAN/COWPEA CRSP

MS/PhD Degrees Completed, 9/30/1990

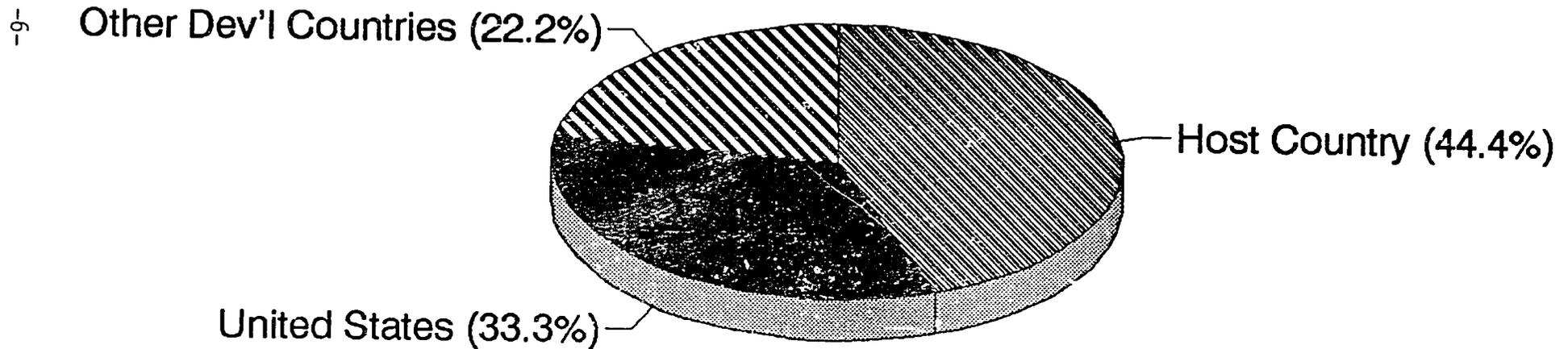
Gender Distribution (Total 153)



BEAN/COWPEA CRSP

MS/PhD Degrees Completed, 9/30/1990

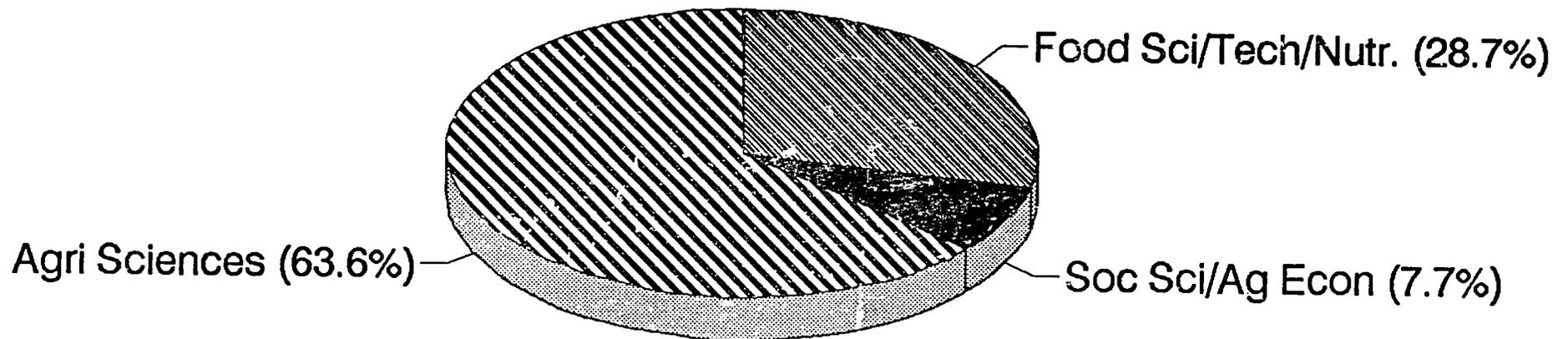
Country of Origin (Total 153)



BEAN/COWPEA CRSP

MS/PhD Degrees Completed, 9/30/1990

Disciplines Represented (Total 153)



BEAN/COWPEA CRSP
DEGREES COMPLETED BY SEPTEMBER 30, 1990 BY PROJECT

PROJECT	US						HOST COUNTRY						OTHERS						TOTALS				
	BS		MS		PhD		BS		MS		PhD		BS		MS		PhD		M	F	TOTAL		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F					
Botswana/CSU				1		1																	
Brazil/BTI									1	1										1	3	4	
Brazil/UWI (B)									1	3										2	3	5	
																				2		2	
Brazil/UWI (M)																							
Cameroon/UGA									1												1	1	
Cameroon/Purdue									1											1		1	
DR/UNL																							
DR/UPR				2	2		1	1		4		1		2				2			8	5	13
Ecuador/Cornell	1	1			1			1	1											7	1	8	
																				1	3	4	
Ecuador/UMN																							
Guatemala/Cornell					4					2	1				1						2	2	
Honduras/UPR							2			2						1				7		7	
																				4	1	5	
INCAP/WSU	2			4	5		4	1															
Kenya/UCD	1			3	1		4	3		4	1				2	3		2	2	22	15	37	
Malawi/MSU				1				1		1	1				2			2	1	10	5	15	
										2										5	3	8	
Mexico/MSU										1													
Nigeria/MSU										1						1					3	1	4
Nigeria/UGA				3	1			1			1										1	1	
							17	26		1	11				1					22	44	66	
Senegal/UCR		1		1	1		2	2		1													
Tanzania/WSU				1	1		1	1		1	1			5			5			15	3	18	
										3	1			1						10	5	15	
TOTAL	4	2	15	14	11	11	25	33	31	20	9	8	2	0	11	6	13	4	121	98	219		
	6 BS		29 MS		22 PhD		58 BS		51 MS		17 PhD		2 BS		17 MS		17 PhD						

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BEAN/COWPEA CRSP
DEGREES IN PROGRESS, SEPTEMBER 30, 1990

DEGREE	US			HC			OTHERS			TOTAL			%
	M	F	T	M	F	T	M	F	T	M	F	T	
BS	0	1	1 (8%)	8	1	9 (75%)	1	1	2 (17%)	9	3	12 (100%)	(17%)
MS	1	3	4 (16%)	9	7	16 (64%)	5	0	5 (20%)	15	10	25 (100%)	(36%)
PhD	4	7	11 (34%)	8	4	12 (38%)	4	5	9 (28%)	16	16	32 (100%)	(47%)
TOTAL	5	11	16 (23%)	25	12	37 (54%)	10	6	16 (23%)	40	29	69 (100%)	(100%)

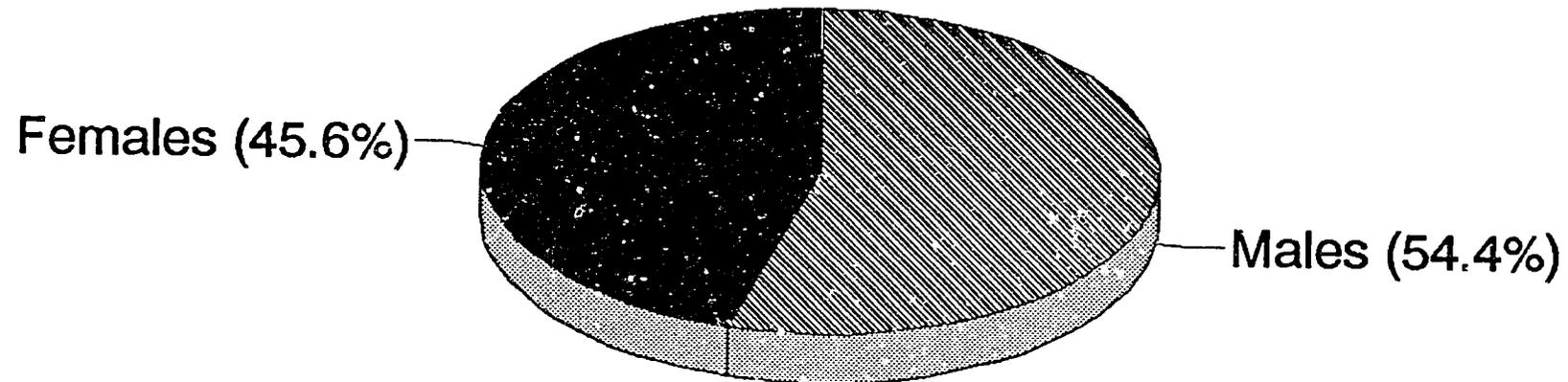
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BEAN/COWPEA CRSP

MS/PhD Degrees in Progress 9/30/1990

Gender Distribution (Total 57)



BEAN/COWPEA CRSP
DEGREES IN PROGRESS, SEPTEMBER 30, 1990 BY PROJECT

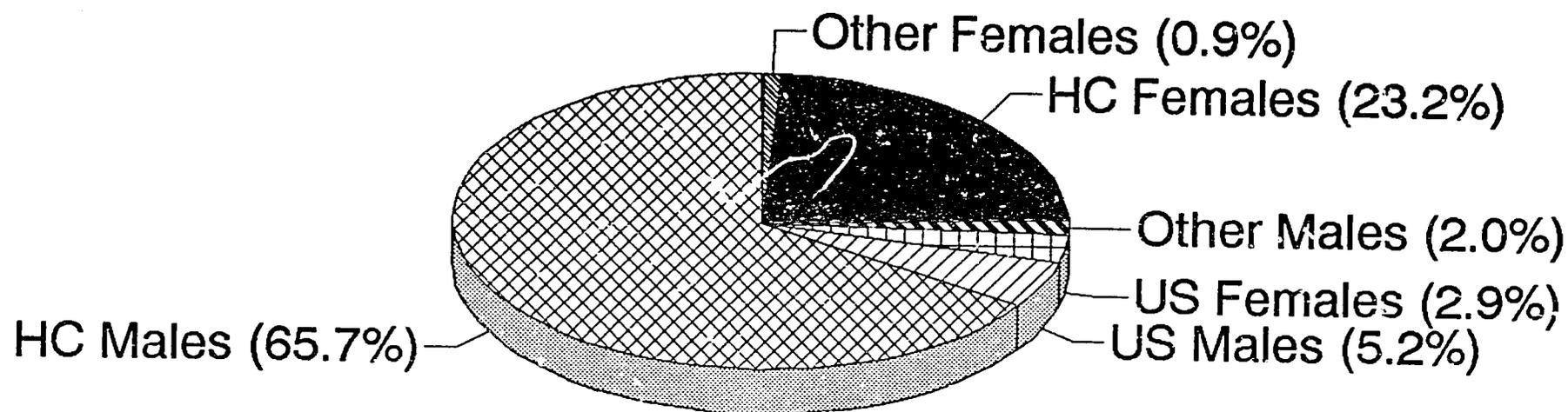
PROJECT	US						HOST COUNTRY						OTHERS						TOTALS			
	BS		MS		PhD		BS		MS		PhD		BS		MS		PhD		M	F	TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F				
Brazil/BTI					2																	
Brazil/UWI (M)	1							1												2	2	4
Cameroon/Purdue																				0	1	1
DR/UNL			1																	0	0	0
Ecuador/UMN				1				1	1											3	2	5
Guatemala/Cornell					1			1		1				1						3	4	7
Honduras/UPR							1	1												2	0	2
INCAP/WSU				1		3	2						1							2	2	4
Malawi/MSU														4						12	10	22
Mexico/MSU																				0	0	0
Nigeria/UGA				1					1	3		1	1							0	0	0
Senegal/UCR					1	1														3	4	7
Tanzania/WSU							4		1											5	1	6
TOTAL	0	1	1	3	4	7	8	1	9	7	8	4	1	1	5	0	4	5	41	28	69	
	1 BS		4 MS		11 PhD		9 BS		16 MS		12 PhD		2 BS		5 MS		9 PhD					

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BEAN/COWPEA CRSP

Non-Degree Training Through 9/30/1990

Gender Distribution (Total 899)



BEAN/COWPEA CRSP
DEGREE STUDENTS DROPPED OUT/TERMINATED, FY 80-90

NAME	GENDER	PROJECT	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	TERM.
US CITIZENS								
OTHERS								
Diop, K. (Senegal)	F	Senegal	MS	UCR	Entomology	Full	4/89	
Minja, G. (Tanz.)	M	Tanzania	MS	WSU	N/A	Total	6/83	9/84
Mosarwe, E. (Bots.)	M	Botswana	BS	Swaziland	N/A	Total	10/85	12/86
Pena, C. (Peru)	M	Guatemala	MS	WSU	FSHN	Partial	6/84	

STUDENTS NOT CONTINUING STUDIES AFTER ENGLISH LANGUAGE TRAINING

Arteaga, O (Guat.)	M	Guatemala		Cornell		Total		1983
Figueroa, G. (Guat.)	M	Guatemala		Cornell				1983
Rosario Valdez, (DR)	F	DR/UNE		UN Lincoln		Total		1981

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III. FY 80-90 MS and PhD THESIS TITLES

BEAN/COWPEA CRSP
M.S. THESIS AND PH.D. DISSERTATION TITLES FY 80-90

Included are the available thesis/dissertation titles of students receiving M.S. or Ph.D degrees under CRSP auspices between October 1, 1980 and September 30, 1990. Project affiliation and level of CRSP financial support are noted for each student.

- Acosta Gallegos, Jorge. 1988. Selection of Common Bean (*Phaseolus vulgaris* L.) Genotypes with Enhanced Drought Tolerance and Biological Nitrogen Fixation. Ph.D. Dissertation, Department of Crop and Soil Sciences, Michigan State University. (Mexico/Michigan State University Project, total CRSP support.)
- Adebo, Phillipa Ogun. 1988. Effect of Processing on Certain Nutritional Parameters of Cowpea (*Vigna unguiculata*). Ph.D. Dissertation, Department of Food Science and Human Nutrition, Michigan State University. (Nigeria/Michigan State University Project, partial CRSP support.)
- Aggour, Ahmed Reda. 1987. Genetics of and Breeding for Resistance to *Xanthomonas campestris* pv. *phaseoli* (Smith) Dye in Beans. Ph.D. Dissertation, Department of Horticulture, University of Nebraska. (Dominican Republic/University of Nebraska Project, indirect CRSP support.)
- Aldana, Fernando. 1985. Studies of Two Levels of Resistance to Halo Blight of Bean Evaluated in Growth Chamber and Field Conditions. M.S. Thesis, Department of Plant Breeding, Cornell University. (Guatemala/Cornell University Project, total CRSP support.)
- Angeles Ramos, Rosendo. 1988. The Occurrence and Properties of Epiphytic *Xanthomonas campestris* pv. *phaseoli* and Other Xanthomonads from Weeds. M.S. Thesis, Department of Plant Pathology, University of Nebraska. (Dominican Republic/University of Nebraska Project, partial CRSP support.)
- Arnaud-Santana, Eladio. 1985. Genetic Variation, Inheritance and Relationship of the Reaction to Common Blight (*Xanthomonas campestris* pv. *phaseoli* [Smith] Dye) and Number of Days to Flowering in Dry Beans (*Phaseolus vulgaris* L.). M.S. Thesis, Department of Horticulture, University of Nebraska, Lincoln. (Dominican Republic/University of Nebraska Project, total CRSP support.)
- Arrizon, Enrique. 1985. Obtained Degree by Exam. M.S., Department of Agronomy, University of California-Davis. (Kenya/University of California Project, partial CRSP support.)
- Artz, William. 1984. Interaction of Procyanidin and Protein. Ph.D. Dissertation, Department of Food Science and Human Nutrition, Washington State University. (INCAP/Washington State University Project, total CRSP support.)
- Baker, Elizabeth. 1983. Effect of Extrusion and Drum-Drained on the Nutritional Quality of Cowpea Meal as Determined by *in vivo* and *in vitro* Assays. M.S. Thesis, Department of Food Science, University of Georgia. (Nigeria/University of Georgia Project, total CRSP support.)

- Ballarin, Marco. 1982. Testing for Fugarium Root Rot Resistance in Dry Beans in Southwestern Colorado. M.S. Thesis, Department of Agronomy, Colorado State University. (INCAP/Washington State University Project, partial CRSP support.)
- Birch, Renee. 1985. Black Beans (*Phaseolus vulgaris*), Bean Broth and Growth of Preschool Guatemalan Children. Ph.D. Dissertation, Department of Food Science and Human Nutrition, Washington State University. (INCAP/Washington State University Project, partial CRSP support.)
- Bokosi, James. 1986. Races of Bean Anthracnose (*Colletotrichum lindemuthianum*) from Malaŵi, Germplasm Screening and the Genetics of Resistance in Selected Bean (*Phaseolus vulgaris* L.) Genotypes. M.S. Thesis, Department of Crop and Soil Sciences, Michigan State University. (Malaŵi/Michigan State University Project, indirect CRSP support.)
- Brunner, Bryan Robert. 1989. Estimation of Outcrossing of the Common Bean in Puerto Rico. M.S. Thesis, Department of Agronomy, University of Puerto Rico. (Dominican Republic/University of Puerto Rico Project, partial CRSP support.)
- Bulgarelli, Marlene A. 1988. Effects of Indigenous Microflora on Chemical and Functional Properties of Cowpea (*Vigna unguiculata*) Paste Used to Prepare Nigeria Akara. Ph.D. Dissertation, Department of Food Science and Technology, University of Georgia. (Nigeria/University of Georgia Project, total CRSP support.)
- Caviness, Gary. 1985. Phenotypic Variation of Flavonoids in Plants and Callus Cultures in *Phaseolus vulgaris* L. M.S. Thesis, Department of Food Science and Human Nutrition, Washington State University. (INCAP/Washington State University Project, partial CRSP support.)
- Cerna, Jonathan. 1989. Inheritance of Early Maturity of Dry Beans. M.S. Thesis, Department of Agronomy and Soils, Iowa State University. (Honduras/University of Puerto Rico Project, total CRSP support.)
- Cisse, Ndiaga. 1983. Inheritance of a Small Leaf Mutation in Cowpea: Implications in Plant Breeding. M.S. Thesis, Department of Agronomy and Range Science, University of California-Davis. (Senegal/University of California-Riverside Project, partial CRSP support.)
- Coffey, Donald. 1985. Studies of Phytohemagglutinin, the Lectin of *Phaseolus vulgaris* L. Ph.D. Dissertation, Department of Food Science and Human Nutrition, Michigan State University. (INCAP/Washington State University Project, partial CRSP support.)
- Conniff, Karen L. 1987. Cowpea and Sorghum Intercrop Systems in Semi-arid Botswana; Assessment of Yield, Growth, and Crop Water Use. Ph.D. Dissertation, Department of Agronomy, Colorado State University. (Botswana/Colorado State University Project, total CRSP support.)
- Damola, Theresa. 1988. Changes in Cowpea Texture and Solubility of Cell-Wall Components in Response to Aerobic and Anaerobic Storage and Their Relationship to Development of the Hard-to-Cook Defect. M.S. Thesis, Department of Food Science and Technology, University of Georgia. (Nigeria/University of Georgia Project, total CRSP support.)

- de Lima, Maria Goretti Araujo. 1986. The Influence of Solar and Ultraviolet Radiation in the Survival and Pathogenicity of *Vairimorpha necatrix* to the *Spodoptera latifascia*. M.S. Thesis, Department of Entomology, ESAL-Lavras. (Brazil/Boyce Thompson Institute Project, total CRSP support.)
- de Mooy, Barbara. 1985. Genetic Diversity in Cowpeas in Botswana. M.S. Thesis, Department of Crop and Soil Sciences, Michigan State University. (Botswana/Colorado State University Project, total CRSP support.)
- de Oliveira, Luiz Antonio. 1988. Competitive Ability of *Rhizobium leguminosarum* bv. *phaseoli* Strains. Ph.D. Dissertation, Department of Soil Science, University of Minnesota. (Mexico/Michigan State University Project, total CRSP support.)
- Del Rio, Luis. 1987. Microflorade la semillade frijol (*Phaseolus vulgaris* L.) en Honduras. M.S. Thesis, Department of Crop Protection, University of Puerto Rico. (Honduras/University of Puerto Rico Project, total CRSP support.)
- Deschamps, H. M. 1987. Hospedantes alternas del mosaico dorado de la habichuela (*Phaseolus vulgaris* L.). M.S. Thesis, Department of Crop Protection, University of Puerto Rico. (Dominican Republic/University of Puerto Rico Project, total CRSP support.)
- Ehlers, J. 1984. Assessment and Utilization of Exotic Cowpea Germplasm to Improve Blackeyed Pea, *Vigna unguiculata* (L.) Walp. Ph.D. Dissertation, Department of Agronomy and Range Science, University of California-Davis. (Senegal/University of California-Riverside Project, total CRSP support.)
- El Madina, Ibrahim Dow. 1985. Flowering of Contrasting Cowpea (*Vigna unguiculata* [L.] Walp.) Genotypes under Different Temperatures and Photoperiods. M.S. Thesis, Department of Botany and Plant Science, University of California-Riverside. (Senegal/University of California-Riverside Project, partial CRSP support.)
- Elowad, Hassan. 1984. Early and Late Nitrogen Fertilization and the Yields and Biological Nitrogen Fixation of Cowpeas (*Vigna unguiculata* [L.] Walp.) Under Well-Watered Conditions and Drought. Ph.D. Dissertation, Department of Botany and Plant Science, University of California-Riverside. (Senegal/University of California-Riverside Project, partial CRSP support.)
- Ene-Obong, Henrietta. 1984. Market Index, Consumption Patterns and Contribution of Cowpea/Legumes to the Nutrient Intakes of Selected Communities around Nsukka. M.S. Thesis, Department of Home Science and Nutrition, University of Nigeria, Nsukka. (Nigeria/University of Georgia Project, partial CRSP support.)
- Enwere, N. Joyce. 1985. Effect of Tempering and Drying on Selected Functional Properties and Performance of Cowpea Flour during Akara and Moin Moin Preparation. M.S. Thesis, Department of Food Science and Technology, University of Nigeria, Nsukka. (Nigeria/University of Georgia Project, partial CRSP support.)

- Falcone, Richard. 1983. Effects of Feed Composition, Feed Moisture and Barrel Temperature on Physical, Rheological and Organoleptic Properties of Extruded Cowpea, Sorghum and Peanut Blends. M.S. Thesis, Department of Food Science and Technology, University of Georgia. (Nigeria/University of Georgia Project, indirect CRSP support.)
- Fernandes, Paulo Marçal. 1986. Influencia da temperatura, umidade relativa do ar e dose na eficiencia de *Beauveria bassiana* (Bals.) Vuill. sobre *Ceratomyxa arcuata* (Col.:Chrysomelidae). M.S. Thesis, Department of Entomology, ESALQ-USP. (Brazil/Boyce Thompson Institute Project, total CRSP support.)
- Finke, M. Luann. 1985. The Inheritance and Association of Resistance to Rust (*Uromyces phaseoli*) and Common Blight (*Xanthomonas campestris* pv. *phaseoli*) and Foliar Abnormalities in Beans (*Phaseolus vulgaris* L.). M.S. Thesis, Department of Horticulture, University of Nebraska, Lincoln. (Dominican Republic/University of Nebraska Project, partial CRSP support.)
- Fujimoto, Debora K. 1985. Analysis of Strain Variation in *Xanthomonas campestris* pathovar *phaseoli* (Smith) Dye. M.S. Thesis, Department of Plant Pathology, University of Nebraska, Lincoln. (Dominican Republic/University of Nebraska Project, partial CRSP support.)
- Garvin, David. 1988. The Inheritance and Linkage of Isozyme Genes in Tepary Bean, *Phaseolus acutifolius* A. Gray. M.S. Thesis, Department of Botany and Plant Science, University of California-Riverside. (Kenya/University of California Project, partial CRSP support.)
- Gillard-Byers, Thomas. 1984. The Allocation of Resources in the Non-Mechanized Small Farm Households of Dumila, Mkundi and Magole Villages and the Kilosa District, Tanzania: A Nutrition-Based Approach. Ph.D. Dissertation, Department of Agricultural Economics, University of Illinois. (Tanzania/Washington State University Project, partial CRSP support.)
- Gniffke, Paul. 1985. Studies of Phenological Variation in the Common Bean (*Phaseolus vulgaris* L.) as Modulated by Mean Temperature and Photoperiod. Ph.D. Dissertation, Department of Plant Breeding, Cornell University. (Guatemala/Cornell University Project, total CRSP support.)
- Greaves, Michael. 1984. Obtained Degree by Exam. M.S., International Agricultural Development, University of California-Davis. (Kenya/University of California Project, partial CRSP support.)
- Hall, Judith S. 1986. Reduction of Dry Bean Storage Losses of Small Farmers in the Highlands of Ecuador. M.S. Thesis, Department of Vegetable Crops, Cornell University. (Ecuador/Cornell University Project, partial CRSP support.)
- Hoyos, Rodrigo A. 1990. Somatic Embryogenesis in Common Bean (*Phaseolus vulgaris* L.): Influence of Media and Environmental Factors on Globular and Mature Embryoid Formation. M.S. Thesis, Department of Crop and Soil Science, Michigan State University. (INCAP/Washington State University Project, partial CRSP support.)

- Hudda, Laila. 1983. Mechanical Dehulling of Cowpeas Using Wet and Dry Methods. M.S. Thesis, Department of Food Science and Technology, University of Georgia. (Nigeria/University of Georgia Project, partial CRSP support.)
- Hughes, Joseph. 1985. Effect of Dietary Fiber and Tannins on Protein Nutritive Value in the Common Bean (*Phaseolus vulgaris*). Ph.D. Dissertation, Department of Food Science and Human Nutrition, Washington State University. (INCAP/Washington State University Project, total CRSP support.)
- Hughes, Joseph. 1985. Microstructural Changes in Maturing Common Bean Seed (*Phaseolus vulgaris* L.). M.S. Thesis, Department of Food Science and Human Nutrition, Washington State University. (INCAP/Washington State University Project, total CRSP support.)
- Ibarra-Perez, Francisco. 1985. Relationship between Root and Shoot Characteristics in Common Beans (*Phaseolus vulgaris* L.) under Drought Stress. M.S. Thesis, Department of Crop and Soil Sciences, Michigan State University. (Mexico/Michigan State University Project, total CRSP support.)
- Jimenez, Juan. 1987. Evaluation of Growing and Storage Conditions on Imbibition, Germination and Cooking Time of Dry Bean Seeds. M.S. Thesis, Department of Horticulture, University of Nebraska. (Dominican Republic/University of Nebraska Project, total CRSP support.)
- Kennedy, Mark. 1982. Extrusion of Cowpeas: Effects of Extruder Feed Moisture and Barrel Temperature on the Physical Properties of Extruded Cowpea Meal. M.S. Thesis, Department of Food Science and Technology, University of Georgia. (Nigeria/University of Georgia Project, indirect CRSP support.)
- Khairallah, M. M. 1990. Mitochondrial Genome Diversity in *Phaseolus*, with Special Reference to *P. vulgaris* L. Ph.D. Dissertation, Crop and Soil Science Department, Michigan State University. (Malawi/Michigan State University Project, partial CRSP support.)
- Kirchhoff, William. 1987. Genetics and Physiology of a Chlorophyll Mutant in Cowpea (*Vigna unguiculata* [L.] Walp.). M.S. Thesis, Department of Plant Science, University of California-Riverside. (Senegal/University of California-Riverside Project, partial CRSP support.)
- Kwapata, Moses B. 1989. Approaches for Overcoming Yield Limitation in Cowpea (*Vigna unguiculata* [L.] Walp.). Ph.D. Dissertation, Department of Botany and Plant Science, University of California-Riverside. (Senegal/University of California-Riverside Project, partial CRSP support.)
- Lazu-Laboy, Jaqueline. 1987. Effect of Genotypes of *Phaseolus vulgaris* in Biological Fixation with *Rhizobium phaseoli*. M.S. Thesis, Department of Agronomy, University of Puerto Rico. (Honduras/University of Puerto Rico Project, partial CRSP support.)
- Leite, Luís Garrigós. 1988. Study of the Epizootic Potential of the Fungi *Zoophthora raticans* against *Epoasca kraemeri*. M.S. Thesis, Department of Entomology, EMBRAPA/CNPAF. (Brazil/Boyce Thompson Institute Project, total CRSP support.)

- Mabagala, Robert B. 1987. Development of an Improved Semi-Selective Medium for *Xanthomonas campestris* pv. *phaseoli* and Its Use to Characterize Resistant Bean Genotypes. M.S. Thesis, Department of Botany and Plant Pathology, Michigan State University. (Tanzania/Washington State University Project, total CRSP support.)
- Mafuleka, M. M. 1990. Mechanisms of Dry Bean (*Phaseolus vulgaris*) Hardening in Storage: Role of Pectin Methylesterase, Phytase and Lignin in Decorticated Hard and Soft Malawian Bean Landraces. Ph.D. Dissertation, Food Science and Human Nutrition Department, Michigan State University. (Malawi/Michigan State University Project, total CRSP support).
- Magalhaes, Bonifacio P. 1990. Studies on Conidium Germination and Appressorium Formation by the Entomopathogenic Fungus *Zoopthora Radicans* (Zygomycetes: Entomophthorales). Ph.D. Dissertation, Department of Entomology, Cornell University. (Brazil/Boyce Thompson Institute Project, partial CRSP support).
- Magayane, Flavianus. 1989. Changes Necessary in Extension and Agricultural Policy to Assist Female-Headed Farm Households in Tanzania. M.S. Thesis, Department of Extension Education, University of Illinois. (Tanzania/Washington State University Project, partial CRSP support.)
- Manthe, Mmasera, E. 1987. The Effect of Cowpea Blends on Yield Components Under Field Conditions in Semi-arid Botswana. M.S. Thesis, Department of Agronomy, Colorado State University. (Botswana/Colorado State University Project, total CRSP support.)
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7Students
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IV. FY 80-90 WORKSHOPS

BEAN/COWPEA CRSP
WORKSHOPS FY 80-90

ANNUAL BEAN/COWPEA CRSP SUMMER WORKSHOPS FOR STUDENTS

Biological Nitrogen Fixation Workshop—Sponsored by the Brazil/University of Wisconsin (Bliss) project, this workshop was held in Madison, Wisconsin, July 17-20, 1983. Eighteen students participated.

MSTAT Workshop—Sponsored by the Mexico/Michigan State University/Adams project, two sessions were held in East Lansing, MI, August 20-24 and 27-31, 1984. Twenty-three students and researchers attended the computer course.

Dry Bean Quality and Women and Food Concerns Workshop—This workshop was sponsored by the INCAP/Washington State University project was held in Pullman, WA, July 16-18, 1985. Thirty-one students and researchers attended.

Workshop on On-Farm Design, Testing and Evaluation—This workshop was sponsored by the CRSP Technical Committee and was held at the University of Florida in Gainesville, FL, July 8-11, 1987. Fifteen students and researchers participated. (Five INTSORMIL participants also attended.)

MSTAT Workshop—Sponsored by the Tanzania/Washington State project, participants from Tanzania, Malawi, Uganda, and the USA attended the course at Sokoine University (October 6-10, 1987).

COWPEA IMPROVEMENT THROUGH BIOTECHNOLOGY—This conference brought researchers from IITA, Italy and Purdue together to discuss cowpea improvement relating to biotechnology issues. This was held at Purdue University in July 1990.

INTERNATIONAL RESEARCH MEETING OF THE BEAN/COWPEA CRSP—This meeting was held in East Lansing, MI from April 30 - May 3, 1990. Over 100 scientists from Africa, Asia, Latin America and the U.S. participated in the conference.

ANNUAL BEAN WORKSHOP at SOKOINE UNIVERSITY of AGRICULTURE—This workshop brings together bean researchers from Tanzania and Eastern and Southern Africa to discuss research findings and to plan collaborative research efforts. Nine workshops have been held to date.

GRANTS AND CONTRACTS WORKSHOPS—Three of these workshops have been held. Two were held in Detroit, MI., one on April 21, 1983 and the second April 22-23, 1985; the third one was held in Chicago, IL, May 7, 1987. They were attended by representatives from the grants and contracts offices of participating CRSP US institutions.

SYMPOSIUM ON BREEDING FOR HIGHER YIELDS IN BEANS—Sponsored by ICTA, CIAT and the Bean/Cowpea CRSP Guatemala/Cornell University/Wallace project, this symposium was held in conjunction with the XXXIII Annual Meeting of PCCMCA in Guatemala City, Guatemala, March 31, 1987. Bean scientists from Central, South and North America attended.

SOCIO-AGRONOMIC WORKSHOP--This workshop took place in East Lansing, MI, October 10-11, 1985. It was sponsored by the Malawi/Michigan State University project and was attended by twenty CRSP researchers and students.

TEPARY BEAN WORKSHOP--Held in Mexacali, Mexico, August 30, 1985, this workshop was sponsored by the University of Arizona, the National Bean Program of Mexico and the Bean/Cowpea CRSP.

WORKSHOP ON DROUGHT AND TEMPERATURE TOLERANCE IN BEANS AND COWPEAS--This workshop was held in Durango, Mexico August 26-28, 1985. Sponsored by the Mexico/Michigan State University/Adams project, it brought together thirty-five researchers from within and outside of the CRSP.

WORLD COWPEA RESEARCH CONFERENCE--Sponsored by IITA and the Bean/Cowpea CRSP, this workshop took place in Ibadan, Nigeria, November 5-9, 1984. It was attended by researchers from around the world.

In addition to these workshops, many of the CRSP projects regularly sponsor workshops and conferences in the Host Countries. These workshops are listed in the FY 80-90 Non-Degree Training Summaries.

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V. FY 1980-90 PROJECT DEGREE AND NON-DEGREE TRAINING CHARTS
BY STUDENT NAME

BOTSWANA/COLORADO STATE UNIVERSITY
DEGREE TRAINING FY 80-87

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETE
US CITIZENS							
Conniff, K.	F	PhD	CSU	Agronomy	Total	1/83	6/87
de Mooy, B.	F	MS	MSU	Crop & Soils	Total	9/82	10/85
BOTSWANA CITIZENS							
Manthe, M.	F	MS	CSU	Agronomy	Total	8/83	12/86
Montshiwa, P.	M	MS	CSU	Agronomy	Total	1/84	12/86
Mosarwe, E.	M	BS	Swaziland	Agriculture	Total	8/85	terminated 12/86

BOTSWANA/COLORADO STATE UNIVERSITY
NON-DEGREE TRAINING FY 80-87

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Conniff, K.	F	Spec Design	IITA	1984	7 days	Total	Cowpea Breeding
de Mooy, B.	F	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
BOTSWANA CITIZENS							
Ditshidi, P.	F	On Job Training	Botswana	1984/85	6 months	Partial	Field and Lab Technician
Manthe, M.	F	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Mokgweetsi, H.	M	Spec Design	Burkina Faso	1983	6 months	Partial	Cowpea Agronomy
Montshiwa, P.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Mosarwe, E.	M	Off Shelf	IITA	1984	2 months	Total	Cowpea Agronomy
Mosarwe, E.	M	Off Shelf	Burkina Faso	1983	6 months	Partial	Cowpea Agronomy
Nkago, T.	M	Off Shelf	Burkina Faso	1985	3 months	Partial	Cowpea Agronomy
Riggle, R.	F	Spec Design		1983	3 days	Total	BNF Workshop
Seokang, K.	F	On Job Training	Botswana	1984/85	3 months	Partial	Field Experimentation
Shubo, M.	M	Off Shelf	IITA	1984	2 months	Total	Cowpea Agronomy
86 Researchers	79 M 7 F	Off Shelf	Botswana	1986	3 days	Partial	Field Experimentation
OTHERS							
Asinga, J. (Tanzania)	M	Spec Design	UW	1983	3 days	Partial	BNF Workshop

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BRAZIL/UNIVERSITY OF WISCONSIN (BLISS)
DEGREE TRAINING FY 80-89

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Henson, R.	M	Post Doc	Brazil	Horticulture	Total	5/83	5/88
BRAZIL CITIZENS							
Pereira, P.	M	MS	UWI	Horticulture	Indirect	8/83	7/85
Pereira, P.	M	PhD	UWI	Horticulture	Total	9/85	5/87

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BRAZIL/UNIVERSITY OF WISCONSIN (BLISS)
NON-DEGREE TRAINING FY 80-89

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Barnes, D.	F	On Job Training	MSU	1983	6 months	Total	Rhizobiology Techniques
Bliss, F.	M	Special Design	U FL	1987	5 days	Partial	On-Farm Testing Workshop
Smith, K.	F	On Job Training	MSU	1985	2 months	Partial	Premature Nodule Senescence
Yokogama, C.	M	On Job Training	MSU	1985	4 months	Partial	Rhizobiology Techniques
Yokogama, C.	M	On Job Training	MSU	1983	3 months	Partial	Rhizobiology Techniques
BRAZIL CITIZENS							
Araujo, R.	M	On Job Training	MSU	1983	8 months	Total	Rhizobiology Techniques
da Cunha, L.	F	Off Shelf	CNPAF	1984/85	12 months	Partial	N ₂ Fixation
de Moura, R.	F	On Job Training	CNPAF	1987	5 months	Total	Rhizobiology Techniques
Fervandes, J.	F	On Job Training	UW	1986	5 days	Partial	N ₂ Fixation
Flores, J.	M	On Job Training	MSU	1984/85	11 months	Total	Rhizobiology Techniques
Lopes, E.	F	On Job Training	CNPAF	1987	5 months	Total	Rhizobiology Techniques
Pereira, P.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Rias, E.	F	On Job Training	CNPAF	1987	5 months	Total	Rhizobiology Techniques

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BRAZIL/UNIVERSITY OF WISCONSIN (MAXWELL)
 DEGREE TRAINING FY 80-88

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Gilbertson, R.	M	Post Doc	UWI	Plant Pathology	Total	4/85	9/88
Havey, M.	M	Post Doc	CNPAF	CNPAF	Total	10/84	9/86
Inglis, D.	F	Post Doc	UWI	Plant Pathology	Total	2/83	2/85
Loniello, A.	F	BS	UWI	Plant Pathology	Partial	9/89	
BRAZIL CITIZENS							
Figueiredo, G.	F	MS	Brazil	Plant Pathology	Total	9/85	12/88

BRAZIL/UNIVERSITY OF WISCONSIN (MAXWELL)
NON-DEGREE TRAINING FY 80-88

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Carlson, E.	M	On Job Training	UW	1985	7 months	Total	Technical Support
Frauenfelder, J.	F	On Job Training	UW	1985	3 months	Total	N/A
Havey, M.	M	Language	UW	1984/85	7 months	Total	Portugese
BRAZIL CITIZENS							
Antunes, I.	M	Special Design	UW	1982	3 days	Total	BNF Workshop
Faria, J.	M	Special Design	UW	1988	2 years	Partial	Molecular Biology
Figueiredo, G.	F	On Job Training	CNPAF	1985	3 months	Total	Evaluation of Media for Sporulation of <u>I. Griseola</u>
Sartorato, A.	M	Off Shelf	UW	1982	3 weeks	Total	Inoculation Techniques
Sartorato, A.	M	Off Shelf	USDA	1985	3 weeks	Total	Inoculation Techniques for Bean Rust
15 People	6 M 9 F	Special Design	CNPAF	1985	10 days	Total	Major Diseases of Beans in Brazil

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BRAZIL/BOYCE THOMPSON INSTITUTE
DEGREE TRAINING FY 80-90

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Hall, J.	F	PhD	Cornell	Vegetable Crops	Partial	5/87	
Wraight, S.	F	PhD	Cornell	Entomology	Total	9/83	
BRAZIL CITIZENS							
de Lima, M.	F	MS	Brazil Univ	Plant Protection	Total	2/84	10/86
Fernandes, P.	M	MS	Brazil Univ	Entomology	Total	2/84	10/86
Leite, L.	M	MS	Brazil Univ	Entomology	Total	3/86	2/89
Lima, G.	F	MS	Brazil Univ	Entomology	Total	3/84	10/86
Magalhaes, B.	M	PhD	Cornell	Entomology	Partial	8/87	
Pereira, R.	M	MS	Cornell	Entomology	Total	1/85	
Quintela, E.	F	MS	Brazil Univ	Entomology	Total	2/84	10/86

BRAZIL/BOYCE THOMPSON INSTITUTE
NON-DEGREE TRAINING FY 80-90

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Daoust, R.	M	Language	Brazil	1981/82	4 months	Total	Portuguese
Kreuger, S.	M	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop
Roberts, D.	M	Language	Cornell	1981	6 weeks	Partial	Portuguese
BRAZIL CITIZENS							
Arevalo, A.	F	On Job Training	Boyce	1986	N/A	Total	N/A
Barbosa, D.	M	Special Design	CNPAF	1986	14 days	Partial	Microbiological Control
Capalbo, D.	F	Special Design	CNPAF	1986	14 days	Partial	Microbiological Control
Carniero, J.	F	On Job Training	CNPAF	1984	7 days	Total	Microbiological Control/ Cowpea Pests--Research/On Job Training
Carniero, J.	F	On Job Training	CNPAF	1983	4 days	Total	Microbiological Control/ Cowpea Pests--Research/On Job Training
Carniero, J.	F	Special Design	CNPAF	1982	5 days	Partial	Microbiological Control/ Cowpea Pests
Coelho, H.	F	On Job Training	CNPAF	1982/83	15 months	Total	Insect Rearing, Lab Techniques
DaSilva, G.	F	Special Design	CNPAF	1986	14 days	Partial	Microbiological Control
Dasmartins, J.	M	Special Design	CNPAF	1986	14 days	Partial	Microbiological Control
de Lima, M.	F	Language	Brazil	1983/84	10 months	Total	English
de Lima, M.	F	Special Design	CNPAF	1982	5 days	Partial	Microbiological Control/ Cowpea Pests
de Lima, M.	F	Off Shelf	CNPAF	1982/84	15 months	Total	Entomology/Micro Control Research Internship

BRAZIL/BOYCE THOMPSON INSTITUTE NON-DEGREE TRAINING (CONT'D)

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
BRAZIL CITIZENS							
Dos Santos, A.	M	On Job Training	CNPAF	1983	3 days	Partial	Microbial Control of <u>Empoasoa kraemeri</u>
Dos Santos, A.	M	On Job Training	CNPAF	1983	3 days	Partial	Research Training
Fernandez, P.	M	Special Design	CNPAF	1982	5 days	Partial	Microbiological Control/ Cowpea Pests
Fernandez, P.	M	Language	Brazil	1983/84	9 months	Total	English
Fernandez, P.	M	Off Shelf	CNPAF	1983/84	8 months	Total	Entomology/Micro Control Research Internship
Ferreira, G.	F	Special Design	CNPAF	1986	14 days	Partial	Microbiological Control
Janeironeves, P.	M	Special Design	CNPAF	1986	14 days	Partial	Microbiological Control
Junior, D.	M	Special Design	CNPAF	1986	14 days	Partial	Microbiological Control
Laranjeiro, A.	M	Special Design	CNPAF	1986	14 days	Partial	Microbiological Control
Leite, L.	M	Language	Brazil	1986		Total	English
Loch, L.	M	Special Design	CNPAF	1989		Partial	Microbiological Control
Magalhaes, B.	M	Special Design	BTI	1984	35 days	Total	Entomology/Micro Control Internship
Martins dos Santos, S.	M	Language	Brazil	1982/84	20 months	Total	English
Martins dos Santos, S.	M	On Job Training	CNPAF	1982/83	18 months	Total	Insect Pathology & Microbial Control, Lab Techniques
Milani, M.	F	Special Design	CNPAF	1990		Partial	Microbiological Control
Ohashi, O.	M	Special Design	CNPAF	1986	14 days	Partial	Microbiological Control
Pereira, R.	M	Off Shelf	CNPAF	1984	6 months	Total	Entomology Research Internship
Quintela, E.	F	Special Design	CNPAF	1984	5 days	Partial	Microbiological Control/ Cowpea Pests
Quintela, E.	F	Language	Brazil	1987		Total	English
Tigano, M.	F	Special Design	CNPAF	1986	14 days	Partial	Microbiological Control/ Microbiological Control
Valicente, F.	M	Special Design	CNPAF	1986	14 days	Partial	Microbiological Control/ Microbiological Control

BRAZIL/BOYCE THOMPSON INSTITUTE NON-DEGREE TRAINING (CONT'D)

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
21 People	11 M 9 F	Special Design	CNPAF	1984	5 days	Partial	Microbiological Control/ Cowpea Pests
20 People	15 M 5 F	Special Design	CNPAF	1985	5 days	Partial	Bean/Cowpea Entomology
10 People	10 M	Off Shelf	CNPAF	1984	18 days	Indirect	Cowpea Production
25 People	11 M 14 F	Off Shelf	CNPAF	1984	2 days	Indirect	Student Interns in Agric
20 People	15 M 5 F	Off Shelf	CNPAF	1983	2 days	Indirect	Student Interns in Agric
16 People	3 M 13 F	Special Design	CNPAF	1982	5 days	Partial	Microbiological Control/ Cowpea Pests
OTHERS							
Camarena, P. (Mexico)	F	Special Design	CNPAF	1984	25 days	Total	Entomology/Micro Control Short-term Internship

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CAMEROON/UNIVERSITY OF GEORGIA
DEGREE TRAINING FY 80-87

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
None							
CAMEROON CITIZENS							
Ntoukam, G.	M	MS	UGA Athens	Entomology	Total	1/84	9/86

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CAMEROON/UNIVERSITY OF GEORGIA
NON-DEGREE TRAINING FY 80-87

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Chalfant, R.B.	M	Special Design	Tifton, GA	1982-5	3 hrs./wk.	Indirect	Tutoring in French
Chalfant, R.B.	M	Special Design	Biloxie, MS	1985	2 days	Total	Cowpea Improvement Workshop
Chalfant, R.B.	M	Special Design	Orlando, FL	1986	2 days	Total	Cowpea Improvement Workshop
Chalfant, R.B.	M	Special Design	Goiania	1983	5 days	Total	Pest Management Workshop
CAMEROON CITIZENS							
Amadou, D.	M	On Job Training	Cameroon	1984	6 months	Partial	Applied Entomology
Amadou, D.	M	On Job Training	Cameroon	1985	2 months	Partial	Cowpea Technology
Endondo, C.	M	Special Design	IITA	1985	3 months	Total	Cowpea Technology
Kairama, M.	F	On Job Training	Cameroon	1984	6 months	Partial	Applied Entomology
Keou, C.	F	On Job Training	Cameroon	1985	2 months	Partial	Cowpea Technology
Kobu, R.	F	On Job Training	Cameroon	1984	6 months	Partial	Applied Entomology
Miles, C.	F	Special Design	Cameroon	1984	4 months	Partial	Applied Entomology
N'Guessan, F.	M	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop
Nquizaye, M.	F	On Job Training	Cameroon	1984	6 months	Partial	Applied Entomology
Ntoukam, G.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Ntoukam, G.	M	Special Design	IITA	1982	4 months	Total	Cowpea Technology
Ntoukam, G.	M	On Job Training	Cameroon	1982/83	6 months	Total	Cowpea Technology
Somda, C.	M	Special Design	UW	1983	3 days	Total	BNF Workshop
Ta'ama, M.	M	Special Design	Washington	1985	3 days	Total	Pesticide Application Workshop
Ta'ama, M.	M	Special Design	Biloxie, MS	1985	2 days	Total	Cowpea Improvement Workshop

CAMEROON/UNIVERSITY OF GEORGIA NON-DEGREE TRAINING (CONT'D)

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
Ta'ama, M.	M	Special Design	Orlando, FL	1986	2 days	Total	Cowpea Improvement Workshop
Ta'ama, M.	M	Special Design	USA	1982-6	1 month/yr	Total	Visits to Various US Research Institutions
Tchieque, --	M	On Job Training	Cameroon	1984	6 months	Partial	Applied Entomology
Tchougna, H.	F	On Job Training	Cameroon	1984	2 months	Partial	Applied Entomology
Warita, M.	F	On Job Training	Cameroon	1985	2 months	Partial	Cowpea Technology
3 Field Technicians	3 M	On Job Training	Cameroon	1982	3 months	Partial	Cowpea Technology

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CAMEROON/PURDUE UNIVERSITY
DEGREE TRAINING FY 87-90

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
None							
CAMEROON CITIZENS							
Chevalier, E.	M	MS	Purdue	Entomology	Total	9/88	9/90

CAMEROON/PURDUE UNIVERSITY
NON-DEGREE TRAINING FY 87-90

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
Kitch, L.	M	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop

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DOMINICAN REPUBLIC/UNIVERSITY OF NEBRASKA-LINCOLN
DEGREE TRAINING FY 80-90

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Finke, L.	F	MS	UN Lincoln	Horticulture	Partial	9/82	1/85
Fujimoto, D.	F	MS	UN Lincoln	Plant Pathology	Partial	9/83	12/84
Fujimoto, D.	F	PhD	UN Lincoln	Plant Pathology	Partial	1/85	
Zapata, M.	F	PhD	UN Lincoln	Plant Pathology	Partial	8/85	5/89
DOMINICAN REPUBLIC CITIZENS							
Angeles, R.	M	MS	UN Lincoln	Plant Pathology	Partial	8/86	5/88
Arnaud Santana, E.	M	MS	UN Lincoln	Horticulture	Total	12/83	5/85
Arnaud Santana, E.	M	PhD	UN Lincoln	Horticulture	Partial	1/89	
Catano, H.	F	MS	UPR	Agronomy	Partial	8/87	
Godoy, G.	F	PhD	UN Lincoln	Plant Pathology	Partial	8/85	1/89
Jimenez, J.	M	MS	UN Lincoln	Horticulture	Total	6/85	10/87
Ramirez, W.	M	MS	UN Lincoln	Horticulture	Total	1/83	5/86
Rodriguez, M.	F	BS	Dom Rep	Agronomy	Partial	8/84	6/87
Tejada, M.	M	MS	UN PR	N/A	N/A	8/86	
OTHERS							
Leyna, H. (Tanzania)	M	PhD	UN Lincoln	Horticulture	Indirect	9/80	Deceased 10/83
Aggour, A. (Egypt)	M	PhD	UN Lincoln	Horticulture	Indirect	9/83	12/87
Erazo, J. (Honduras)	M	BS	EAP	Agronomy	Partial	1/88	12/88
Zepeda, J. (Honduras)	M	BS	EAP	Agronomy	Partial	1/88	12/88
Zaiter, H.	M	PhD	UN Lincoln	Horticulture	Partial	9/83	5/87

DOMINICAN REPUBLIC/UNIVERSITY OF NEBRASKA-LINCOLN
NON-DEGREE TRAINING FY 80-90

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Blair, M.	M	Special Design	UPR	1989		Partial	Plant Breeding
Coyne, D.	M	Language	UN Lincoln	1981/85	4 years	Indirect	Spanish
McElroy, J.	M	Special Design	Nebraska	1985	2 days	Total	Bean Production Workshop
Schuster, M.	M	Language	UN Lincoln	1981/82	9 months	Indirect	Spanish
Steadman, J.	M	Language	UN Lincoln	1981/8:			
DOMINICAN REPUBLIC CITIZENS							
Andujar, F.	M	Off Shelf	Costa Rica	1985	10 days	Total	Microcomputer Course
Arnaud-Santana, E.	M	Other	Nebraska	1985	1 day	Total	Bean Field Day
Arnaud-Santana, E.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Arnaud-Santana, E.	M	Language	UN Omaha	1983	12 months	Total	English
Arnaud-Santana, E.	M	Special Design	UW	1983	3 days	Total	BNF Workshop
Arnaud-Santana, E.	M	On Job Training	Nebraska	1982	1 day	Total	Bean Rust Nursery Evaluation
Castillo, F.	M	Off Shelf	Costa Rica	1985	10 days	Total	Bean Production Course
Concepcion, S.	M	Special Design	Nebraska	1989	3 months	Total	Plant Pathology
Figueroa, A.	F	On Job Training	Nebraska	1986	1 month	Partial	
Herrera, M.	M	Special Design	UPR	1990	2 months	Partial	Plant Breeding
Jimenez, J.	M	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Jimenez, J.	M	Language	UN Omaha	1984/85	10 months	Total	English
Morates, M.	M	Off Shelf	CIAT	1984	2 months	Partial	Bean Disease Resistance
Moreta, J.	M	Off Shelf	Costa Rica	1985	10 days	Total	Microcomputer Course
Pena, E.	F	On Job Training	Nebraska	1987			
Pena, E.	M	Special Design	U Nebraska	1986		Partial	Crop Protection
Ramirez, W.	M	Off Shelf	UW	1983	3 days	Total	BNF Workshop
Ramirez, W.	M	Language	UN Omaha	1982	7 months	Total	English
Ramirez, W.	M	On Job Training	Nebraska	1982	1 day	Total	Bean Rust Nursery Evaluation
Ramirez, W.	M	Other	Nebraska	1982	1 day	Total	Bean Field Day
Rosario Valdez, G.	F	Language	UN Omaha	1981	3 months	Total	English

DOMINICAN REPUBLIC/UNIVERSITY OF NEBRASKA-LINCOLN NON-DEGREE TRAINING (CONT'D)

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
Sanchez, A.	F	Special Design	UPR	1989		Partial	Plant Pathology
Sanchez, A.	F	Special Design	Guatemala	1985	38 days	Partial	Bean Golden Mosaic Station Management
Sanchez, A.	F	Off Shelf	UPR	1984	2 weeks	Total	Lab Techniques
Sanchez, A.	F	Special Design	UPR	1983	22 days	Total	Bacterial Diseases/Beans
Tejado, M.	M	Off Shelf	Costa Rica	1985	30 days	N/A	Bean Production/Mustia Hilachoza
Valdez, M.	F	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop
35 People	30 M 5 F	Special Design	UPR	1983	3 days	N/A	Bean Rust Workshop
OTHERS							
Jung, G.	M	Special Design	U Nebraska	1989		Partial	Horticulture
Opio, F.	F	Special Design	U Nebraska	1989	1 month	Partial	Plant Pathology
Zaiter, H.	M	Special Design	U Nebraska	1989		Partial	Plant Breeding

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DOMINICAN REPUBLIC/UNIVERSITY OF PUERTO RICO
DEGREE TRAINING FY 80-86

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Brunner, B.	M	MS	UPR	Agronomy	Partial	3/85	6/88
Velez Martinez, H.	M	MS	UPR	Crop Protection	Partial	8/82	6/89
DOMINICAN REPUBLIC CITIZENS							
Deschamps, H.	M	MS	UPR	Crop Protection	Total	1/84	3/87
Martinez Cruz, M.	M	MS	UPR	Crop Protection	Total	8/81	2/84
Mateo Solano, M.	M	MS	UPR	Agronomy	Total	3/83	5/86
Oviedo, F.	M	BS	DR Univ	Agronomy	Partial	9/83	12/87
Oviedo, F.	M	MS	UPR	Agronomy	Total	1/87	5/89
Rodriguez, M.	F	BS	DR Univ	Agronomy	Partial	8/83	6/87

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DOMINICAN REPUBLIC/UNIVERSITY OF PUERTO RICO
NON-DEGREE TRAINING FY 80-86

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Davila, M.	F	Special Design	UPR	1984	6 weeks	Total	Summer Practical Requirement
Echavez-Badel, R.	M	Special Design	UPR	1983	5 weeks	Total	Micro Computers
Echavez-Badel, R.	M	Special Design	UPR	1983	4 days	Partial	Bean Rust Workshop
Gonzalez, O.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Segarra, F.	M	Special Design	UPR	1984	2 months	Total	Summer Practical Requirement
Velez Martinez	M	Special Design	UPR	1983	5 days	Total	Micro Computer Training
Velez Martinez	M	Special Design	UPR	1983	4 days	Partial	Bean Rust Workshop
Zapata, Serrano M.	F	Special Design	UPR	1983	5 days	Total	Micro Computer Training
Zapata, Serrano M.	F	Special Design	UPR	1983	4 days	Partial	Bean Rust Workshop
DOMINICAN REPUBLIC CITIZENS							
Martinez, Cruz M.	M	Special Design	UW	1983	3 days	Total	BNF Workshop
Mateo Solano, M.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Nin, J.	M	Special Design	UPR	1984	10 days	Total	Bean Research Techniques
Oviedo, F.	M	Off Shelf	CIAT	1984	2 months	Partial	Agronomic Aspect of Bean Culture
Oviedo, F.	M	Special Design	UPR	1984	3 days	Partial	Bean Breeding Workshop
Oviedo, F.	M	Off Shelf	UPR	1983	3 weeks	Total	Bean Technology Training
Oviedo, F.	M	On Job Training	UPR	1983	2 weeks	Total	Short Course on Bean Research Techniques
Oviedo, F.	M	Special Design	UPR	1982	14 days	Partial	Bean Breeding
Oviedo, F.	M	On Job Training	UPR	1982	2 weeks	Total	Short Course on Bean Research Techniques
Pena, E.	F	Special Design	CIAT	1984	2 months	Partial	Bean Disease Resistance
Pena, E.	F	Special Design	UPR	1984	11 days	Total	Bean Research Techniques

DOMINICAN REPUBLIC/UNIVERSITY OF PUERTO RICO NON-DEGREE TRAINING (CONT'D)

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
Rodriguez, M.	F	Off Shelf	CIAT	1984	1 month	Partial	Germplasm Management
Rodriguez, M.	F	Special Design	UPR	1984	3 months	Total	Special Problems
Rodriguez, M.	F	Special Design	UPR	1983	3 weeks	Total	Bean Technology
Rodriguez, M.	F	Special Design	UPR	1982	13 days	Partial	Bean Breeding
Rodriguez, M.	F	Special Design	UPR	1982	N/A	Partial	Pesticide Management
Saladin, F.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
15 People	10 M 5 F	Special Design	DR	1985	1 week	Partial	Research Techniques/ Plant Virology
30 People	20 M 10 F	Special Design	DR	1984	3 days	Partial	First Bean Nitrogen Fixation

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ECUADOR/CORNELL UNIVERSITY
DEGREE TRAINING FY 80-86

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Campbell, C.	F	PhD	Cornell	Intl. Nutrition	Indirect	9/78	10/85
Golden, D.	M	BS	Cornell	Ag Economics	Indirect	9/82	6/85
Goldstein, D.	F	BS	Cornell	Rural Sociology	Indirect	N/A	6/84
Hall, J.	F	MS	Cornell	Vegetable Crops	Partial	9/82	8/86

ECUADOR CITIZENS

None

ECUADOR/CORNELL UNIVERSITY
NON-DEGREE TRAINING FY 80-86

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Campbell, C.	F	Special Design	Cornell	1984	1 week	Total	FSR Theory Workshop
Campbell, C.	F	On Job Training	Cornell	1984	3 months	Total	Integration of Nutrition
Dillon, Paul	M	Special Design	Cornell	1982	1 months	Total	Research Design
Dillon, Paul	M	On Job Training	Ecuador	1981/82	10 months	Total	Literature Review
Golden, D.	M	On Job Training	Cornell	1982/85	3 years	Total	Micro Computer Capacity
Goldstein, D.	F	Off Shelf	Ecuador	1984	5 months	Total	Sociology
Goldstein, D.	F	On Job Training	Ecuador	1983	7 months	Total	Survey Research
Goldstein, D.	F	On Job Training	Ecuador	1982/84	9 months	Total	Analysis & Write-Up
Gonzalez, C.	M	Special Design	Cornell	1984	1 week	Total	FSR Theory Method
Hall, Judy	F	Special Design	Ecuador	1985	1 week	Total	FSR Workshop
Hall, Judy	F	On Job Training	Ecuador	1985	1 month	Total	Seed Storage Study
Hall, Judy	F	Special Design	Ecuador	1984	1 month	Total	Seed Storage Problems
Kline, W.	M	On Job Training	Ecuador	1985	1 week	Total	FSR Workshop
Kline, W.	M	Special Design	Cornell	1984	1 week	Total	FSR Theory & Method
Merschrod, K.	M	Special Design	Cornell	1984	1 week	Total	FSR Theory & Method
Raynolds, L.	F	Special Design	Cornell	1984	1 week	Total	FSR Theory & Method
Staver, C.	M	On Job Training	Ecuador	1981/82	10 months	Total	Research Design
ECUADOR CITIZENS							
Acuna, J.	M	Special Design	Ecuador	1985	1 week	Total	FSR Workshop
Acuna, J.	M	Language	Ecuador	1983/84	21 months	Total	English
Acuna, J.	M	On Job Training	Ecuador	1982	1 month	Total	FSR
Alcivar, W.	M	On Job Training	Ecuador	1985	1 month	Total	FSR
Arevalo, V.	F	Language	Ecuador	1983/84	11 months	Total	English
Arevalo, V.	F	On Job Training	Ecuador	1984/85	6 months	Total	FSR
Arevalo, V.	F	Other	KSU	1984	1 week	Total	FSR Symposium
Arevalo, V.	F	On Job Training	Ecuador	1983	8 months	Total	Survey Research
Arevalo, V.	F	On Job Training	Ecuador	1983	1 month	Total	Analysis & Write-Up

ECUADOR/CORNELL UNIVERSITY NON-DEGREE TRAINING (CONT'D)

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
Arevalo, V.	F	On Job Training	Ecuador	1982	1 month	Total	FSR
Arroyabe, J.	M	On Job Training	Ecuador	1984/85	6 months	Total	FSR
Barba, D.	F	Special Design	Ecuador	1985	1 week	Total	FSR Workshop
Barba, D.	F	On Job Training	Ecuador	1985	1 month	Total	FSR
Cardenas, F.	F	On Job Training	Ecuador	1985	1 month	Total	FSR
Cardozo, V.	M	Special Design	Ecuador	1985	1 week	Total	FSR Workshop
Carillo, M.	M	On Job Training	Ecuador	1985	1 month	Total	FSR Workshop
Carillo, R.	M	On Job Training	Ecuador	1985	1 month	Total	FSR
Carillo, R.	M	Other	Ecuador	1984	1 week	Total	FSR Symposium
Cevallos, E.	M	Special Design	Ecuador	1985	1 week	Total	FSR Workshop
Cevallos, E.	M	Language	Ecuador	1983/84	21 months	Total	English
Cevallos, E.	M	On Job Training	Ecuador	1983	1 month	Total	FSR
Cevallos, E.	M	On Job Training	Ecuador	1982	1 month	Total	FSR
Chavez, N.	M	Special Design	Ecuador	1985	1 week	Total	FSR Workshop
Chavez, N.	M	On Job Training	Ecuador	1985	2 months	Total	Interview Methods
Chavez, N.	M	On Job Training	Ecuador	1984/85	6 months	Total	FSR Analysis
Chiriboga, C.	M	Language	Ecuador	1983/84	1 year	Total	English
Chiriboga, C.	M	On Job Training	Ecuador	1982	1 month	Total	FSR
Cordova, L.	F	Language	Ecuador	1983/84	1 year	Total	English
Cordova, L.	F	On Job Training	Ecuador	1982	1 month	Total	FSR
Diaz, J.	M	On Job Training	Ecuador	1985	1 week	Total	FSR Workshop
Espinosa, P.	M	Other	KSU	1984	1 week	Total	FSR Symposium
Espinosa, P.	M	On Job Training	Ecuador	1982	5 weeks	Total	FSR
Estrella, G.	M	On Job Training	Ecuador	1985	1 month	Total	FSR
Figueroa, A.	M	Language	Ecuador	1983/84	1 year	Total	English
Figueroa, A.	M	On Job Training	Ecuador	1982	1 month	Total	FSR
Guerra, M.	M	On Job Training	Ecuador	1985	1 month	Total	FSR
Hinostrosa, F.	M	On Job Training	Ecuador	1985	1 month	Total	FSR
Limangi, R.	M	On Job Training	Ecuador	1985	1 month	Total	FSR
Linzan, L.	M	On Job Training	Ecuador	1985	1 month	Total	FSR
Linzan, L.	M	On Job Training	Ecuador	1985	1 month	Total	FSR/Final Report

ECUADOR/CORNELL UNIVERSITY NON-DEGREE TRAINING (CONT'D)

	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
Maldonado, L.	M	Special Design	Ecuador	1985	1 week	Total	FSR Workshop
Munoz, F.	M	Special Design	Ecuador	1985	1 week	Total	FSR Workshop
Pinchazoa	M	Language	Ecuador	1983/84	1 year	Total	English
Pinchazoa	M	On Job Training	Ecuador	1982	1 month	Total	FSR
Pinzon, J.	M	Language	Ecuador	1983/84	1 year	Total	English
Pinzon, J.	M	On Job Training	Ecuador	1982	1 month	Total	FSR
Ugalde, A.	M	On Job Training	Ecuador	1985	1 month	Total	FSR
Uquillas, J.	M	On Job Training	Ecuador	1985	1 week	Total	FSR Workshop
Vargas, O.	M	On Job Training	Ecuador	1985	1 month	Total	FSR
Veles, A.	M	On Job Training	Ecuador	1985	1 month	Total	FSR
Villafuerte, A.	M	Special Design	Ecuador	1985	1 week	Total	FSR Workshop
Villasis, C.	M	Special Design	Ecuador	1985	1 week	Total	FSR Workshop
Villasis, C.	M	Language	Ecuador	1983/84	12 months	Total	English
Zambrano, E.	M	Special Design	Ecuador	1985	1 week	Total	FSR Workshop
Zambrano, E.	M	Language	Ecuador	1983/84	1 year	Total	English
Zambrano, E.	M	On Job Training	Ecuador	1982	1 month	Total	FSR
OTHERS							
Palacios, J.	M	On Job Training	Cornell	1982/83	9 months	Total	Micro Computer Applications

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ECUADOR/UNIVERSITY OF MINNESOTA
DEGREE TRAINING FY 89-90

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Daniels, K.	F	PhD	UMN	Soil Science	Partial	4/90	
Draeger, K.	F	MS	UMN	Soil Science	Partial	9/89	
ECUADOR CITIZENS							
Bernal, G.	M	MS	UMN	Soil Science	Partial	9/90	
Estevez, C.	F	MS	UMN	Soil Science	Partial	7/89	4/90
Estevez, C.	F	PhD	UMN	Soil Science	Partial	5/90	
OTHERS							
Aarons, S. (Jamaica)	F	PhD	UMN	Soil Science	Partial	7/89	
Chaverra, M. (Colum.)	F	MS	UMN	Soil Science	Partial	7/89	4/90
Gourley, C. (Austral)	M	PhD	UMN	Soil Science	Partial	9/89	
Jjemba, P. (Uganda)	M	MS	UMN	Soil Science	Partial	7/89	

ECUADOR/UNIVERSITY OF MINNESOTA
NON-DEGREE TRAINING FY 89-90

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
ECUADOR CITIZENS							
Bernal, G.	M	Off Shelf	Iowa	1989	1 week	Partial	Biological Nitrogen Fixation
Bernal, G.	M	Special Design	UMN	1989	3 weeks	Partial	Soil Science
Estevez, C.	F	Off Shelf	Iowa	1989	1 week	Partial	Biological Nitrogen Fixation
OTHERS							
Aarons, S. (Jamaica)	F	Off Shelf	Iowa	1989	1 week	Partial	Biological Nitrogen Fixation
Ayisi, K. (Ghana)	M	Special Design	UMN	1990	2 weeks	Partial	Inoculation Studies
Chaverra, M. (Colombia)	F	Off Shelf	Iowa	1989	1 week	Partial	Biological Nitrogen Fixation
Jjemba, P. (Uganda)	M	Off Shelf	Iowa	1989	1 week	Partial	Biological Nitrogen Fixation
Ayisi, K. (Ghana)	M	Off Shelf	Iowa	1989	1 week	Partial	Biological Nitrogen Fixation

GUATEMALA/CORNELL UNIVERSITY
DEGREE TRAINING FY 80-90

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Gniffke, P.	M	PhD	Cornell	Plant Breeding	Total	11/81	8/85
Muhammed, A.	M	PhD	Cornell	Plant Breeding	Partial	11/81	1/83
Scully, B.	M	PhD	Cornell	Plant Breeding	Total	8/85	9/88
Yourstone, K.	M	PhD	Cornell	Plant Breeding	Indirect	9/82	3/88
GUATEMALA CITIZENS							
Aldana, F.	M	MS	Cornell	Plant Breeding	Total	6/83	6/85
Gomez-Paniagua	M	PhD	Cornell	Vegetable Crops	Total	1/88	
Herrera, J.	M	MS	Guatemala	Computer Science	Partial	1/90	
Monterosso, V.	M	MS	Cornell	Vegetable Crops	Total	8/85	10/87
OTHERS							
Wolokolie, A. (Liberia)	M	MS	Cornell	Plant Breeding	Indirect	1/81	1/84

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GUATEMALA/CORNELL UNIVERSITY
NON-DEGREE TRAINING FY 80-90

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Yourstone, K.	M	Off Shelf	MSU	1984	1 week	Total	MSTAT Workshop
Gniffke, P.	M	Special Design	CIAT	1981/83	18 months	Total	Physiological, Genetic Studies
GUATEMALA CITIZENS							
Aldana, F.	M	Special Design	BTI	1983/85	26 months	Total	Plant Pathology
Aldana, F.	M	Special Design	UW	1983	3 days	Total	BNF Workshop
Aldana, F.	M	Language	Cornell	1982/83	16 months	Total	English
Aquino, O.	M	Special Design	Cornell	1984	2 weeks	Total	Remote Sensing
Arriaga, S.	M	Special Design	Ecuador	1985	1 week	Total	FSR Workshop
Arriaga, S.	M	Special Design	Cornell	1984	2 weeks	Total	Remote Sensing
Arriaga, S.	M	Other	KSU	1984	1 week	Total	FSR Symposium
Arteaga, O.	M	Language	Cornell	1982/83	18 months	Total	English
Diaz, J.	M	Language	Guatemala	1985	3 months	Total	English
Estrada, L.	M	Special Design	Cornell	1985	2 weeks	Total	Remote Sensing
Figueroa, G.	M	Language	Cornell	1982/83	18 months	Total	English
Gordon, A.	M	Special Design	Cornell	1985	2 weeks	Total	Remote Sensing
Guerrero, T.	F	Language	Guatemala	1985	3 months	Total	English
Herrera, J.	M	Special Design	Cornell	1987	14 days	Total	Statistical Analysis
Herrera, J.	M	Off Shelf	MSU	1984	1 week	Total	MSTAT Workshop
Juarez, H.	M	Other	KSU	1984	1 week	Total	FSR Symposium
Martinez, M.	M	Other	KSU	1984	1 week	Total	FSR Symposium
Masaya, P.	M	On Job Training	Ecuador	1985	1 week	Total	FSR Workshop
Masaya, P.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Montorosso, V.	M	Language	Cornell	1985	2 months	Total	English
Montorosso, V.	M	Special Design	Cornell	1985	2 weeks	Total	Remote Sensing

GUATEMALA/CORNELL UNIVERSITY NON-DEGREE TRAINING (CONT'D)

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
Reyes, M.	M	Language	Guatemala	1985	3 months	Total	English
Reyes, M.	M	Other	Honduras	1985	1 week	Total	PCCMCA
Vasquez y Vasquez, F.	M	Language	Guatemala	1985	3 months	Total	English

OTHERS

Wolokolie, A. (Liberia)	M	Special Design	Cornell	1983	N/A	Indirect	Growth Research on Limas
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HONDURAS/UNIVERSITY OF PUERTO RICO
DEGREE TRAINING FY 80-90

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Lazu, J.	F	MS	UPR	Agronomy	Partial	8/85	5/87
HONDURAS CITIZENS							
Cerna, J.	M	BS	Iowa State U	Agronomy & Soils	Total	9/85	12/86
Cerna, J.	M	MS	UPR	Agronomy	Total	1/87	6/89
De Fortin, S.	F	BS	EAP	Agronomy	Partial	5/89	
Del Rio, L.	M	BS	UPR	Crop Protection	Total	8/83	12/84
Del Rio, L.	M	MS	UPR	Crop Protection	Total	1/85	3/87
Echevarria, R.	M	MS	UPR	Agronomy	Partial	8/88	
Moncada, R.	M	BS	EAP	Agronomy	Partial	5/89	
OTHERS							
Taopanta, I. (Guat)	F	BS	EAP	Agronomy	Partial	5/88	

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HONDURAS/UNIVERSITY OF PUERTO RICO
NON-DEGREE TRAINING FY 80-90

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
None							
HONDURAS CITIZENS							
Cerna, J.	M	Language	Iowa State U.	1985	1 month	Total	English
Cerna, J.	M	Special Design	UPR	1984	18 days	Total	Bean Technology
Del Rio, L.	M	Special Design	UPR	1983	3 weeks	Total	Bean Technology
Del Rio, L.	M	Special Design	UPR	1982	2 weeks	Total	Bean Technology
Diaz Donaire, R.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Espinal, D.	F	Special Design	CIAT	1985	1 month	Total	Bean Research Techniques
Jiminez, J.	M	Off Shelf	CIAT	1989	3 weeks	Partial	Breeding
Mayr, M.	F	Special Design	UPR	1984	18 days	Total	Bean Research Techniques
Rucks, P.	M	Special Design	UPR	1983	3 weeks	Total	Bean Technology
Rucks, P.	M	Special Design	UPR	1982	2 weeks	Total	Bean Technology
Young, R.	M	Off Shelf	CIAT	1989	3 weeks	Partial	Breeding
Zuluaga, S.	M	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop
20 People	M 15	Special Design	Honduras	1985	2 days	Partial	BNF Workshop
	F 5						

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INCAP/WASHINGTON STATE UNIVERSITY
DEGREE TRAINING FY 80-90

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Artz, W.	M	PhD	WSU	Food Sci & Hm Nt	Total	1/80	6/84
Ballarin, M.	M	MS	CSU	Agronomy	Partial	11/80	11/82
Banordon, B.	M	PhD	WSU	Food Sci & Hm Nt	Partial	1/85	
Berrios, J.	M	PhD	WSU	Food Sci & Hm Nt	Partial	1/89	
Birch, R.	F	PhD	WSU	Food Sci & Hm Nt	Partial	6/82	7/85
Caviness, G.	M	MS	WSU	Food Sci & Hm Nt	Partial	9/82	5/85
Coffey, D.	M	PhD	MSU	Food Sci & Hm Nt	Partial	1/83	6/85
Dessert, K.	F	MS	MSU	Crop Science	Total	7/87	6/90
Froseth, B.	M	BS	WSU	Food Sci & Hm Nt	Indirect	9/80	6/84
Hoff, R.	M	BS	WSU	Food Sci & Hm Nt	Partial	9/83	5/84
Hogg, J.	M	MS	WSU	Anthropology	Partial	5/85	5/90
Hughes, J.	M	MS	WSU	Food Sci & Hm Nt	Total	9/83	6/85
Hughes, J.	M	PhD	WSU	Food Sci & Hm Nt	Total	9/85	12/88
Jensen, J.	F	MS	WSU	Food Sci & Hm Nt	Total	9/83	6/89
Kim, W.	F	PhD	KSU	Grain Science	Total	9/84	
Mackey, J.	F	MS	WSU	Food Sci & Hm Nt	Partial	9/84	12/87
McClellan, P.	M	PhD	CSU	Agronomy	Partial	9/80	6/82
Riggle, R.	F	MS	CSU	Agronomy	Total	7/82	6/84
Senzicki, B.	F	MS	WSU	Food Sci & Hm Nt	Partial	6/82	8/84
Silverstein, L.	F	PhD	WSU	Food Sci & Hm Nt			
Tomkinson, R.	M	PhD	MSU	Food Sci & Hm Nt	Total	9/85	
Wilson, J.	F	MS	MSU	Food Sci & Hm Nt	Total	9/84	
GUATEMALAN CITIZENS							
Arevalo, C.	F	MS	INCAP	Food Science	Partial	1/84	
Arriola, P.	F	MS	INCAP	Food Science	Partial	1/84	
Chon, R.	M	BS	INCAP	Food Science	Partial	9/89	
De Leon, L.	M	MS	INCAP	Food Science	Indirect	6/83	1/84
De Pereda, C.	F	MS	INCAP	Food Science	N/A	1/84	12/85
Estrada, D.	M	BS	INCAP	Food Science	Partial	5/83	12/84

INCAP/WASHINGTON STATE UNIVERSITY (DEGREE STUDENTS CONT'D)

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
Fialco, M.	M	MS	INCAP	Food Science	Partial	1/84	
Garcia, L.	F	BS	INCAP	Food Science	Indirect	7/83	7/84
Gil, M.	M	MS	INCAP	Food Science	Partial	9/84	
Loayza, C.	M	MS	INCAP	Food Science	Indirect	7/82	2/85
Martinez, M.	M	BS	INCAP	Food Science	Partial	5/86	10/86
Martinez, O.	F	BS	INCAP	Food Science	Indirect	4/82	9/83
Masaya, G.	F	BS	INCAP	Food Science	Indirect	1/82	12/82
Mendoza, C.	M	BS	INCAP	Food Science	Partial	11/85	9/86
Moscoso, C.	F	MS	INCAP	Food Science	Partial	4/85	
Nayera, V.	M	MS	INCAP	Food Science	Partial	3/85	12/86
Rivera, G.	M	BS	INCAP	Food Science	Indirect	N/A	N/A
Rosado, G.	M	BS	INCAP	Food Science	Indirect	N/A	N/A
Schieben, H.	M	MS	INCAP	Food Science	Partial	9/84	9/86
Sosa, J.	M	BS	INCAP	Food Science	Total	5/83	1/85

OTHERS

Ahad, A. (Afgan.)	M	MS	WSU	Food Sci & Hm Nt	Partial	6/84	Left Program
Chilukuri, A. (India)	F	PhD	WSU	Food Sci & Hm Nt	Partial	9/89	
Ena, J. (India)	F	PhD	WSU	Food Sci & Hm Nt	Total	9/83	12/87
Hoyos, R. (Columbia)	M	MS	MSU	Crop Science	Partial	9/88	
Hsieh, H. (Taiwan)	M	MS	WSU	Food Sci & Hm Nt	Partial	2/89	
Ma, Li (China)	M	MS	WSU	Food Sci & Hm Nt	Partial	6/89	
Nzuzzi, L. (Zaire)	M	MS	WSU	Food Sci & Hm Nt	Partial	9/82	12/85
Nzuzzi, L. (Zaire)	M	PhD	WSU	Food Sci & Hm Nt	Partial	7/86	8/90
Pena, C. (Peru)	M	MS	WSU	Food Sci & Hm Nt	Partial	9/89	
Rasyid, A. (Indones.)	M	MS	WSU	Food Sci & Hm Nt	Partial	1/81	6/83
Reddy, I. (India)	F	PhD	KSU	Grain Crops	Partial	1/89	
Srisuma, N. (Thail.)	F	MS	MSU	Food Sci & Hm Nt	Partial	9/82	12/84
Srisuma, N. (Thail.)	F	PhD	MSU	Food Sci & Hm Nt	Partial	6/85	
Trakoontivakorn, G. (Thailand)	F	PhD	WSU	Food Sci & Hm Nt	Partial	2/89	
Vindiola, O. (Mex.)	F	MS	KSU	Grain Science	Total	1/83	6/86
Vindiola, O. (Mex.)	F	PhD	KSU	Grain Science	Total	7/86	9/88
Wassimi, N. (Afgan.)	M	PhD	MSU	Crop & Soil Sci	Total	3/80	9/85
Wei (Aw), T. (Malay)	F	MS	WSU	Food Sci & Hm Nt	Partial	1/80	6/83

INCAP/WASHINGTON STATE UNIVERSITY
NON-DEGREE TRAINING FY 80-90

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Ballarin, M.	M	On Job Training	CSU	1982/85	3 years	Partial	Lab Technician
Banordon, B.	M	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Birch, R.	F	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Hoff, R.	M	On Job	WSU	1983/84	8 months	Partial	Lab Technician
Hughes, J.	M	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Jensen, J.	F	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Riggle, R.	F	Special Design	UW	1983	3 days	Total	BNF Workshop
Wilson, J.	F	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
GUATEMALA CITIZENS							
Alvizures, R.	F	On Job Training	INCAP	N/A	N/A	N/A	Nutrition
Arann, H.	M	On Job Training	INCAP	N/A	N/A	Partial	Lab Technician
Arevalo, C.	F	Special Design	INCAP	N/A	N/A	Partial	Human Digestibility Trials
Argueta, C.	M	Special Design	MSU	1984	3 months	Total	Food Technology
Chon, C.	M	On Job Training	INCAP	N/A	N/A	Partial	Lab Technician
de Bosque, C.	M	On Job Training	INCAP	N/A	N/A	N/A	Physio-Chemical Properties
de Leon, L.	M	On Job Training	INCAP	N/A	N/A	Indirect	Extrusion
Garcia, A.	M	On Job Training	INCAP	N/A	N/A	Indirect	Agronomy/Hardening
Goray, L.	M	On Job Training	INCAP	N/A	N/A	N/A	Food Products
Le Cifuentes, A.	F	On Job Training	INCAP	N/A	N/A	Total	Lab Technician
Ordonas, M.	M	On Job Training	INCAP	N/A	N/A	Total	Lab Technician
Ortiz, A.	M	On Job Training	INCAP	N/A	N/A	Partial	Bean Hardening
Palacios, P.	F	On Job Training	INCAP	N/A	N/A	Partial	Amino Acids
Paz, H.	M	On Job Training	INCAP	N/A	N/A	Total	Lab Technician
Polanco, A.	F	On Job Training	INCAP	N/A	N/A	Total	Lab Technician
Rodas, R.	F	On Job Training	INCAP	N/A	N/A	Total	Lab Technician

INCAP/WASHINGTON STATE UNIVERSITY NON-DEGREE TRAINING (CONT'D)

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
Rios, B.	F	On Job Training	INCAP	N/A	N/A	N/A	Sensory Evaluation
Tranco, J.	M	On Job Training	INCAP	N/A	N/A	N/A	Water Absorption
Vinicio, M.	M	On Job Training	INCAP	N/A	N/A	N/A	Drum Drying
OTHERS							
Ahad, A. (Afgan.)	M	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Amaya, H. (Salvaдор)	M	On Job Training	INCAP	N/A	N/A	Partial	Bean Utilization in Home
Azucena, A. (El Sal.)	F	Special Design	INCAP	N/A	N/A	Indirect	Work on Bean Samples
Castro, A. (El Sal.)	F	Special Design	INCAP	N/A	N/A	Indirect	Analytical Work on Bean Samples
de Godinez, C. (Col.)	F	On Job Training	INCAP	N/A	N/A	Total	Digestibility
Joseph, E. (India)	F	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Nzuzzi, L. (Zaire)	M	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Srisuma, N. (Thail.)	F	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Wassimi, N. (Afgan.)	M	Special Design	UW	1983	3 days	Total	BNF Workshop
Wei (Aw), T. (Malay)	F	On Job Training	WSU	1983/84	14 months	Total	Lab Technician

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KENYA/UNIVERSITY OF CALIFORNIA-DAVIS
DEGREE TRAINING FY 80-87

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Bouscaren, S.	M	PhD	UC Riverside	Botany & Pl Sci	Partial	6/86	
Garvin, D.	M	MS	UC Riverside	Botany	Partial	9/85	9/87
Greaves, M.	M	MS	UC Davis	Int'l Ag Dev	Partial	3/82	3/84
Levy, K.	F	MS	UC Riverside	Botany & Pl Sci	Indirect	10/83	6/84 (Dropped out)
Quagliaroli, L.	F	MS	UC Davis	Agronomy	Partial	1/85	Terminated
Sage, T.	F	MS	UC Davis	Agronomy	Indirect	10/80	10/82
Sage, T.	F	PhD	UC Davis	Agronomy	Indirect	10/82	6/89
Scully, B	M	MS	UC Riverside	Botany & Pl Sci	Partial	10/83	3/85
Stockinger, E.	M	BS	UC Riverside	Botany & Pl Sci	Partial	6/84	6/85
Thomas, C.V.	F	PhD	UC Riverside	Botany & Pl Sci	Partial	9/78	3/83
KENYA CITIZENS							
Kamwetti, M.	F	MS	UC Davis	Agronomy	Total	7/84	6/86
Nayabundi, J.	M	PhD	UC Davis	Agronomy	Indirect	1/81	6/85
Omwega, C.	M	MS	UC Riverside	Nematology	Total	3/84	6/85
OTHERS							
Arrizon, E. (Mexico)	M	MS	UC Davis	Agronomy	Partial	1/83	6/85
Dhugga, K. (India)	M	PhD	UC Riverside	Botany & Pl Sci	Partial	3/82	3/87
Lazcano, F. (Mexico)	M	MS	UC Riverside	Botany & Pl Sci	Partial	6/86	7/88
Sarath, G. (India)	M	PhD	UC Davis	Agronomy	Partial	9/78	3/84
Zimmermann, M(Brazil)	F	PhD	UC Riverside	Botany & Pl Sci	Partial	9/79	6/83

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KENYA/UNIVERSITY OF CALIFORNIA-DAVIS
NON-DEGREE TRAINING FY 80-87

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Corbett, C.	M	On Job Training	UC Riverside	1984	12 months	Total	Bean Research
Cory, C.	F	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Cory, C.	F	Special Design	UW	1983	3 days	Total	BNF Workshop
Turano, M.	F	Special Design	UW	1983	3 days	Total	BNF Workshop
KENYA CITIZENS							
Omwega, C.	M	On Job Training	UC Riverside	1985	14 weeks	Total	Nematology
OTHERS							
El Madina, E. (Sudan)	M	Off Shelf	UC Riverside	1984	3 months	Total	Bean Research
Mosjidis, J. (Chile)	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Sarath, G. (India)	M	Special Design	UW	1983	3 days	Total	BNF Workshop

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MALAWI/MICHIGAN STATE UNIVERSITY
DEGREE TRAINING FY 80-90

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Martin, G	M	MS	MSU	Crop & Soil Sci	Partial	9/81	8/84
Sprecher, S.	F	PhD	MSU	Crop & Soil Sci	Partial	9/83	6/87
MALAWI CITIZENS							
Bokosi, J.	M	MS	MSU	Crop & Soil Sci	Indirect	9/83	7/86
Mafuleka, M	F	PhD	MSU	Food Sci & Hm Nt	Total	9/85	8/90
Mkandawire, A.	M	PhD	MSU	Crop & Soil Sci	Partial	4/84	7/87
Mloza-Banda, H.	M	MS	MSU	Crop & Soil Sci	Partial	9/83	12/85
Msuku, W.	M	PhD	MSU	Botany & Pl Path	Indirect	6/81	8/84
OTHERS							
Khairallah, M.(Leb.)	F	PhD	MSU	Crop & Soil Sci	Partial	1/85	7/90

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MALAWI/MICHIGAN STATE UNIVERSITY
NON-DEGREE TRAINING FY 80-90

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Sprecher, S.	F	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
MALAWI CITIZENS							
Ayeh, E.	M	Off Shelf	Tanzania	1987	2 weeks	Total	Computer (MSTAT)
Mloza-Banda, H.	M	Off Shelf	Tanzania	1987	2 weeks	Total	Computer (MSTAT)
Mloza-Banda, H.	M	Off Shelf	MSU	1984	3 days	Total	Rhizobiology Techniques
4 People	4 F	On Job Training	Malawi	1984	2 weeks	Total	Observation Techniques

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MEXICO/MICHIGAN STATE UNIVERSITY
DEGREE TRAINING FY 80-90

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
None							
MEXICAN CITIZENS							
Acosta, J.	M	PhD	MSU	Crop & Soil Sci	Total	9/84	5/88
Castellanos, J.	M	PhD	UMN	Agronomy	Total	12/87	Terminated
Ibarra, F.	M	MS	MSU	Crop & Soil Sci	Total	3/82	3/85
OTHERS							
Oliviera, L. (Brazil)	M	PhD	UMN	Agronomy	Total	7/86	10/88
Samper, C. (Columbia)	F	MS	MSU	Crop & Soil Sci	Partial	6/81	6/84

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MEXICO/MICHIGAN STATE UNIVERSITY
NON-DEGREE TRAINING FY 80-90

	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
None							
MEXICO CITIZENS							
Espinosa, D.	M	Special Design	U MN	1985	9 months	Total	Competition in Rhizobium Serology
Lopez Alcoces, E.	M	Special Design	U MN	1985	4 months	Total	BNF
Perez Trujillo, H.	M	Language	U MN	1985	6 months	Total	English
Ibarra, F.	M	Special Design	UW	1983	3 days	Total	BNF Workshop
OTHERS							
Samper, C. (Colombia)	F	Special Design	UW	1983	3 days	Total	BNF Workshop

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NIGERIA/MICHIGAN STATE UNIVERSITY
DEGREE TRAINING FY 80-88

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
None							
NIGERIA CITIZENS							
Ogun, P.	F	PhD	MSU	Food Sci & Hm Nt	Partial	9/83	7/88

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NIGERIA/MICHIGAN STATE UNIVERSITY
NON-DEGREE TRAINING FY 80-88

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
None							
NIGERIA CITIZENS							
Ogun, P.	F	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
OTHERS							
Martinez, A. (Mexico)	M	On Job Training	MSU	1983/84	19 months	Total	Breath Hydrogen Analysis

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NIGERIA/UNIVERSITY OF GEORGIA
DEGREE TRAINING FY 80-90

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Baker, E.	F	MS	UGA Athens	Food Science	Total	9/81	12/83
Bulgarelli, M.	F	PhD	UGA Athens	Food Science	Total	9/84	12/88
Falcone, R.	M	MS	UGA Athens	Food Science	Indirect	9/82	12/83
Holt, S.	F	MS	UGA Athens	Food Science	Partial	2/89	
Kennedy, M.	M	MS	UGA Athens	Food Science	Indirect	9/80	12/82
Schaffner, D.	M	MS	UGA Athens	Food Science	Indirect	9/83	6/85
NIGERIA CITIZENS							
Adani, L.	F	BS	U Nigeria*	Home Sci & Nt	Partial	9/78	7/82
Agbo, H.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/85	7/89
Ahamba, E.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/79	7/83
Akinboye, R.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/82	7/86
Akudu, M.	F	MS	U Nigeria	Food Sci & Tech	Partial	1/87	
Anosike, A.	F	BS	U Nigeria	Home Sci & Nt	Partial	9/80	7/84
Anyanwu, C.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/85	7/89
Anyika, J.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/84	7/88
Anyika, R.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/86	7/87
Azokwu, W.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/85	7/89
Chukwuka, I	M	BS	U Nigeria	Home Sci & Nt	Partial	9/81	7/85
Damola, T.	F	MS	UGA Athens	Food Science	Total	10/85	6/88
Eduiyovwiri, A.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/83	7/87
Egbuchunam, N.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/83	7/87
Egwu, I.	M	MS	U Nigeria	Food Sci & Tech	Partial	9/88	
Ejiofor, J.	F	BS	U Nigeria	Home Sci & Nt	Partial	9/81	7/85
Eke, K.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/85	7/89
Ekechukwu, F.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/85	7/89
Ene-Obong, H.	F	MS	U Nigeria	Home Sci & Nt	Partial	10/81	5/84
Ene-Obong, H.	F	PhD	U Nigeria	Home Sci & Nt	Partial	9/86	
Enwere, N.	F	MS	U Nigeria	Food Sci & Tech	Partial	9/81	1/85
Enwere, N.	F	PhD	U Nigeria	Food Sci & Tech	Partial	2/85	7/87
Eze, J.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/86	7/87
Ezeani, G.	M	BS	U Nigeria	Home Sci & Nt	Partial	9/81	9/85

*University of Nigeria, Nsukka

NIGERIA/UNIVERSITY OF GEORGIA DEGREE TRAINING (CONT'D)

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
Ezeofor, I.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/83	7/87
Ezimah, P.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/81	7/88
Ikeme, P.	F	MS	U Nigeria	Food Sci & Tech	Partial	9/85	9/88
Iwe, O.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/79	7/83
Mba, M.	F	MS	U Nigeria	Food Sci & Tech	Partial	10/85	
Modupe, F.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/80	7/84
Ndiokwelu, I	F	MS	U Nigeria	Home Sci & Nt	Partial	9/81	7/85
Ndubuaku, V.	F	MS	U Nigeria	Home Sci & Nt	Partial	3/86	11/88
Njoku, E.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/83	7/88
Nnanna, I.	M	PhD	UGA Athens	Food Science	Total	1/84	3/88
Nwamba, A.	F	BS	U Nigeria	Home Sci & Nt	Partial	9/80	7/84
Nweke, J.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/85	8/86
Nwojo, M.	M	MS	U Nigeria	Food Sci & Tech	Partial	9/83	7/85
Nwosu, E.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/85	7/89
Nzomiwu, N.	F	MS	U Nigeria	Home Sci & Nt	Partial	9/84	10/86
Obi, J.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/81	7/84
Obi, V.	F	MS	U Nigeria	Home Sci & Nt	Partial	9/81	3/84
Obiegbuna, J.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/82	7/87
Ohajunwa, U.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/83	7/88
Okafor, C.	F	BS	U Nigeria	Home Sci & Nt	Partial	9/78	7/83
Okechukwu, P.	M	PhD	U Nigeria	Food Sci & Tech	Partial	/86	
Okeke, C.	F	PhD	U Nigeria	Home Sci & Nt	Partial	9/83	12/88
Okeke, V.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/85	7/89
Okonkwo, N.	F	MS	U Nigeria	Home Sci & Nt	Partial	9/83	7/85
Okpalakunne, J.	M	BS	U Nigeria	Home Sci & Nt	Partial	9/81	7/85
Onah, B. N.	F	MS	U Nigeria	Ag Econ	Partial	/85	5/87
Onochie, B.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/80	7/85
Onoja, S.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/78	7/82
Onubogu, E.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/82	12/85
Onuibgo, I.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/85	8/86
Onuoha, N.	F	PhD	U Nigeria	Food Sci & Tech	Partial	9/82	12/85
Otuwa, N.	F	BS	U Nigeria	Home Sci & Nt	Partial	9/80	7/84
Souzey, J.	F	MS	U Nigeria	Home Sci & Nt	Partial	9/86	
Tuan, Y.	F	MS	UGA Athens	Food Sci & Tech	Partial	2/88	12/89
Uchendu, U.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/78	7/82
Udeata, E.	F	BS	U Nigeria	Home Sci & Nt	Partial	9/80	7/84
Udofot, L.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/81	7/82
Ufot, U.	F	BS	U Nigeria	Home Sci & Nt	Partial	9/79	7/82

NIGERIA/UNIVERSITY OF GEORGIA DEGREE TRAINING (CONT'D)

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
Ukoha, N.	F	BS	U Nigeria	Home Sci & Nt	Partial	9/81	7/85
Uwaegbute, A.	F	PhD	U Nigeria	Home Sci & Nt	Partial	9/83	9/87
Uwakwe, O. S.	M	BS	U Nigeria	Food Sci & Tech	Partial	9/78	7/82
Uzo, F.	F	BS	U Nigeria	Food Sci & Tech	Partial	9/80	7/81
OTHERS							
Hudda, L. (India)	F	MS	UGA Athens	Food Science	Partial	9/81	12/83

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NIGERIA/UNIVERSITY OF GEORGIA
NON-DEGREE TRAINING FY 80-90

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Stewart, J.	M	On Job Training	UG Experiment	1983	12 weeks	Indirect	Cowpea Dehulling Techniques
Stewart, J.	M	On Job Training	UG Experiment	1984	13 weeks	Total	Cowpea Dehulling Techniques
Stewart, J.	M	On Job Training	UG Experiment	1985	13 weeks	Total	Cowpea Data Analysis
Weems, C.	F	Off Shelf	UG Experiment	1984	11 weeks	Indirect	Analysis Cowpea Moisture Techniques
NIGERIA CITIZENS							
Enwere, J.	F	Special Design	UG Experiment	1987	4 months	Total	Rheology & Microstructure of Cowpea Flour, Starch & Protein Systems
Nnanna, I.	M	Off Shelf	MSU	1984	3 days	Total	MSTAT Workshop
Nnanna, I.	M	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Obizoba, I.	M	Off Shelf	UG Experiment	1984	4 days	Partial	Cowpea Phytate & Fiber Analysis
Obizoba, I.	M	Other	UG Experiment	1985	1 day	Total	Crain Legume Utilization Workshop

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SENEGAL/UNIVERSITY OF CALIFORNIA-RIVERSIDE
DEGREE TRAINING FY 80-90

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Ehlers, J	M	PhD	UC Davis	Agron & Range Sci	Total	9/80	9/84
Gwathmey, C	M	PhD	UC Riverside	Botany & Pl Sci	Partial	9/85	
Kirchhoff, W.	M	MS	UC Riverside	Botany & Pl Sci	Partial	9/84	3/87
Mohnike, A.	F	BS	UC Riverside	Botany & Pl Sci	Partial	N/A	6/87
Mutters, R.	M	PhD	UC Riverside	Botany & Pl Sci	Partial	9/83	6/88
Nielsen, C	F	MS	UC Riverside	Botany & Pl Sci	Partial	9/81	12/83
Petrie, C.	F	PhD	UC Riverside	Botany & Pl Sci	Partial	1/87	
Rigert, K.	F	PhD	UC Davis	Agron & Range Sci	Partial	9/81	9/85
Robertson, B.	F	PhD	UC Riverside	Botany & Pl Sci	Partial	1/80	7/85
SENEGAL CITIZENS							
Cisse, N.	M	MS	UC Davis	Agron & Range Sci	Partial	4/81	7/83
Diop, K.	F	BS	Riverside C	Entomology	Total	1/85	3/89
Thiaw, S.	M	BS	UC Riverside	Botany & Pl Sci	Total	9/83	6/88
Thiaw, S.	M	MS	UC Riverside	Botany & Pl Sci	Partial	1/89	
OTHERS							
Abbas, M. (Sudan)	M	MS	U Arizona	Botany & Pl Sci	Partial	9/82	5/84
Ahmed, F. (Sudan)	M	PhD	UC Riverside	Botany & Pl Sci	Partial	9/87	
El Madina, I. (Sudan)	M	MS	UC Riverside	Botany & Pl Sci	Partial	2/83	8/85
Elowad, H. (Sudan)	M	PhD	UC Riverside	Botany & Pl Sci	Partial	9/80	12/84
Ismail, A. (Sudan)	M	PhD	UC Riverside	Botany & Pl Sci	Partial	1/88	
Kwapata, M. (Malawi)	M	PhD	UC Riverside	Botany & Pl Sci	Partial	9/84	3/89
Marfo, K. (Ghana)	M	PhD	UC Riverside	Botany & Pl Sci	Partial	1/87	6/89
Mohamed, I. (Sudan)	M	PhD	U Arizona	Botany & Pl Sci	Partial	N/A	8/84
Mubarak, A. (Sudan)	M	MS	UC Riverside	Botany & Pl Sci	Partial	4/88	3/90
Mubarak, A. (Sudan)	M	PhD	UC Riverside	Botany & Pl Sci	Partial	4/90	
Tewolde, H. (Ethiopia)	M	MS	U Arizona	Botany & Pl Sci	Partial	1/82	5/84
Warrag, M (Sudan)	M	PhD	UC Riverside	Botany & Pl Sci	Partial	9/79	6/83
Yamamoto, E. (Japan)	M	MS	UC Riverside	Botany & Pl Sci	Partial	9/85	8/87

SENEGAL/UNIVERSITY OF CALIFORNIA-RIVERSIDE
NON-DEGREE TRAINING FY 80-90

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
None							
SENEGAL CITIZENS							
Cisse, N.	M	Special Design	Senegal	1985	16 days	Total	Viral and Bacterial Inoculation Procedures
Cisse, N.	M	Off Shelf	MSU	1984	3 days	Total	MSTAT Workshop
Cisse, N.	M	Language	Wash., DC	1981	3 months	Indirect	English
Diop, K.	F	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop
Diop, K.	F	Language	UC Riverside	1984	4 months	Total	English
Diouf,	M	Special Design	UC Riverside	1985	15 days	Total	Measurement of Osmotic Potential
Ndiaye, M.	M	Special Design	UC Riverside	1985	15 days	Total	Measurement of Osmotic Potential
Ndiaye, M.	M	On Job Training	Senegal	1985	16 days	Total	Viral and Bacterial Inoculation Procedures
Ndiaye, M.	M	Special Design	UC Riverside	1984	22 days	Total	Ureides as a Measurement of BNF in Cowpeas
Thiaw, S.	M	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop
Thiaw, S.	M	Language	UC Riverside	1983	10 weeks	Total	English
OTHERS							
Abbas, M. (Sudan)	M	Special Design	UW	1983	3 days	Total	BNF Workshop
Gaikwad, D. (India)	M	Special Design	Senegal	1985	16 days	Total	Viral and Bacterial Inoculation Procedures

SENEGAL/UNIVERSITY OF CALIFORNIA-RIVERSIDE NON-DEGREE TRAINING (CONT'D)

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
El Madina, I (Sudan)	M	Off Shelf	UFL	1985	4 days	Indirect	Farming Systems Workshop
Elowad, H. (Sudan)	M	Special Design	UW	1983	3 days	Total	BNF Workshop
Elowad, H. (Sudan)	M	Off Shelf	CSU	1983	4 days	Indirect	Farming Systems Workshop
Marfo, K. (Ghana)	M	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop
Mohamed, I. (Sudan)	M	Special Design	UW	1983	3 days	Total	BNF Workshop

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TANZANIA/WASHINGTON STATE UNIVERSITY
DEGREE TRAINING FY 80-90

NAME	GENDER	DEGREE	UNIVERSITY	DEPARTMENT	CRSP SUPPORT	BEGAN	COMPLETED
US CITIZENS							
Gillard-Byers, T	M	PhD	U Illinois	Ag. Economics	Partial	8/80	5/84
Miller, P.	F	MS	U Illinois	Ag. Economics	Partial	1/83	6/85
Rocke, T.	M	MS	U Illinois	Ag. Economics	Total	8/83	5/86
White, M.	F	PhD	U Illinois	Ag. Economics	Partial	9/81	5/86
TANZANIA CITIZENS							
Elia, F.	M	PhD	UN Dar	Crop Science	Partial	1/88	
Kasuga, L.	M	BS	SUA	Crop Science	Partial	1/88	
Kikoka	M	BS	SUA	Crop Science	Partial	1/88	
Mabagala, R.	M	MS	MSU	Botany & Pl Path	Total	1/85	6/87
Mabagala, R.	M	PhD	MSU	Botany & Pl Path	Total	7/87	
Magayane, F.	M	MS	U Illinois	Ag Extension	Partial	8/87	8/89
Magayane, F.	M	PhD	U Illinois	Ag Extension	Partial	9/89	
Minja, G.	M	MS	WSU	N/A	Total	6/83	9/84 Terminated
Mmbaga, E.	M	PhD	MSU	Crop Science	Partial	11/87	7/89
Mohamed, R.	F	BS	SUA	Crop Science	Partial	1/87	7/89
Mollel, N.	M	MS	U Illinois	Ag Extension	Total	6/84	5/86
Mollel, N.	M	PhD	U Illinois	Ag Extension	Total	5/86	7/89
Nchimbi, S.	F	MS	UWI	Horticulture	Total	8/82	6/85
Nchimbi, S.	F	PhD	UWI	Horticulture	Total	6/85	4/88
Njau, P.	M	BS	SUA	Crop Science	Partial	1/88	
Quentin, M.	F	PhD	MSU	Entomology	Total	9/84	
Rugambisa, J.	M	PhD	U Illinois	Ag Economics	Total	8/81	6/85
Rweyemamu, C.	M	PhD	MSU	Crop Science	Partial	9/90	
Urio, A.	M	BS	SUA	Crop Science	Partial	1/88	
Zubeda, M.	F	PhD	SUA	Crop Science	Partial	9/89	
OTHERS							
Oree, A. (Uganda)	M	BS	SUA	Crop Science	Partial	1/87	
Wang, W. (Taiwan)	M	MS	WSU	Plant Pathology	Total	6/81	6/83
Wang, W. (Taiwan)	M	PhD	WSU	Plant Pathology	Total	7/83	8/85

TANZANIA/WASHINGTON STATE UNIVERSITY
NON-DEGREE TRAINING FY 80-90

NAME	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Boge, W.	M	Off Shelf	MSU	1984	5 days	Indirect	MSTAT Workshop
Doyle, T.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Dua, J.	F	Off Shelf	Tanzania	1987	2 weeks	Total	Computer (MSTAT)
Rocke, T.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Silbernagel, M.	M	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Silbernagel, M.	M	Other	Mexico	1985	2 days	Total	Drought Workshop
Silbernagel, M.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Silbernagel, M.	M	Special Design	UW	1983	3 days	Total	BNF Workshop
Silbernagel, M.	M	Special Design	Brazil	1983	10 days	Total	Pest Management Workshop
Silbernagel, M.	M	Special Design	CIAT	1983	3 months	Total	Bean Research Work Study
Silbernagel, M.	M	Special Design	UPR	1983	3 days	Total	Bean Rust Workshop
TANZANIA CITIZENS							
Fute, J.	M	Off Shelf	Tanzania	1987	2 weeks	Total	Computer (MSTAT)
Gadial, A.	F	Off Shelf	Tanzania	1987	2 weeks	Total	Computer (MSTAT)
Gondwe, B.	F	Special Design	CIAT	1983	3 months	Indirect	Bean Research Work Study
Kallunde, S.	F	Off Shelf	Tanzania	1987	2 weeks	Total	Computer (MSTAT)
Karel, A.	M	Special Design	CIAT	1983	3 month	Indirect	Bean Research Work Study
Karel, A.	M	Special Design	Brazil	1983	10 days	Total	Pest Management Workshop
Mabagala, R.	M	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop
Maeda, E.	M	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Maeda, E.	M	Other	MSU	1985	5 days	Total	Visit MSU Bean Research
Maeda, E.	M	Other	WSU	1985	3 days	Total	Visit US PI
Mayona, C.	M	Off Shelf	Tanzania	1987	2 weeks	Total	Computer (MSTAT)
Misangu, R.	M	Other	US	1984	1 month	Total	Visit US Bean Research Centers
Misangu, R.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Misangu, R.	M	Special Design	CIAT	1983	3 months	Indirect	Bean Research Work Study
Mmbaga, M.	F	Special Design	UPR	1983	3 days	Total	Bean Rust Workshop

TANZANIA/WASHINGTON STATE UNIVERSITY NON-DEGREE TRAINING (CONT'D)

	GENDER	TYPE OF PROGRAM	LOCATION	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
Mollel, N.	M	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop
Mollel, N.	M	Other	Tanzania	1985	3 months	Total	M.S. Thesis Research
Mollel, N.	M	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Muhikambele, V.	M	Off Shelf	Tanzania	1987	2 weeks	Total	Computer (MSTAT)
Mwikambele	M	Off Shelf	Tanzania	1987	2 weeks	Total	Computer (MSTAT)
Nchimbi, S.	F	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop
Nchimbi, S.	F	Other	Spokane	1986	7 days	Total	Bean Workshop
Nchimbi, S.	F	Other	Tanzania	1985	1 month	Total	Coordinate PhD Research
Nchimbi, S.	F	Special Design	WSU	1985	3 days	Total	Dry Bean Quality Workshop
Nchimbi, S.	F	Off Shelf	MSU	1984	5 days	Total	MSTAT Workshop
Nchimbi, S.	F	Other	US	1984	6 weeks	Total	Visit Bean Research Centers in the United States
Nchimbi, S.	F	Special Design	UW	1983	3 days	Total	BNF Workshop
Nwalego, F.	F	Off Shelf	Tanzania	1987	2 weeks	Total	Computer (MSTAT)
Quentin, M.	F	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop
Quentin, M.	F	Special Design	MSU	1986	1 week	Total	MSTAT Workshop
Quentin, M.	F	Off Shelf	S. Carolina	1984	1 week	Total	Plant Resistance to Insects Workshop
Quentin, M.	F	Other	US	1984	2 weeks	Total	Visit Bean & Entomology Research
Runkulatile, B.	M	Off Shelf	Tanzania	1987	2 weeks	Total	Computer (MSTAT)
Rweyemamu, C.	M	On Job Training	U FL	1990	2 weeks	Total	Computer
Seenapa, M.	M	Special Design	INCAP	1983	6 days	Total	Nutrition Workshop
Tesha, A.	M	Other	US	1985	8 days	Total	Visit US Bean Researchers
66 People	57 M 9 F	Special Design	Tanzania	1985	2 days	Partial	4th Annual Bean Workshop
52 People	45 M 7 F	Special Design	Tanzania	1984	2 days	Partial	3rd Annual Bean Workshop
45 People	34 M 11 F	Special Design	Tanzania	1983	2 days	Partial	2nd Annual Bean Workshop
30 People	20 M 10 F	Special Design	Tanzania	1982	2 days	Partial	1st Annual Bean Workshop

OTHERS

Mabasirye, M. (Uganda)	F	Off Shelf	Tanzania	1987	2 weeks	Partial	Computer (MSTAT)
Male-Kayiwa, B. (Ugan.)	F	Off Shelf	Tanzania	1987	2 weeks	Partial	Computer (MSTAT)

MANAGEMENT OFFICE
NON-DEGREE TRAINING FY 80-90

	GENDER	TYPE OF PROGRAM	LOCATICN	YEAR	DURATION	CRSP SUPPORT	NATURE OF TRAINING
US CITIZENS							
Ferguson, A.	F	Special Design	U FL	1987	5 days	Total	On-Farm Testing Workshop
Freed, R.	M	Special Design	U FL	1987	3 days	Total	On-Farm Testing Workshop

VI APENDICES

APPENDIX A

BEAN/COWPEA CRSP GUIDELINES FOR DEGREE TRAINING

Developed by the Bean/Cowpea CRSP Technical Committee
June 1987

In the early years of the Bean/Cowpea CRSP, projects were encouraged to train students to enhance the capacity of the Host Country and the U.S. for collaborative research. In recent years, in reaction to reduced funding from USAID, the Management Office has discouraged the initiation of further student training in which CRSP funds are used and obligated for future years. The main reasons for this decision were that it was felt that: research is the main goal of the CRSP; the available funds for Host Countries were barely adequate to support their research programs; and that it would be unwise to start students on degree programs if they could not be completed. Some guidelines are presented to help Principal Investigators make decisions concerning the training of Host Country and U.S. students.

1. Any degree training should be consistent with the overall training plan of the Host Country institution.
2. Alternative funding sources should be sought to provide scholarships for students, such as may be available through the USAID Mission or other sources.
3. Education of students from "graduate" countries should not be financed with CRSP funds.
4. Students should be sent to the U.S. institution that can best meet the training needs of the student. In many cases CRSP institutions have special advantages for training LDC students.
5. Students conducting thesis research in the U.S. should be studying an area that can help the project to meet its CRSP research objectives. This is especially important if the project is paying all of the costs of the training.
6. In the rare cases where a CRSP project is totally funding the graduate training of a Host Country student, a commitment should be obtained from the Host Country institution that they will attempt to provide a position to the student on her or her return home, that will support the objectives of the CRSP project.
7. Principal Investigators are encouraged to advise USAID Missions of the excellent training opportunities that are available through the CRSP projects for students interested in research on areas that are relevant to the production and utilization of beans and cowpeas. Training students from different developing countries will help the CRSP to meet its global plan and will enhance the relations between the CRSP and the network of USAID Missions.
8. Providing support to U.S. graduate students is not discouraged but their research should have direct relevance to the objectives of the CRSP project, and they should have a sincere interest in international development.

APPENDIX B

BEAN/COWPEA CRSP
NON-DEGREE TRAINING CATEGORIES

LANGUAGE TRAINING--Included under this category are all students receiving English language training plus any other language training received by PIs and other project researchers or students.

SPECIALLY DESIGNED TECHNICAL COURSE--This refers to any course or curriculum designed especially for the trainee(s). Examples include the 1983 summer Biological Nitrogen Fixation Workshop for CRSP students, courses on micro-biological control of bean/cowpea pests developed by the Brazil/BTI project, ect.

OFF-SHELF TECHNICAL COURSE--Included here are previously existing courses or curricula offered as a training program. Examples are the MSTAT Workshop, training in cowpea breeding at IITA, ect.

ON-JOB TRAINING--This refers to the training of investigators, students and lab technicians as part of their employment.

OTHER--This category includes visits to research institutions and universities, participation in conferences and academic meetings, ect.

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APPENDIX C

ACRONYMS

BNF	Biological nitrogen fixation
BTI	Boyce Thompson Institute
CIAT	Centro Internacional de Agricultura Tropical, Cali, Colombia
CNPAF	National Research Center for Rice and Beans,
EMBRAPA, Brazil	
CSU	Colorado State University
DR	Dominican Republic
FSR	Farming Systems Research
HC	Host Country
IITA	International Institute of Tropical Agriculture
INCAP	Institute of Nutrition of Central America and
Panama	
KSU	Kansas State University
MS	Masters Degree
MSTAT	Micro-Computer Statistical and Data Management
Package	
MSU	Michigan State University
PCCMCA	Central American Cooperative Program for the
Improvement of Food Crops	
PhD	Doctor of Philosophy
UC	University of California
UFL	University of Florida
UGA	University of Georgia
UNL	University of Nebraska, Lincoln
UPR	University of Puerto Rico
JWI	University of Wisconsin
WSU	Washington State University

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APPENDIX D

BEAN/COWPEA CRSP REPORT OF TRAINING SURVEY November 20, 1990

EXECUTIVE SUMMARY

This survey was conducted to generate an overall evaluation of CRSP training and to ascertain the extent to which that training was sufficiently useful to the professional needs of the graduates. With 51 percent of the 121 surveys returned by the time of this report, some important conclusions are apparent.

Even though the CRSP has a strong record of training females from the US and developing countries, the predominant respondents to date were from males, most from developing countries (predominantly Africa). At the time of their training, these respondents were married with their spouses and children living with them (not all of the children in their households were their own). Half of the spouses were also getting education at some level. It is not surprising, therefore, that the dominant non-academic problem reported was financial, even though 75 percent of these spouses were also working. However, perhaps because of these working spouses, nearly half of all respondents reported having no non-academic problems at all.

On average, the male and female respondents, whether from the U.S. or developing countries, were in their early thirties and had been chosen for training mostly on the basis of their strong academic records. Forty-three percent of the respondents received Masters degrees through the CRSP, 40 percent received a Ph.D. and 17 percent earned a Bachelors degree.

The respondents were very positive about their CRSP training, especially in relation to the relevance of the content, the amount of content matter and the specific skills learned. Most received degrees in plant sciences, although a smaller number studied in other biological fields and a few did their work in agricultural economics.

Areas studied outside of their disciplines which the respondents rated especially high were statistics and computer science, which they indicated have been the areas most relevant to their country's needs. A few even suggested work in these areas should be increased.

Of the skills acquired, most rated research/field/lab techniques as especially valuable. A few had language skills training but did not emphasize its importance.

Field trips and assistantships were the most highly rated practical experiences. Those who had had contact with extension during their training felt this experience valuable.

Overall, the respondents reported that they "very much" used the skills and knowledge gained in their programs and over half indicated they would make no changes. Changes by those who had suggestions included more computer work, more statistics, more plant pathology, more genetic technology and, in some cases, more practical work and less theory. Interestingly, two respondents indicated more rural/urban sociology although none reported having had any.

Half of the respondents changed jobs since their degrees. Of these, half were in the same workplace as before their degree training with a similar number, in fact, having changed work places. The nature of the jobs held by the respondents had changed very little except for the clear increase in teaching since the degree was completed.

Following their degree, financial rewards of various kinds were received by over 67 percent of the respondents. Other benefits cited were trips to workshops, etc.; access to promotions (with or without financial reward); and increased access to books and other professional materials.

The fact that they almost all report maintaining contact with their major professors as well as other CRSP alumni reinforces the notion that the experience was very positive for those who responded. Another strong indication is that the respondents overwhelmingly support the development of a CRSP Alumni Club.

As has been reported on many occasions, the network which grows out of the CRSP research and training initiatives and brings together women and men from many nations, ethnic groups and language backgrounds is an exciting achievement. As these scientists take over increasingly responsible positions in their countries and maintain contact with one another across international boundaries, a vibrant mechanism for improving the availability of food is set in motion as is a strong force for international cooperation and peace.

INTRODUCTION

In the fall of 1989, an alumni survey was sent out to 121 students who had received degrees in whole or in part supported by the Bean/Cowpea CRSP. The purpose of the survey was to get an overall evaluation of CRSP training and to ascertain the extent to which that training was sufficiently useful to the graduates' professional needs. Addresses used were the last known residences available in CRSP or major professors' records. To date, 62 have been returned, for a return rate of 51 percent. A copy of the survey is attached (Attachment 1).

DEMOGRAPHICS

Of the 62 surveys returned, 17 (27 percent) were from U.S. students and 45 (73 percent) were from developing countries.

TABLE 1: REGION OF ORIGIN OF RESPONDENTS

<u>Region</u>	<u>Number</u>	<u>Percent</u>
United States	16	26
Latin America	13	21
Asia	2	3
Africa	<u>31</u>	<u>50</u>
Total	62	100

The gender of graduates returning the survey was 68 percent male and 32 percent female. Of the males, 10 (24 percent) were from the U.S. and 22 (76 percent) from developing countries. Among the females, 6 (30 percent) were from the U.S. and 14 (70 percent) were from developing countries.

TABLE 2: GENDER OF RESPONDENTS

	<u>United States</u>	<u>Developing Country</u>
Male	10	32
Female	<u>6</u>	<u>14</u>
Total	16	46

Mean age of the respondents was 33 for males (with a range of 26 to 43 years of age) and 35 for females (with a range of 27 to 42 years of age). As between male and female, there was little difference between the mean age of respondents from the U.S. and those from developing countries.

TABLE 3: MEAN AGE OF RESPONDENTS

	<u>United States</u>	<u>Developing Country</u>
Male	32	34
Female	<u>37</u>	<u>34</u>
Average	34	34

The major criterion for student selection was "strong scholastic record," a characteristic indicated by 66 percent of the respondents. While most felt previous affiliation with the CRSP was not a strong criterion (60 percent), around half felt that previous job experience, personal and/or professional connections and employer's requirements played a role in their selection.

Forty-four percent of the respondents completed a Masters degree with the CRSP. Ph.D.s were awarded to 38 percent of the respondents and 18 percent received Bachelors. Most of the Bachelors degrees were awarded to non-US students (92 percent).

Of the respondents who were married during the time that they were completing their degrees (55 percent), 24 (75 percent) had their spouses living with them. Of these 24 spouses, 15 (47 percent) were also receiving education, which included computer technology, secretarial science, English and regular undergraduate and graduate degree programs. In addition, of these 24, 22 (69 percent) were working in jobs such as nursing, hospital nutrition, teaching assistant, administrative aide, word processing operator, university lecturer, or secretary.

Of the 34 married respondents, 30 (54 percent) had children at the time they were in school. The average number of children was 2. Frequently there were children living with them who were not their own.

Financial difficulties while in training were reported as the major non-academic problem faced by the respondents (33 percent). Family separation/health were indicated by 31 percent as important.

PROFESSIONAL TRAINING/EVALUATION

Most who had completed only one degree (28) had a Masters degree (45 percent) while 36 percent had pursued a Ph.D. (Bachelor level 19 percent). Of those who had completed a second CRSP degree (7), 29 percent (2) had completed a Masters degree and 71 percent (5) had completed a Ph.D.

Over half of the graduates were from the plant sciences (63 percent). The rest (29 percent) were from other biological sciences except for a few (7 percent) from agricultural economics.

Academic areas studied by the respondents outside the major discipline were mostly statistics and computer science (50 percent). When asked of the subjects studied, what areas have been the most relevant to their countries' needs, 26 percent said statistics/computers, 16 percent genetics and plant breeding, 9 percent plant pathology, 16 percent crop science/botany/plant physiology, and 8 percent each indicated entomology and food quality. Agricultural economics was mentioned by 3 percent. The respondents indicated that they used the skills and knowledge gained in these areas "very much" (69 percent). While language skills were acquired by many of the respondents, they were not mentioned as especially helpful while research/field/lab techniques, on the other hand, were skills felt to be especially useful.

Additional outside-of-classroom experiences (e.g., workshops, professional meetings) were attended by about 80 percent of the respondents during and after their degree programs.

When asked about the extent to which their training had included contact with extension, 32 percent reported having had such contact.

The most useful practical experiences were recorded as field visits and assistantships. When asked what aspects of their program proved of little or no use, most said none. When asked to suggest changes, on the other hand, many said more computer skills. In addition, more statistics was also suggested. Several indicated more plant pathology, more genetic technology and more practical work/less theory.

Overall, respondents seemed to feel positively about the training they had received. As shown in Table 4, "specific skills learned" and "relevance of content" were rated especially well.

TABLE 4: VALUE OF THE EDUCATION (% RESPONSE)

	<u>Low</u>	<u>Medium</u>	<u>High</u>
Relevance of content	4	24	72
Amount of content matter	4	39	57
Specific skills learned	2	26	72
Field experiences	22	26	52
Outside interactions with professors	22	19	61
Interactions with other professionals	19	33	52

PROFESSIONAL CONTRIBUTIONS

Six respondents had returned to school since their last CRSP degree. Eight returned to the same type of job while 31 had different jobs when they returned (16 same employer and 15 different employer).

TABLE 5: EMPLOYMENT CHANGES OF RESPONDENTS
SINCE LAST CRSP-SUPPORTED DEGREE

	<u>Number</u>	<u>Percent</u>
Changed job	31	50
Same job	8	13
Back in school	6	10
No previous job	<u>17</u>	<u>27</u>
Total	62	100

The respondents were asked to estimate the current percent time they were assigned to teaching, research, extension and administration versus the time distribution among these four tasks before receiving their CRSP degree. There was a small increase in the percent time graduates engaged in teaching following the awarding of their degrees. This was balanced by a small decrease in time spent in administration. Each of the other two areas also decreased slightly.

TABLE 6: PERCENT TIME DISTRIBUTION

	<u>Before Degree</u>	<u>After Degree</u>	<u>Change</u>
Teaching	20	26	6
Research	54	55	1
Extension	11	9	-2
Administration	15	10	-5

Fifty percent of the respondents received a financial reward for having completed their degrees. About one-fourth, however, did not. Also, one-fourth did not respond to this question.

Other benefits accrued to the graduates as well. Forty percent reported receiving trips, including attending workshops and gaining access to professional contacts, 37 percent reported having received a promotion (with or without financial reward) and 21 percent reported increased access to books and other professional material. Twenty-three percent reported increased opportunities for work outside their regular job.

Respondents having completed one CRSP degree indicated maintaining contact with their major professors (82 percent) but after two degrees 92 percent of them do so. Over half (55 percent) indicated they also maintain contact with other CRSP alumni. There was an overwhelming enthusiasm for the establishment of a CRSP alumni club. Over 90 percent responded that they were interested in such a club.

18Students:jlc:112090

ATTACHMENT 1

BEAN/COWPEA CRSP ALUMNI SURVEY

Michigan State University
East Lansing, Michigan, U.S.A.

This survey is being distributed to alumni of the Bean/Cowpea CRSP to learn more about the appropriateness of the degree programs supported by the CRSP. We are also interested in forming a CRSP Alumni Association and seek your suggestions for it. Please fill out this survey as completely and honestly as you can. We appreciate your time and effort.

PLEASE TYPE OR PRINT

1. Name: _____
2. Current mailing address: _____

- Permanent address: _____

- Please check which address should be used for next mailing. Current _____ Permanent _____
3. Nationality: _____
4. Gender: Male _____ Female _____
5. Date of birth: _____
6. Where do you currently work? _____
7. What is the title of your current job? _____
8. What is the nature of your current job (responsibilities, job description, activities, management, etc.)?

9. What percent of your time is spent in each of the following categories?
Teaching _____ Research _____ Field/extension _____ Management/administration _____
10. Where did you work before beginning your CRSP-related degree training? _____
11. What was the title of the job you held before beginning your last CRSP-related degree? _____

12. What was the nature of the job you held before beginning your last CRSP-related degree? _____

13. In the job you held before beginning your last CRSP-related degree, what percent of your time was spent in each of the following categories?
Teaching _____ Research _____ Field/extension _____ Management/administration _____
14. Did you receive a salary increase due to your latest CRSP-related degree? Yes _____ No _____
If yes, what was the percent of that increase? _____

15. Please check any other job-related benefits due to this degree

- | | | |
|--|---|--|
| <input type="checkbox"/> Promotion | <input type="checkbox"/> Bonuses | <input type="checkbox"/> Opportunities for work outside regular job |
| <input type="checkbox"/> Books | <input type="checkbox"/> Trips | (please specify) _____ |
| <input type="checkbox"/> Health benefits | <input type="checkbox"/> Access to vehicles | <input type="checkbox"/> Access to better housing |
| <input type="checkbox"/> Please name any benefits not already listed | | <input type="checkbox"/> Better educational opportunities for children |

16. On the scale of 1 - 5, circle the number which best describes how significant the following were in your being selected for a CRSP-related degree program.

	<u>Not at all</u>					<u>Most Significant</u>				
a. Previous CRSP affiliation	1	2	3	4	5					
b. Previous job experience	1	2	3	4	5					
c. Strong scholastic record	1	2	3	4	5					
d. Personal connections	1	2	3	4	5					
e. Professional connections	1	2	3	4	5					
f. Required by employer	1	2	3	4	5					
g. Other (specify)	1	2	3	4	5					
_____	1	2	3	4	5					
_____	1	2	3	4	5					

17. Location of your CRSP-related degree program(s).

- a. Name of Institution: _____ Department: _____
 Location: _____ Degree Earned: _____ Year: _____
 Major: _____ Minor(s): _____
 Name of your academic advisor: _____
 Do you keep in regular contact with your academic advisor? Yes _____ No _____
- b. Name of Institution: _____ Department: _____
 Location: _____ Degree Earned: _____ Year: _____
 Major: _____ Minor(s): _____
 Name of your academic advisor: _____
 Do you keep in regular contact with your academic advisor? Yes _____ No _____

18. List the title of your thesis and/or dissertation.

Masters: _____

 Ph.D.: _____

19. List any other research publications/reports on which you were author or co-author.

Title	Author(s)	Printed by	Year
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

20. In what fields other than your major and minor did you take courses during your degree program(s) (e.g., social science, computer science, statistics, research methods, management, etc.)?
- Masters: _____
- Ph.D.: _____
21. Identify the two subject areas in which you took one or more courses during your degree program which have been the most relevant to your work and the needs of your country. Please briefly explain your choices.
- a. _____
- _____
- b. _____
- _____
22. To what extent have you used the knowledge/skills learned in your degree program? Please check one.
- Very much _____ Somewhat _____ Very little _____ Not at all _____
- Please explain: _____
- _____
23. What specific skills did you acquire during your training which were not part of your academic program (e.g., language, computer, communications, sports, driving)? _____
- _____
24. Identify the two specific skills learned during your degree program which have proven the most useful to you in your country. Briefly explain your choices.
- a. _____
- _____
- b. _____
- _____
25. Describe briefly the practical experiences (e.g., field visits/internships/assistantships) in your academic program which you have found to be the most useful.
- _____
- _____
- _____
26. Are there any specific aspects (courses, requirements, activities, etc.) of your degree program(s) that have proven to be of little or no use upon returning to your country? Please list and explain briefly.
- _____
- _____
- _____
27. Considering your current job and responsibilities, if you had an opportunity to go back and change your degree program(s), coursework, activities, etc., what changes, additions or deletions would you make and why?
- _____
- _____
- _____
- _____

28. Do you have any professional or personal contact with other CRSP alumni? Yes _____ No _____
If yes, please list their names. Nature of interaction

_____	_____
_____	_____
_____	_____
_____	_____

29. List your participation in professional organizations and check which period you were involved.

Name of organization	During degree program	Currently
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

30. What professional journals do you read regularly?

31. Please indicate briefly the professional meetings/workshops (CRSP and non-CRSP) you attended during your degree program and describe in what ways each has been beneficial.

a. Name of meeting: _____
Location: _____ Duration: _____
Benefits: _____

b. Name of meeting: _____
Location: _____ Duration: _____
Benefits: _____

c. Name of meeting: _____
Location: _____ Duration: _____
Benefits: _____

2. Have you attended any professional meetings/workshops since completing your last degree program?
Yes _____ No _____

If no, why not? _____

If yes, please list them with the most recent one first.

a. Name of meeting: _____
Location: _____ Duration: _____

b. Name of meeting: _____
Location: _____ Duration: _____

c. Name of meeting: _____
Location: _____ Duration: _____

33. Check below the average level of funding received from all sources for your last completed degree program. Please estimate the percent of support from each source.

		Percent	
CRSP:	Total _____	Partial _____	_____
Other sources (please list and include assistantships, other employment, savings, etc.):			
a. _____	Total _____	Partial _____	_____
b. _____	Total _____	Partial _____	_____
c. _____	Total _____	Partial _____	_____

34. Did you have any contact with extension services during your degree program? Yes _____ No _____
 If yes, in what ways have you benefited from that experience? _____

35. On the scale of 1 - 5, circle the number you feel best describes how adequately your education met your needs.

	Inadequate		Adequate		More Than Adequate
a. Relevance of content to the needs of your country	1	2	3	4	5
b. Amount of content matter covered	1	2	3	4	5
c. Specific skills learned	1	2	3	4	5
d. Field experiences	1	2	3	4	5
e. Interaction with professors outside of class	1	2	3	4	5
f. Interaction with other professionals	1	2	3	4	5

36. Describe any non-academic problems you may have had during this period.

37. How did the CRSP help? _____

38. How could the CRSP have helped? _____

39. Were you married at the time of your last degree program? Yes _____ No _____

40. Was your spouse living with you during your last degree program? Yes _____ No _____

41. Did your spouse receive any educational training at that time? Yes _____ No _____

If yes, describe: _____

42. Did your spouse work during that time? Yes _____ No _____ Nature of work _____

43. Did you have children at that time? Yes _____ No _____ Total number of children _____

Number of your children who lived with you during your last degree program _____

Number of your children who did not live with you during your last degree program _____

Number of persons who were not your own children who lived with you during your last degree program _____

