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INTERNATIONAL BOARD FOR PLANT GENETIC RESOURCES

CASHEW DESCRIPTORS

IBPGR Secretariat
Rome, July 1986

The International Board for Plant Genetic Resources (IBPGR) is an autonomous international scientific organization under the aegis of the Consultative Group on International Agricultural Research (CGIAR). The IBPGR was established by the CGIAR in 1974. The basic function of the IBPGR is to promote and coordinate an international network of genetic resources centres to further the collection, conservation, documentation, evaluation and use of plant germplasm and thereby contribute to raising the standard of living and welfare of people throughout the world. Financial support for the core programme is provided by the Governments of Australia, Austria, Belgium, Canada, China, Denmark, France, Federal Republic of Germany, India, Italy, Japan, the Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom, and the USA as well as the World Bank. FAO of the United Nations provides the Headquarters.

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PREFACE

This descriptor list for cashew (Anacardium occidentale L.) is based upon a draft document prepared by Dr. T.B. Dasaradhi and Dr. M.C. Nambiar. The IBPGR is grateful also to several experts who commented upon the original draft; a complete list of contributors is provided in Appendix I.

The IBPGR encourages the collection of data on the first four categories of this list: 1. Accession; 2. Collection; 3. and 4. Characterization and preliminary evaluation. The IBPGR endorses the information in categories 1-4 as the minimum that ideally should be available for any one accession. Other descriptors are given in categories 5 onwards that will enable the simple encoding of further characterization and evaluation data and which can serve as examples for the creation of additional descriptors in the IBPGR form by any user.

Although the suggested coding should not be regarded as the definitive scheme, this format has the full backing of the IBPGR and is promoted worldwide. The descriptor list given here provides an international format and thereby produces a universally understood 'language' for all plant genetic resources data. The adoption of this scheme for all data encoding, or at least the production of a transformation method to convert other schemes to the IBPGR format, will produce a rapid, reliable and efficient means for information storage, retrieval and communication. This will greatly assist the utilization of germplasm throughout the international plant genetic resources network. It is recommended, therefore, that information should be produced by closely following the descriptor list with regard to: ordering and numbering descriptors; using the descriptors specified; and using the descriptor states recommended.

Any suggestions for modifications will be welcomed by the IBPGR Secretariat, Rome.

DESCRIPTOR LIST FOR CASHEW

The IBPGR now uses the following definitions in genetic resources documentation:

(i) passport (accession identifiers and information recorded by collectors);

(ii) characterization (consists of recording those characters which are highly heritable, can be easily seen by the eye and are expressed in all environments);

(iii) preliminary evaluation (consists of recording a limited number of additional traits thought desirable by a consensus of users of the particular crop).

Characterization and preliminary evaluation will be the responsibility of the curators, while further characterization and evaluation should be carried out by the plant breeder. The data from further evaluation should be fed back to the curator who will maintain a data file.

The following internationally accepted norms for the scoring or coding of descriptor states should be followed as indicated below:

(a) measurements are made according to the SI system. The units to be applied are given in brackets following the descriptor;

(b) many descriptors which are continuously variable are recorded on a 1-9 scale. The authors of this list have sometimes described only a selection of the states, e.g. 3, 5 and 7 for such descriptors. Where this has occurred the full range of codes is available for use by extension of the codes given or by interpolation between them - e.g. in Section 8 (Pest and disease susceptibility) 1 = extremely low susceptibility and 8 = high to extremely high susceptibility;

(c) presence/absence of characters are scored as + (present) and 0 (absent);

(d) for descriptors which are not generally uniform throughout the accession (e.g. mixed collection, genetic segregation) mean and standard deviation could be reported where the descriptor is continuous or mean and 'x' where the descriptor is discontinuous;

(e) when the descriptor is inapplicable, '0' is used as the descriptor value, e.g. if an accession does not form flowers, 0 would be scored for the following descriptor

<u>Flower colour</u>

1 White
2 Yellow
3 Red
4 Purple

(f) blanks are used for information not yet available;

(g) standard colour charts, e.g. Royal Horticultural Society Colour Chart, Methuen Handbook of Colour, Munsell Color Charts for Plant Tissues are strongly recommended for all ungraded colour characters (the precise chart used should be specified in the NOTES descriptor, 11);

(h) dates should be expressed numerically in the format DDMMYYYY, where

DD - 2 digits to represent the day
MM - 2 digits to represent the month
YYYY - 4 digits to represent the year

PASSPORT

1. ACCESSION DATA

1.1 ACCESSION NUMBER

This number serves as a unique identifier for accessions and is assigned by the curator when an accession is entered into his collection. Once assigned this number should never be reassigned to another accession in the collection. Even if an accession is lost, its assigned number is still not available for re-use. Letters should occur before the number to identify the genebank or national system (e.g. MG indicates an accession comes from the genebank at Bari, Italy; PI indicates an accession within the USA system; ILL indicates an accession in the ICARDA lentil collection)

1.2 DONOR NAME

Name of institution or individual responsible for donating the germplasm

1.3 DONOR IDENTIFICATION NUMBER

Number assigned to accession by the donor

1.4 OTHER NUMBERS ASSOCIATED WITH THE ACCESSION (other numbers can be added as 1.4.3 etc.)

Any other identification number known to exist in other collections for this accession, e.g. USDA Plant Inventory number (<u>not</u> collection number, see 2.1)

1.4.1 <u>Other number 1</u>

1.4.2 <u>Other number 2</u>

1.5 SCIENTIFIC NAME

1.5.1 <u>Genus</u>

1.5.2 <u>Species</u>

1.5.3 <u>Subspecies</u>

1.6 PEDIGREE/CULTIVAR NAME

Nomenclature and designations assigned to breeder's material

1.7 ACQUISITION DATE

The date in which the accession entered the collection

1.8 DATE OF LAST REGENERATION OR MULTIPLICATION 1/

1.9 ACCESSION SIZE 1/

Approximate number of seeds of accession in collection

1.10 NUMBER OF TIMES ACCESSION REGENERATED 1/

Number of regenerations or multiplications since original collection

1.11 TYPE OF MAINTENANCE

1 Vegetative
2 Tissue culture

2. COLLECTION DATA

2.1 COLLECTOR'S NUMBER

Original number assigned by collector of the sample normally composed of the name or initials of the collector(s) followed by a number. This item is essential for identifying duplicates held in different collections and should always accompany sub-samples wherever they are sent

2.2 COLLECTING INSTITUTE

Institute or person collecting/sponsoring the original sample

2.3 DATE OF COLLECTION OF ORIGINAL SAMPLE

2.4 COUNTRY OF COLLECTION OR COUNTRY WHERE CULTIVAR/VARIETY BRED

Use the 3 letter abbreviations supported by the Statistical Office of the United Nations. Copies of these abbreviations are available from the IBPGR Secretariat and have been published in the FAO/IBPGR Plant Genetic Resources Newsletter number 49

2.5 PROVINCE/STATE

Name of the administrative subdivision of the country in which the sample was collected

---

1/ Applies only when collection conserved by tissue culture

2.6 LOCATION OF COLLECTION SITE

Number of kilometres and direction from nearest town, village or map grid reference (e.g. TIMBUKTU 7S means 7 km south of Timbuktu)

2.7 LATITUDE OF COLLECTION SITE

Degrees and minutes followed by N (north) or S (south), e.g. 1030S

2.8 LONGITUDE OF COLLECTION SITE

Degrees and minutes followed by E (east) or W (west), e.g. 7625W

2.9 ALTITUDE OF COLLECTION SITE (m)

Elevation above sea level

2.10 COLLECTION SOURCE

1 Wild
2 Farm land
3 Farm store
4 Backyard
5 Village market
6 Commercial market
7 Institute
8 Other (specify in the NOTES descriptor, 11)

2.11 STATUS OF SAMPLE

1 Wild
2 Weedy
3 Breeder's line
4 Primitive cultivar/landrace
5 Advanced cultivar (bred)
6 Other (specify in the NOTES descriptor, 11)

2.12 LOCAL/VERNACULAR NAME

Name given by farmer to cultivar/landrace/weed

2.13 NUMBER OF PLANTS SAMPLED

Approximate number of plants collected in the field to produce this accession

2.14 PHOTOGRAPH

Was a photograph taken of the accession or environment at collection?

0 No
+ Yes

2.15 TYPE OF SAMPLE

1 Vegetative
2 Seed
3 Both

2.16 HERBARIUM SPECIMEN

Was a herbarium specimen collected? If so, provide any identification number in the NOTES descriptor, 11

0 No
+ Yes

2.17 DISTRIBUTION

The general distribution of the species in the areas of collections

3 Limited
7 Widely distributed

2.18 GENETIC EROSION

Estimate of the rate at which genetic erosion of the species is occurring in the region of collection

0 No erosion
3 Slow
5 Intermediate
7 Fast

2.19 OTHER NOTES FROM COLLECTOR

Collectors will record ecological information. For cultivated crops, cultivation practices such as irrigation, season of sowing, etc. will be recorded

CHARACTERIZATION AND PRELIMINARY EVALUATION

3. SITE DATA

3.1 COUNTRY OF CHARACTERIZATION AND PRELIMINARY EVALUATION

3.2 SITE (RESEARCH INSTITUTE)

3.3 NAME OF PERSON(S) IN CHARGE OF CHARACTERIZATION

3.4 AGE OF TREE

4. PLANT DATA

Unless otherwise noted, descriptors should be evaluated for mature productive trees

4.1 VEGETATIVE

4.1.1 Tree habit

See Fig. 1

3 Upright and compact (trunk erect with mostly erect branches)

5 Upright and open (trunk erect and usually multiple with sparse, more-or-less erect branches)

7 Spreading (branches close to ground and spreading horizontally)

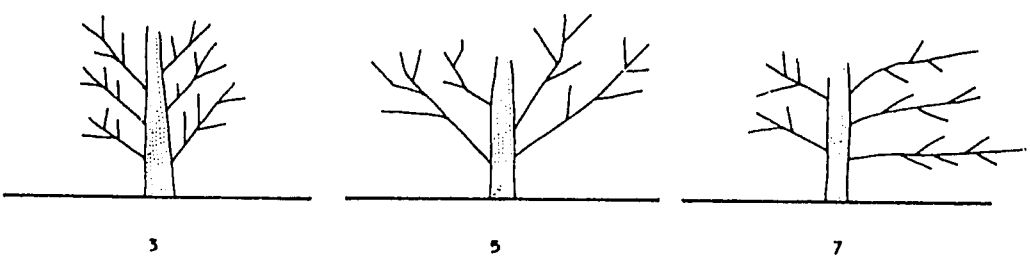


Fig. 1. Tree habit

4.1.2 Internode length

Measured after current season's growth has ceased

3 Short (0.8-1.0 cm) (congested nodes)
5 Intermediate (1.4-1.6 cm)
7 Long (2.0-2.2 cm) (widely spaced nodes)

4.1.3 <u>Leaf shape</u>

Of fully expanded leaves. See Fig. 2

1 Obovate (club-shaped)
2 Ovate
3 Oblong
4 Circular
5 Other (specify in the NOTES descriptor, 11)

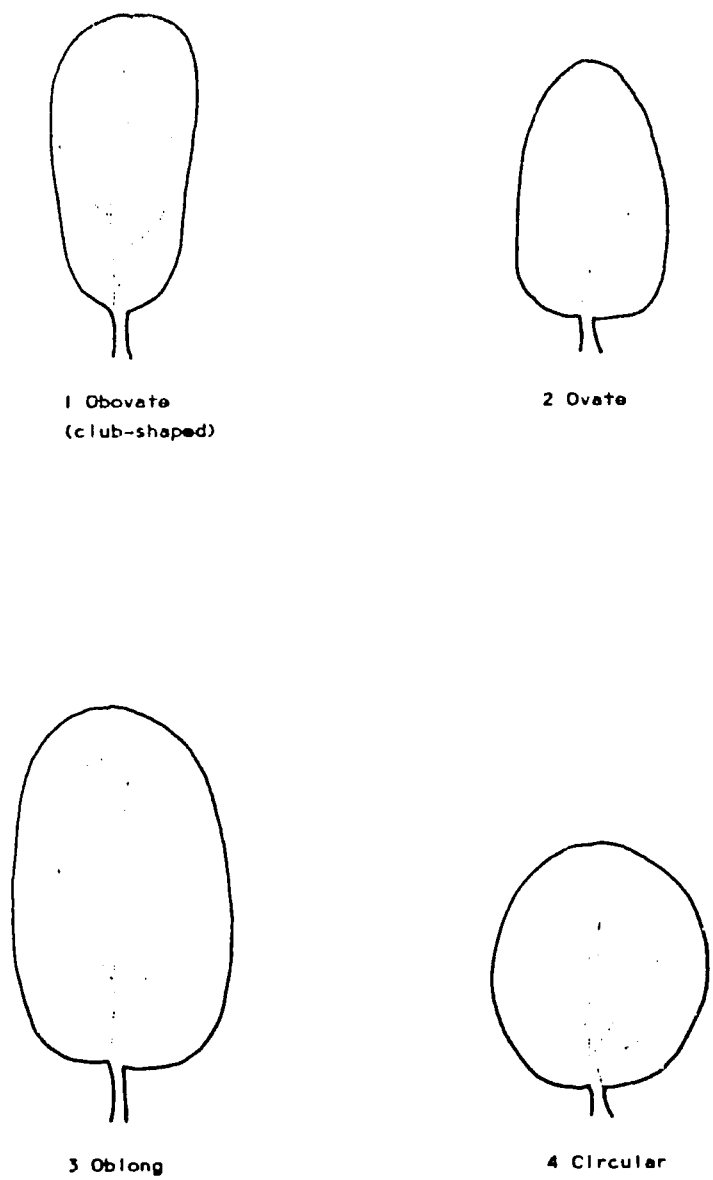


Fig. 2. Leaf shape

4.2 INFLORESCENCE AND FRUIT

For diagrams of the cashew apple and cashew nut see Figs. 3 and 4 respectively

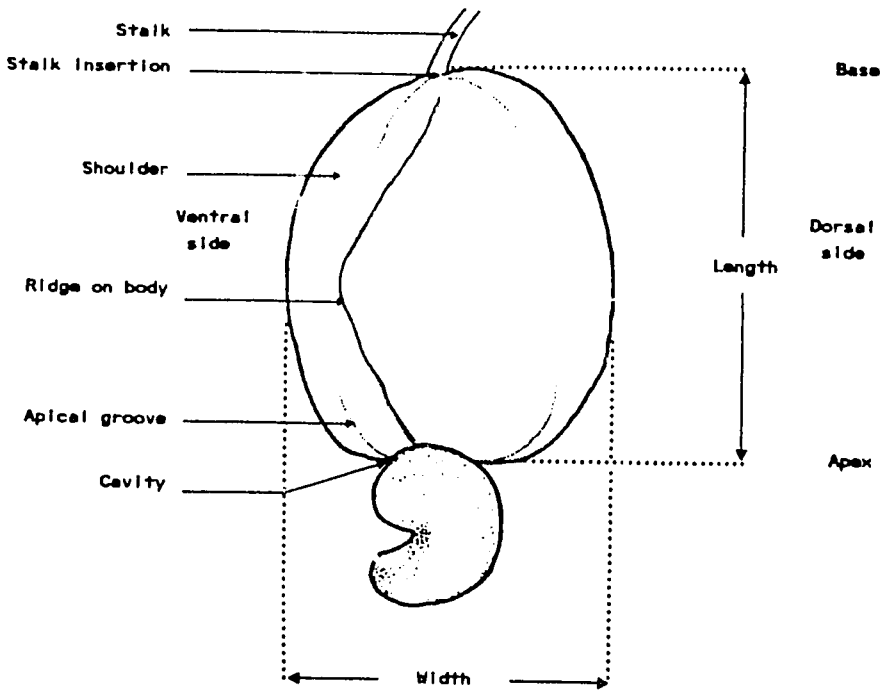


Fig. 3. Cashew apple

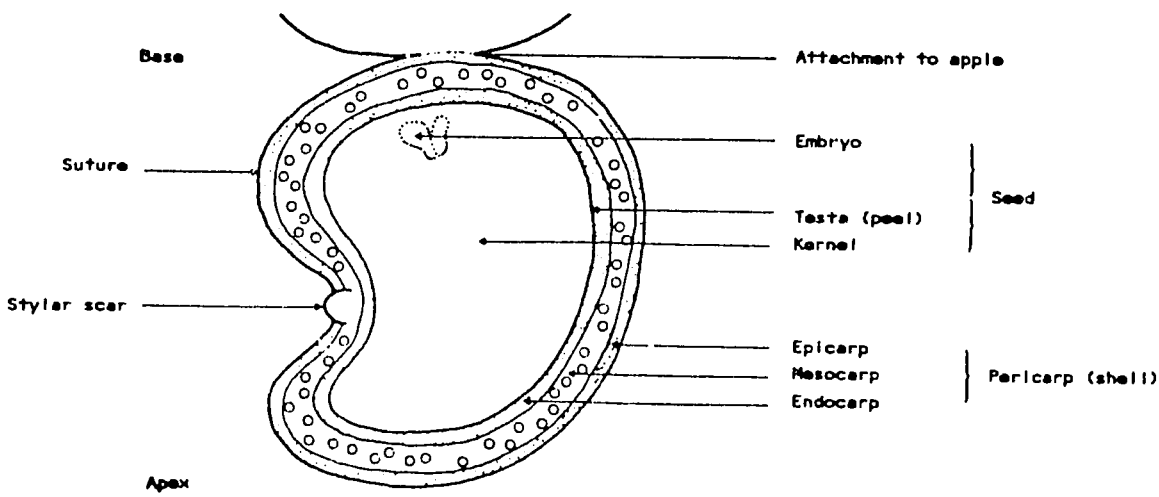


Fig. 4. Cashew nut

4.2.1 Season of flowering

		N. hemisphere	S. hemisphere
3	Early	Jan. - Feb.	July - Aug.
5	Mid-season	Feb. - Mar.	Aug. - Sept.
7	Late	Mar. - Apr.	Sept. - Oct.

4.2.2 Inflorescence shape

See Fig. 5

3 Narrowly pyramidal (conical)
5 Pyramidal (deltoid)
7 Broadly pyramidal

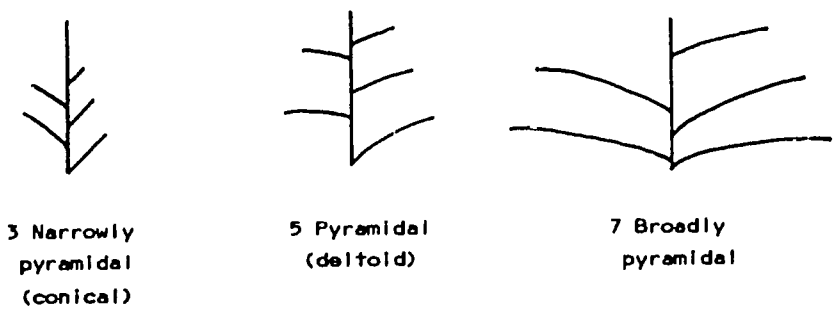


Fig. 5. Inflorescence shape

4.2.3 Flower colour

Of corolla

1 White
2 Cream
3 Pink
4 Other (specify in the NOTES descriptor, 11)

4.2.4 Mature cashew apple colour

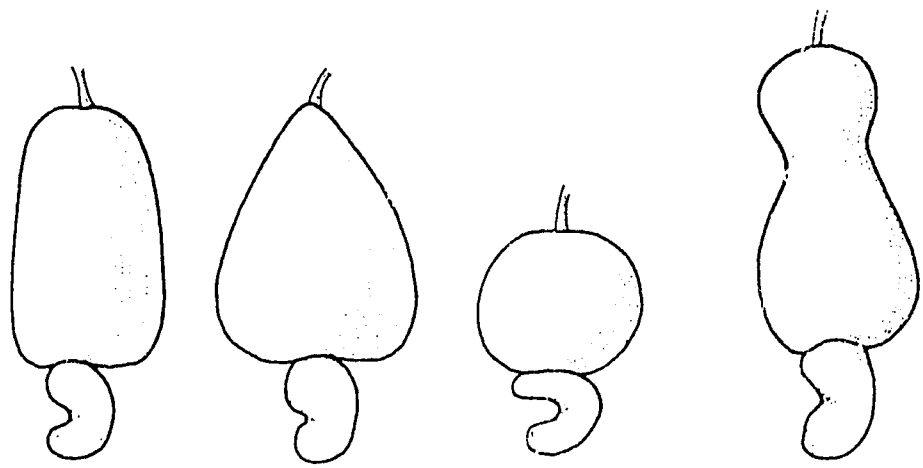
Principal colour of skin

1 Yellow
2 Red
3 Other (specify in the NOTES descriptor, 11)

4.2.5 Cashew apple shape

See Fig. 6

1 Cylindrical (diameter at top and bottom nearly equal)
2 Conical to obovate
3 Round (sides bulge out, length and maximum diameter equal)
4 Pyriform (clear depression on neck region all around apple)



1 Cylindrical 2 Conical to obovate 3 Round 4 Pyriform

Fig. 6. Cashew apple shape

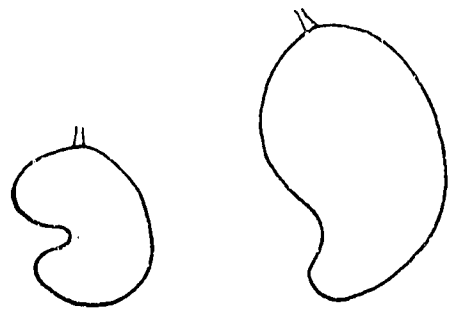
4.2.6 Colour of mature nut shell

1 Buff
2 Grey
3 Ash grey
4 Pink or crimson tones present
5 Other (specify in the NOTES descriptor, 11)

4.2.7 Nut shape

See Fig. 7

1 Kidney-shaped (apex and base are in line with convex right shoulder)
2 Oblong-ellipsoid (shoulders drop equally at bases; nut is slightly elongated)



1 Kidney-shaped 2 Oblong-ellipsoid

Fig. 7. Nut shape

4.2.8 Nut weight

Including shell (pericarp)

1 Very low (> 1 g)
3 Low (3-4 g)
5 Intermediate (5-6 g)
7 High (7-8 g)
9 Very high (< 9 g)

4.2.9 Shell oil percentage

Weight of oil divided by weight of shells divided by 100

4.3 SEED

4.3.1 Shelling percentage

Seed weight divided by dry net weight multiplied by 100

3 Low (16-18%)
5 Intermediate (22-24%)
7 High (28-30%)

4.3.2 <u>Seed weight</u>

After shelling dry nut

3 Low (> 30 g)
5 Intermediate (30-50 g)
7 High (< 50 g)

4.3.3 <u>Attachment of peel to kernel</u>

(Attachment of testa to cotyledons)

3 Loose (peel leathery and easily removed without heat)

7 Tight (peel thin and adhesive; requires heat or drying to remove)

FURTHER CHARACTERIZATION AND EVALUATION

5. SITE DATA

5.1 COUNTRY OF FURTHER CHARACTERIZATION AND EVALUATION

5.2 SITE (RESEARCH INSTITUTE)

5.3 NAME OF PERSON IN CHARGE OF EVALUATION

5.4 AGE OF TREE

6. PLANT DATA

Unless noted otherwise, descriptors should be evaluated for middle-aged, bearing trees

6.1 VEGETATIVE

6.1.1 Tree height (m)

From ground to top of tree

6.1.2 Tree spread (m)

Measured as the mean of the diameter in 2 directions

6.1.3 Cracks on trunk bark

0 Absent (smooth)
+ Present (rough)

6.1.4 Height of main branches (m)

From ground level to point on trunk where main branches originate

3 Low (0.8-1.0 m)
5 Intermediate (1.4-1.6 m)
7 High (2.0-2.2 m)

6.1.5 Crotch angle of main branches

See Fig. 8

3 Acute (less than 90°)
7 Obtuse (more than 90°)

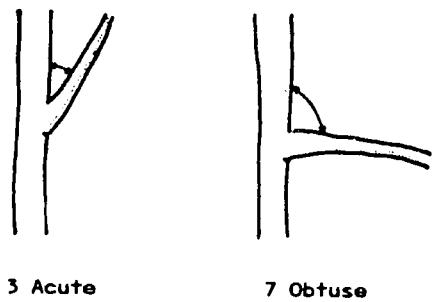


Fig. 8. Crotch angle of main branches

6.1.6 Ease of peeling bark from twigs

3 Difficult (bark shreds and breaks when peeled - indicates rather inactive cambium)
7 Easy (bark peels easily; moisture present underneath bark - indicates rather active cambium)

6.1.7 Extension growth of twigs (cm)

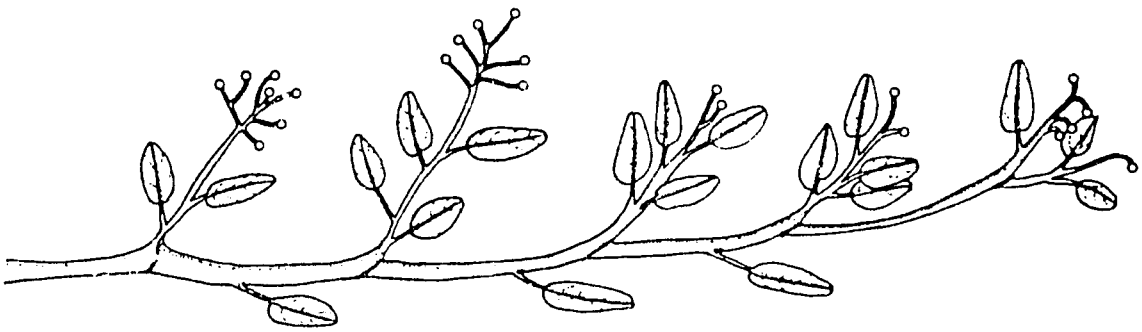
Measured during major growth flush following harvest. Mean of 10 randomly selected twigs

6.1.8 Branching pattern

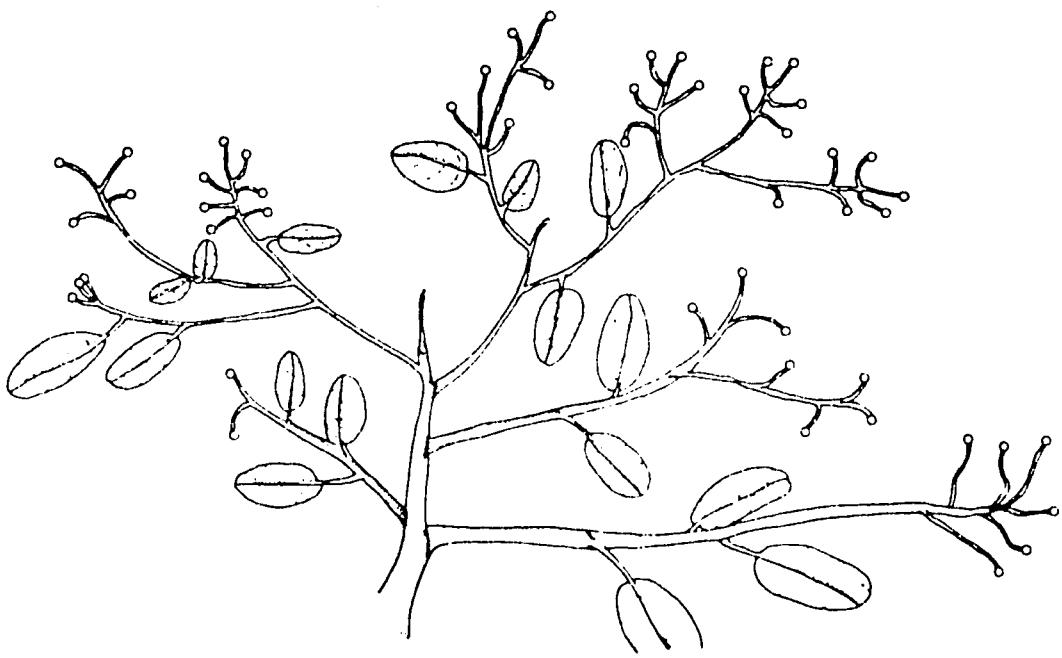
See Fig. 9

If both patterns occur, record predominant one

1 Extensive (one branch arises below apex of twig with each flush of growth)
2 Intensive (Several branches arise below apex of twig with each flush of growth)



1 Extensive



2 Intensive

Fig. 9. Branching pattern

6.1.9 Twig diameter

Of current shoot at an internode

Measured after current season's growth has ceased

3 Thin
5 Intermediate
7 Thick

6.1.10 Number of leaves per twig

On current shoot at leaf-shedding

Mean of 10 randomly selected twigs

6.1.11 Colour of young leaves

1 Green
2 Yellow
3 Orange
4 Light pink
5 Red
6 Brown
7 Other (specify in the NOTES descriptor, 11)

6.1.12 Colour of mature leaves

At harvest time

1 Yellow
2 Green
3 Dark green
4 Pink
5 Other (specify in the NOTES descriptor, 11)

6.1.13 Odour of leaves

From crushed young leaves

1 Mango-like
2 Turpentine-like
3 Other (specify in the NOTES descriptor, 11)

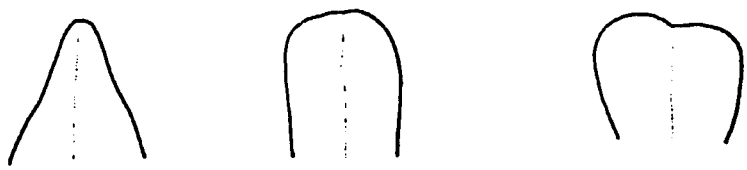
6.1.14 Leaf margin

1 Wavy
2 Smooth

6.1.15 **Leaf apex shape**

See Fig. 10

1 Pointed
2 Rounded
3 Indented (with a slight notch)



1 Pointed 2 Rounded 3 Indented (with a slight notch)

Fig. 10. Leaf apex shape

6.1.16 **Leaf size**

3 Small
5 Intermediate
7 Large

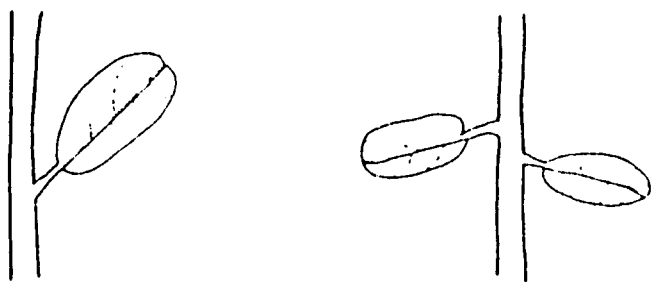
6.1.17 **Brittleness of leaf**

3 Leathery
7 Brittle

6.1.18 **Angle of leaf petiole relative to stem**

See Fig. 11

1 Acute (less than 90°)
2 Obtuse (more than 90°)



1 Acute 2 Obtuse

Fig. 11. Angle of leaf petiole relative to stem

6.1.19 Leaf cross-section

See Fig. 12

1 Level
2 Reflexed (leaf margins turned downward)
3 Incurved (leaf margins turned upward)
4 Twisted

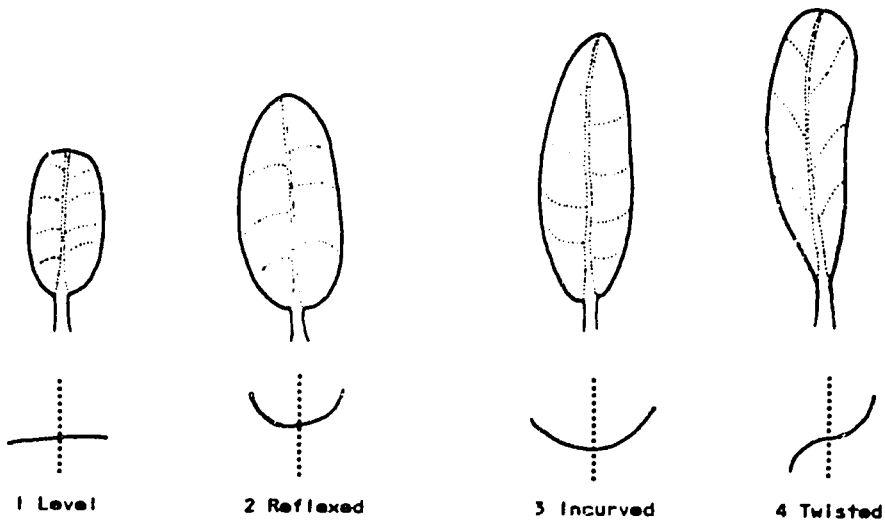


Fig. 12. Leaf cross-section

6.2 INFLORESCENCE AND FRUIT

For diagrams of the cashew apple and cashew nut see Figs. 3 and 4 respectively

6.2.1 Colour of boot leaf

1 Light green
2 Dark green
3 Other (specify in the NOTES descriptor, 11)

6.2.2 Inflorescence size

3 Small
5 Intermediate
7 Large

6.2.3 Compactness of inflorescence

3 Loose
7 Compact

6.2.4 Type of inflorescence branching

1 All around (branches located all around main axis)
2 Two-sided (branches only located along opposite sides of main axis; branches more or less in a plane)

6.2.5 Elaboration of inflorescence

See Fig. 13

1 Helicoid
2 Cymose

1 Helicoid 2 Cymose

Fig. 13. Elaboration of inflorescence

6.2.6 Sex ratio

Ratio of hermaphrodite flowers to total number of flowers (hermaphrodite plus male flowers)

3 Low
5 Intermediate
7 High

6.2.7 Secondary flowering

0 Absent (one flowering period per year)
+ Present (more than one flowering period per year)

6.2.8 Size of cashew apple

At mid-season

3 Small
5 Intermediate
7 Large

6.2.9 Weight of cashew apple

At mid-season

3 Low (20-27 g)
5 Intermediate (36-43 g)
7 High (52-59 g)

6.2.10 Shape of cashew apple base

See Fig. 14

1 Angular (shoulders subtend acute angle)
2 Rounded (sloped toward shoulders)
3 Flattened (not sloped toward shoulders)
4 Obliquely flattened (slope toward one shoulder)

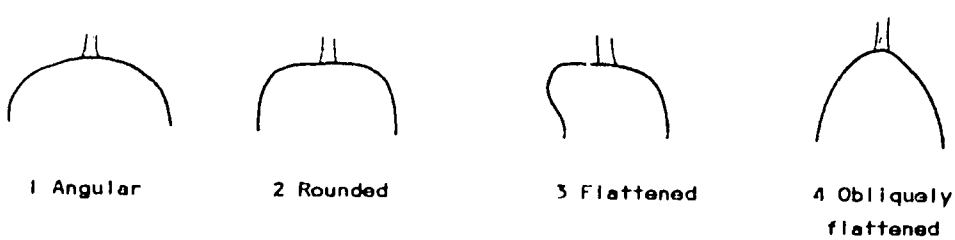


Fig. 14. Shape of cashew apple base

6.2.11 Ridges on cashew apple

See Fig. 15

0 Absent
1 Broken
2 Entire (unbroken from base to apex)

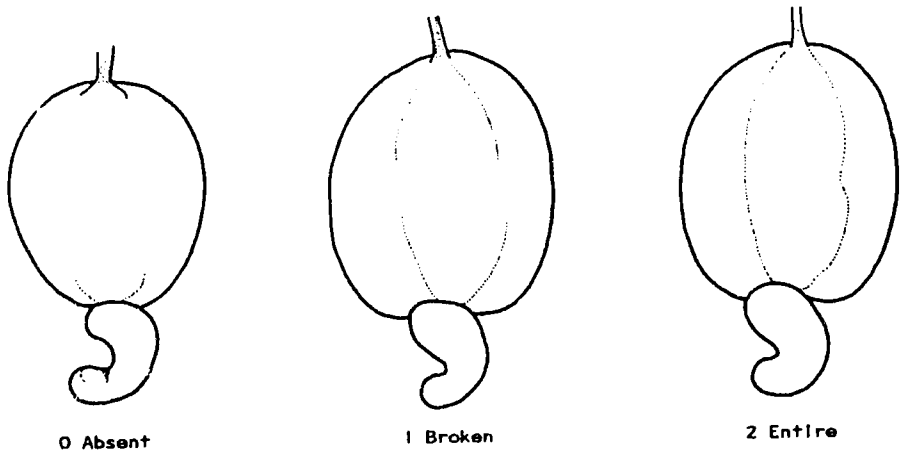


Fig. 15. Ridges on cashew apple

6.2.12 Cashew apple apex

See Fig. 16

1 Level
2 Oblique

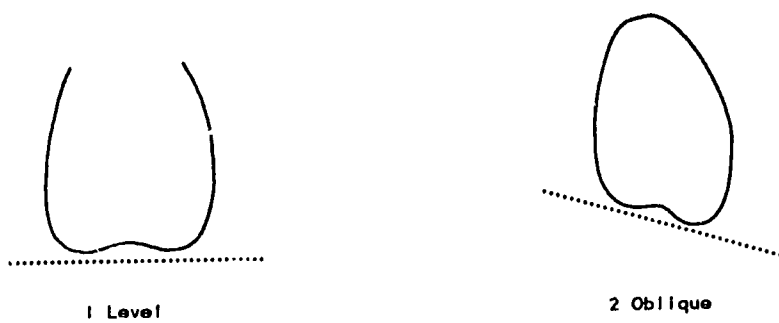


Fig. 16. Cashew apple apex

6.2.13 <u>Grooves on apex</u>

Of cashew apple

0 Absent
3 Shallow (notched)
7 Deep (furrowed)

6.2.14 <u>Cavity at apex of cashew apple</u>

Where nut is attached

See Fig. 17

0 Absent (apex is flat)
3 Shallow
7 Deep

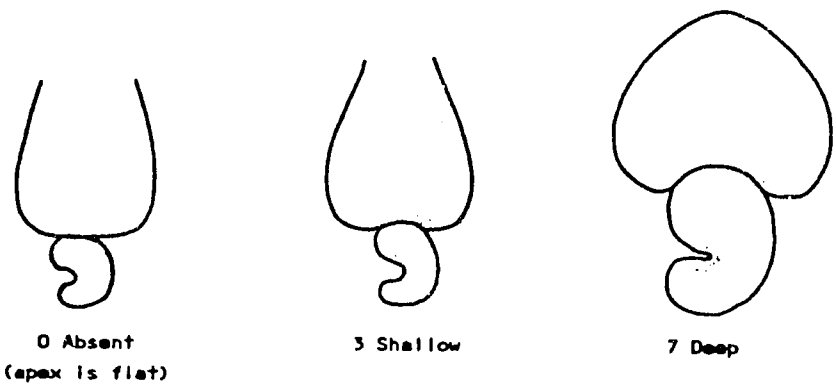


Fig. 17. Cavity at apex of cashew apple

6.2.15 <u>Lenticel size</u>

On cashew apple

3 Small
5 Intermediate
7 Large

6.2.16 <u>Density of lenticels</u>

On cashew apple

3 Sparse
7 Dense

6.2.17 <u>Skin of cashew apple</u>

1 Smooth and glossy
2 Rough and dull

6.2.18 Ease of peeling of cashew apple

3 Easily peeled
7 Difficult to peel

6.2.19 Flesh colour

Cashew apple

1 White
2 Cream
3 Yellow
4 Other (specify in the NOTES descriptor, 11)

6.2.20 Flesh softness

Cashew apple

3 Low
5 Intermediate
7 High

6.2.21 Flesh odour

Cashew apple

3 Weak
7 Strong

6.2.22 Juice yield

From cashew apple

3 Low
5 Intermediate
7 High

6.2.23 Juice quality

6.2.23.1 Juice astringency

Test should be done by 4 people who taste not more than 6 samples at one session. Each sample should be an average of 6 uniform specimens

3 Slight
5 Intermediate
7 Astringent

6.2.23.2 Juice acidity

Test should be done by 4 people who taste not more than 6 samples at one session. Each sample should be an average of 6 uniform specimens. Alternatively, acidity can be measured by means of a pH test or by titration

3 Slight
5 Intermediate
7 Sour

6.2.23.3 Juice sweetness

Test should be done by 4 people who taste not more than 6 samples at one session. Each sample should be an average of 6 uniform specimens

3 Slight (bland)
5 Intermediate (well blended with acidity)
7 Sweet

6.2.24 Attachment of nut to cashew apple

Scored on mature fruit

3 Loose (separation easy and clean with one twist)
5 Intermediate
7 Tight (separation requires 2 or more twists and piece of apple flesh remains on nut)

6.2.24 <u>Cashew nut dimensions</u> (mm)

See Fig. 18

6.2.24.1 <u>Nut length</u>

Distance from point of attachment to apex

6.2.24.2 <u>Nut width</u>

Maximum distance between shoulders

6.2.24.3 <u>Nut thickness</u>

Maximum distance between flanks

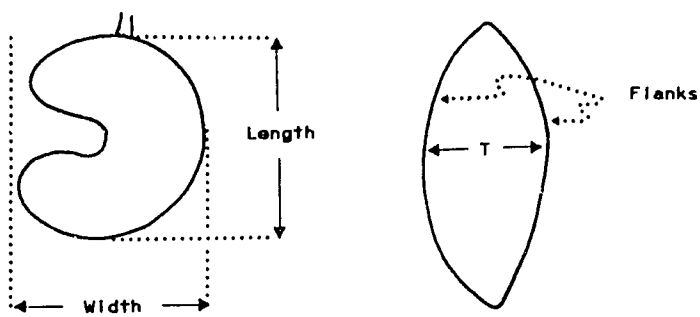


Fig. 18. Cashew nut dimensions

6.2.25 <u>Shape of nut base</u>

See Fig. 19

1 Rounded
2 Flattened
3 Obliquely flattened
4 Angular

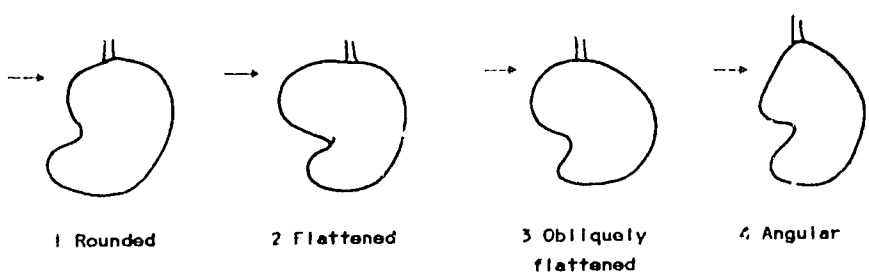


Fig. 19. Shape of nut base

6.2.26 <u>Suture of nut</u>

See Fig. 20

1 Rounded (not distinct)
2 Angular (distinct)

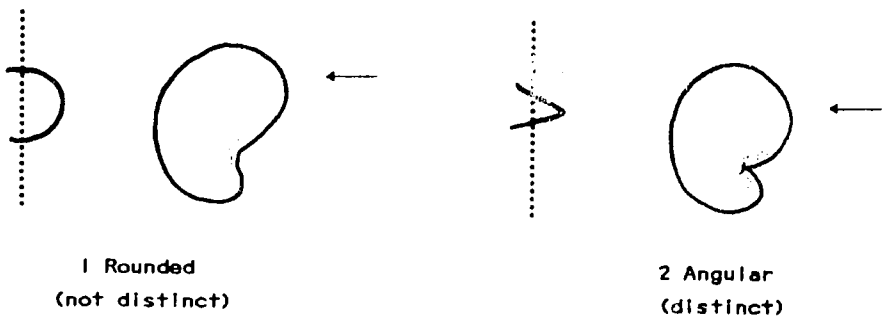


Fig. 20. Suture of nut

6.2.27 <u>Flanks of nut</u>

See Fig. 21

3 Flattened
5 Rounded
7 Bulging

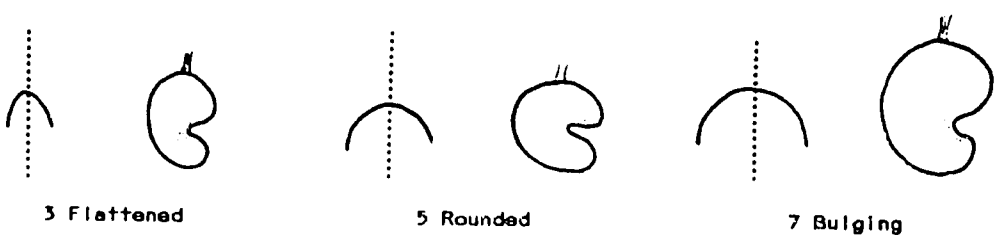


Fig. 21. Flanks of nut

6.2.28 <u>Stylar scar on nut</u>

3 Small (narrow)
7 Large (wide)

6.2.29 <u>Shape of nut apex</u>

See Fig. 22

1 Round
2 Intermediate
3 Pointed

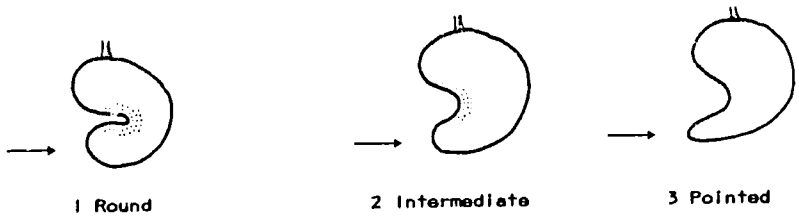


Fig. 22. Shape of nut apex

6.2.30 <u>Relative position of suture and apex</u>

See Fig. 23

1 Suture projection in front of apex
2 Suture projection in line with apex
3 Suture projection behind apex

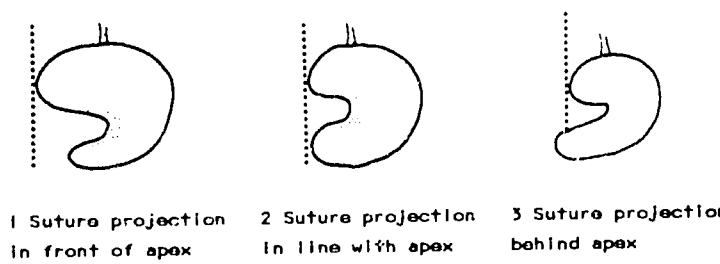


Fig. 23. Relative position of suture and apex

6.2.31 <u>Shell (pericarp) thickness</u> (mm)

3 Thin (2.1-2.5 mm)
5 Intermediate (3.1-3.5 mm)
7 Thick (4.1-4.5 mm)

6.2.32 <u>Uniformity of shell thickness</u>

Excluding suture

0 Not uniform
+ Uniform

6.3 SEED

6.3.1 Seed dimensions (mm)

Measured in the same way as are the nut dimensions

See Fig. 18

6.3.1.1 Kernel length

Distance from base (location of plumule) to apex

6.3.1.2 Kernel width

Maximum width

6.3.1.3 Kernel thickness

Maximum distance between flanks

6.3.2 Cotyledonary grooves

3 Shallow
7 Deep

6.3.3 Breakage percentage

Percentage of kernels broken while processing

6.3.4 Kernel quality

3 Poor
5 Intermediate
7 Good

6.3.5 Kernel oil percentage

6.3.6 Kernel protein percentage

7. STRESS SUSCEPTIBILITY

Scored on a 1-9 scale, where

3 Low susceptibility
5 Medium susceptibility
7 High susceptibility

7.1 LOW TEMPERATURE

7.2 HIGH TEMPERATURE

7.3 DROUGHT

7.4 HIGH SOIL MOISTURE

7.5 WIND

8. PEST AND DISEASE SUSCEPTIBILITY

Scored on a 1-9 scale, where

3 Low susceptibility
5 Medium susceptibility
7 High susceptibility

8.1 PESTS

8.1.1	*Acrocercops syngramma* Meyr.	Leaf miner
8.1.2	*Aleurodicus cocois* Curtis	Whitefly
8.1.3	*Analeptes trifasciata* Fabr.	Girdler
8.1.4	*Anarsia epotias* Meyr.	Shoot borer
8.1.5	*Anthistarcha binocularis* Meyr.	Shoot borer
8.1.6	*Crimissa cruralis* Stal.	Leaf feeding beetle
8.1.7	*Helopeltis* spp.	Mirid bugs
8.1.8	*Hypatima haligramma* Meyr.	Chelaria bud borer
8.1.9	*Macalla moncusalis* Walker	Leaf and blossom webber
8.1.10	*Mecocorynus loripes* Chev.	Borer
8.1.11	*Orthago exvinacea* Hamps.	Leaf and blossom webber
8.1.12	*Paranaleptes reticulata* Thomson	Girdler
8.1.13	*Plocaederus* spp.	Borers
8.1.14	*Pseudoaonidia trilobitiformis* Green	Scale
8.1.15	*Selenothrips rubrocinctus*	Thrips
8.1.16	*Thylocoptila panrosema* Meyr.	Apple and nut borer
8.1.17	Others (specify in the NOTES descriptor, 11)	

8.2 FUNGI

8.2.1	*Botryodiplodia theobromae* Pat. (=*Lasiodiplodia theobromae*) (Pat.) Griff. & Maubl.)	Floral shoot die back

8.2.2	Colletotrichum gloeosporioides (Penz.) Sacc. (=Gloeosporium mangiferae P. Henn.)	Anthracnose
8.2.3	Corticium salmonicolor (Pellicularia salmonicolor) Berk. & Br. Dastur)	Pink disease
8.2.4	Fusarium spp.	Seedling mortality
8.2.5	Oidium anacardii Noach.	Powdery mildew
8.2.6	Pestalotia spp.	Leaf spots
8.2.7	Phyllosticta spp.	Leaf spots
8.2.8	Pythium spp.	Seedling mortality
8.2.9	Sclerotium rolfsii Sacc. (Corticium rolfsii Curzi)	Seedling mortality
8.2.10	Others (specify in the NOTES descriptor, 11)	

8.3 BACTERIA

8.3.1 Others (specify in the NOTES descriptor, 11)

8.4 VIRUS

8.4.1 Others (specify in the NOTES descriptor, 11)

9. ALLOENZYME COMPOSITION

This may prove to be a useful tool for identifying duplicate accessions

10. CYTOLOGICAL CHARACTERS AND IDENTIFIED GENES

11. NOTES

Give additional information where the descriptor state is noted as 'Other' as, for example, in descriptors 2.10, 4.1.3, etc. Also include here any further relevant information

APPENDIX I

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