



सत्यमेव जयते

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GOVERNMENT OF INDIA

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पौधा किस्म और कृषक अधिकार संरक्षण प्राधिकरण
एनएएससी काम्प्लेक्स, डीपीएस मार्ग, निकट टोडापुर गांव, नई दिल्ली-110012

PROTECTION OF PLANT VARIETIES & FARMERS' RIGHTS AUTHORITY
NASC COMPLEX, DPS MARG, Opp. Todapur Village, New Delhi-110012



भारत सरकार
GOVERNMENT OF INDIA

भारतीय पौधा किस्म जर्नल, खण्ड 07, अंक 02
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पौधा किस्म और कृषक अधिकार संरक्षण प्राधिकरण
एनएएससी काम्प्लेक्स, डीपीएस मार्ग, निकट टोडापुर गांव, नई दिल्ली – 110 012

PROTECTION OF PLANT VARIETIES & FARMERS' RIGHTS AUTHORITY
NASC Complex, DPS Marg, Opp. Todapur Village, New Delhi – 110 012

'भारतीय पौधा किस्म जरनल पौधा किस्म और कृषक अधिकार संरक्षण प्राधिकरण (पौ.कि.कृ.अ.सं.प्रा.) का आधिकारिक जरनल है। पीपीवी और एफआर अधिनियम, 2001 तथा पीपीवी और एफआर नियमावली, 2003 के नियम 2 (जी) के अंतर्गत अध्यक्ष, पीपीवी और एफआर, एस.2, ए ब्लॉक, एनएएससी काम्प्लैक्स, डीपीएस मार्ग, निकट टोडापुर गांव, नई दिल्ली-110012 की ओर से प्राधिकरण के रजिस्ट्रार द्वारा प्रकाशित किया जा रहा है।

Plant Variety Journal of India is the Official Journal of the Protection of Plant Varieties and Farmers' Rights Authority (PPV & FRA) published by the Registrar on behalf of the Chairperson, PPV & FRA, S-2 A Block, NASC Complex, DPS Marg, Opp. Todapur Village, New Delhi-110012 under the PPV & FR Act, 2001 and Rule 2 (g) of the PPV & FR Rules, 2003.

Protection of Plant Varieties and Farmers' Rights (Second Amendment) Rules, 2012

रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D. L.-33004/99


भारत का राजपत्र
The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)
PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 639] नई दिल्ली, मंगलवार, दिसम्बर 18, 2012/अग्राहायण 27, 1934
No. 639] NEW DELHI, TUESDAY, DECEMBER 18, 2012/AGRAHAYANA 27, 1934

कृषि मंत्रालय

(कृषि और सहकारिता विभाग)

अधिसूचना

नई दिल्ली, 17 दिसम्बर, 2012

सा.का.नि. 900(अ).—केंद्रीय सरकार, पौधा किस्म और कृषक अधिकार संरक्षण अधिनियम, 2001 (2001 का 53) की धारा 96 की उप-धारा (2) के खंड (7) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, पौधा किस्म और कृषक अधिकार नियम, 2003 का और संशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात् :—

1. संक्षिप्त नाम और प्रारंभ.—(1) इन नियमों का संक्षिप्त नाम पौधा किस्म और कृषक अधिकार संरक्षण (दूसरा संशोधन) नियम, 2012 है।

(2) ये उनके राजपत्र में प्रकाशन की तारीख को प्रवृत्त होंगे।

2. पौधा किस्म और कृषक अधिकार संरक्षण नियम, 2003 के नियम 36 के पश्चात् निम्नलिखित नियम अंतःस्थापित किया जाएगा, अर्थात् :—

"36. क-धारा 8 की उप-धारा (2) के खंड (ड.) के अधीन रजिस्ट्रीकृत किस्म के बीजों के उत्पादन और बिक्री का प्रबंध करने की रीति—(1) इस अधिनियम के अधीन किसी रजिस्ट्रीकृत किस्म के बीजों का उत्पादन, विपणन और बिक्री करने का हकदार अभिजनक या अन्य व्यक्ति :—

(क) रजिस्ट्रीकृत किस्म की सामग्री के बीज या प्रचार सामग्री कृषकों को समयबद्ध रूप से उपलब्ध कराएगा जिससे उनकी समुचित आवश्यकताओं की पूर्ति हो सके; या

(ख) ऐसी रजिस्ट्रीकृत किस्म की सामग्री के उत्पादन, विपणन और बीजों की बिक्री या प्रचार सामग्री कृषकों को समुचित कीमत पर उपलब्ध कराने का प्रबंध करेगा।"

[फा. सं. 1-16/2012-एस.डी. V]

डॉ. अतनु पुरकायस्थ, संयुक्त सचिव

टिप्पण :—मूल नियम भारत के राजपत्र, भाग II, खंड 3, उप-खंड (i) में सा.का.नि. 738(अ) तारीख 12 सितम्बर, 2003 द्वारा प्रकाशित किए गए थे और तत्पश्चात् सा.का.नि. 843(अ) तारीख 30 दिसम्बर, 2004, सा.का.नि. 731(अ) तारीख 14 अक्टूबर, 2008, सा.का.नि. 319(अ) तारीख 11 मई, 2009, सा.का.नि. 783(अ) तारीख 27 अक्टूबर, 2009, सा.का.नि. 901(अ) तारीख 17 दिसम्बर, 2009 और सा.का.नि. 949(अ) तारीख 3 दिसम्बर, 2010 द्वारा संशोधित किए गए थे।

MINISTRY OF AGRICULTURE**(Department of Agriculture and Cooperation)****NOTIFICATION**

New Delhi, the 17th December, 2012

G.S.R. 900(E).—In exercise of the powers conferred by clause (vii) of sub-section 2 of section 96 of the Protection of Plant Varieties and Farmers' Rights Act, 2001 (53 of 2001) the Central Government hereby makes the following Rules further to amend the Protection of Plant Varieties and Farmers' Rights Rules, 2003 namely :—

1. Short title and commencement.—(1) These Rules may be called Protection of Plant Varieties and Farmers' Rights (Second Amendment) Rules, 2012.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Protection of Plant Varieties and Farmers' Rights Rules, 2003, after rule 36, the following rule shall be inserted namely :—

“36A Manner for arranging production and sale of seeds of registered variety under clause (c) of sub-section 2 of section 8—(1) The breeder of a registered variety or any person entitled to produce, market and sell the seeds of a registered variety under this Act shall :—

(a) provide the seeds or propagating material of the registered variety to the farmers in a timely manner, so as to satisfy their reasonable requirements; or

(b) arrange for production, marketing and sale of seeds or propagating material of such registered variety to the farmers at a reasonable market price”.

[F. No. 1-16/2012-SD. V]

Dr. ATANU PURKAYASTHA, Jt. Secy.

Note :— The principal rules were published in the Gazette of India, Part II, Section 3, Sub-section (i) by G.S.R. 738(E), dated the 12th September, 2003 and subsequently amended by G.S.R. 843(E), dated the 30th December, 2004, G.S.R. 731(E), dated the 14th October, 2008, G.S.R. 319(E), dated the 11th May, 2009, G.S.R. 783(E), dated the 27th October, 2009, G.S.R. 901(E), dated the 17th December, 2009 and G.S.R. 949(E), dated the 3rd December, 2010.

Protection of Plant Varieties and Farmers' Rights (Use of Denomination of Registered Variety) Rules, 2012

रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D. L.-33004/99



भारत का राजपत्र The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)

PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 642]

नई दिल्ली, मंगलवार, दिसम्बर 18, 2012/अग्राहायण 27, 1934

No. 642]

NEW DELHI, TUESDAY, DECEMBER 18, 2012/AGRAHAYANA 27, 1934

कृषि मंत्रालय

(कृषि और सहकारिता विभाग)

अधिसूचना

नई दिल्ली, 17 दिसम्बर, 2012

सा.का.नि. 903(अ).—केंद्रीय सरकार, पौधा किस्म और कृषक अधिकार संरक्षण अधिनियम, 2001 (2001 का 53) की धारा 96 की उप-धारा (2) के खंड (64) के साथ पठित धारा 68 की उप-धारा (1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, निम्नलिखित नियम बनाती है, अर्थात्:—

1. संक्षिप्त नाम और प्रारंभ.—(1) इन नियमों का संक्षिप्त नाम पौधा किस्म और कृषक अधिकार संरक्षण (रजिस्ट्रीकृत किस्म के अभिधान का उपयोग) नियम, 2012 है।

(2) ये इनके राजपत्र में प्रकाशन की तारीख को प्रवृत्त होंगे।

2. परिभाषाएँ.—इन नियमों में जब तक कि संदर्भ से अन्यथा अपेक्षित न हो,—

(i) 'अधिनियम' से कृषक अधिकार संरक्षण अधिनियम, 2001 (2001 का 53) अभिप्रेत है;

(ii) इन नियमों में प्रयुक्त सभी अन्य शब्द और अभिव्यक्तियाँ किंतु जो परिभाषित नहीं हैं, का क्रमशः वही अर्थ होगा जो उनका अधिनियम में है।

3. अभिधान का उपयोग.—किसी रजिस्ट्रीकृत किस्म के संबंध में अभिधान का अर्थान्वयन अभिधान के मुद्रित या अन्य दृश्य प्रतिनिधित्व के प्रति निर्देश के रूप में किया जाएगा।

4. रजिस्ट्रीकरण के व्यौरों का उपदर्शन.—इस अधिनियम के अधीन किसी रजिस्ट्रीकृत किस्म के बीजों का आच्छादन, या कोई अन्य आधान इस अधिनियम के अधीन अभिप्राप्त अभिधान और रजिस्ट्रीकरण के व्यौरों को उपदर्शित करेगा।

5. किसी रजिस्ट्रीकरण किस्म के संबंध में अभिधान का उपयोग.—किसी रजिस्ट्रीकृत किस्म के संबंध में किसी अभिधान के उपयोग का अर्थान्वयन ऐसी किस्म में या किसी भौतिक या किसी अन्य संबंध चाहे जो भी हो, के प्रति किया जाएगा।

6. आधान का अभिधान के उपयोग की रीति.—(1) अभिधान बीज के प्रत्येक आधान पर उस आधान जिसमें बीज को पैक किया गया है और प्रत्येक आच्छादन जिसमें आधान पैक किया गया है में सहज दृश्य स्थान पर और साफ तथा सुस्पष्ट होगा।

(2) अधिनियम की धारा 68 की उप-धारा (2) और उप-धारा (3) के अर्थात्गत किसी अभिधान के उपयोग का अर्थान्वयन अभिधान के उपयोग के रूप में किया जाएगा।

7. रजिस्ट्रीकृत अधिकर्ता या रजिस्ट्रीकृत अनुज्ञप्तिधारी द्वारा अभिधान का उपयोग.—रजिस्ट्रीकृत अधिकर्ता या रजिस्ट्रीकृत अनुज्ञप्तिधारी द्वारा अभिधान के उपयोग का अर्थान्वयन अभिधान के उपयोग के रूप में किया जाएगा, जब—

(क) उक्त रजिस्ट्रीकृत अधिकर्ता या रजिस्ट्रीकृत अनुज्ञप्तिधारी व्यापार के प्रक्रम में संबंधित है;

- (ख) किस्म के संबंध में अभिधान तत्समय रजिस्ट्रीकृत रहता है;
 (ग) वह अधिनियम के उपबंधों के अधीन अनुज्ञप्तिधारी या रजिस्ट्रीकृत अभिकर्ता के रूप में रजिस्ट्रीकृत है।
 (घ) वह उन शर्तों और परिसीमाओं का पालन करता है जिनके अधीन रजिस्ट्रीकृत अनुज्ञप्तिधारी का रजिस्ट्रीकरण या रजिस्ट्रीकृत अभिकर्ता है।

8. भारत में उपयोग और निर्यात व्यापार के लिए उपयोग.—(1) किसी किस्म के अभिधान के उपयोग का अर्थान्वयन केवल भारत में उपयोग के रूप में किया जाएगा।

(2) भारत से निर्यात की जाने वाली किसी किस्म के लिए भारत में अभिधान के लिए आवेदन के अर्थान्वयन अभिधान के उपयोग के रूप में किया जाएगा।

[फा. सं. 1-4/2009-एस.डी. V]

डॉ. अतनु पुरकायस्थ, संयुक्त सचिव

MINISTRY OF AGRICULTURE
(Department of Agriculture and Cooperation)
NOTIFICATION

New Delhi, the 17th December, 2012

G.S.R. 903(E).—In exercise of the powers conferred by sub-section (1) of Section 68 read with clause (Lxiv) of sub-section (2) of Section 96 of the Protection of Plant Varieties and Farmer's Rights Act, 2001 (53 of 2001), the Central Government hereby makes the following rules, namely:-

1. Short title and commencement.—(1) These rules may be called the Protection of Plant Varieties and Farmers' Rights (Use of Denomination of Registered Variety) Rules, 2012.

(2) They shall come into force on the date of their publication in the official Gazette.

2. Definitions.—In these rules, unless the context otherwise requires,—

(i) "Act" means the Protection of Plant Varieties and Farmers' Rights Act, 2001 (53 of 2001).

(ii) All other words and expressions used in these rules but not defined, shall have the same meaning respectively assigned to them in the Act.

3. Use of denomination.—The use of a denomination in relation to a variety registered shall be construed as a reference to the use of printed or other visual representation of the denomination.

4. Indication of details of registration.—The package or any other container, containing the seeds of a variety registered under the Act shall indicate the denomination and details of registration obtained under the Act.

5. Use of the denomination in relation to a registered variety.—The use of a denomination in relation to a variety registered shall be construed as a reference to the use of the denomination upon, or in any physical or in any other relation whatsoever, to such variety.

6. Manner of using the denomination in the container.—(1) The denomination shall appear on each container of seed in a conspicuous place on the container in which the seed is packed and on every other covering in which that container is packed and shall be clear and legible.

(2) The application of a denomination of a registered variety within the meaning of sub-section (2) and (3) of Section 68 of the Act shall also be construed as a use of denomination.

7. Use of denomination by registered agent or registered licensee.—The use of a denomination by registered agent or registered licensee shall be construed as use of denomination, where—

(a) the said registered agent or registered licensee is connected in the course of the trade;

(b) in respect of which variety the denomination remains registered for the time being;

(c) he is registered as licensee or registered agent under the provisions of the Act;

(d) he complies with the conditions and limitations to which the registration of a registered licensee or registered agent is subject.

8. Use in India and use for export trade.—(1) Use of a denomination of a variety shall be construed as use in India only.

(2) Applying a denomination in India to a variety to be exported from India shall constitute use of the denomination.

[F. No. 1-4/2012-SD. V]

Dr. ATANU PURKAYASTHA, Jt. Secy.

Gazette notification for documents to be kept at Branch Offices of the
Plant Varieties Registry

रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D.L. 33004/99



भारत का राजपत्र
The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 2430]

नई दिल्ली, मंगलवार, दिसम्बर 18, 2012/अग्रहायण 27, 1934

No. 2430]

NEW DELHI, TUESDAY, DECEMBER 18, 2012/AGRAHAYANA 27, 1934

कृषि मंत्रालय

(कृषि और सहकारिता विभाग)

अधिसूचना

नई दिल्ली, 17 दिसम्बर, 2012

का.आ. 2931(अ).—केन्द्रीय सरकार, पौधा किस्म और कृषक अधिकार संरक्षण अधिनियम, 2001 (2001 का 53) की धारा 13 की उप-धारा (3) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, निदेश देती है कि पौधा किस्म रजिस्ट्री के प्रत्येक शाखा कार्यालय में निम्नलिखित दस्तावेज रखे जाएंगे, अर्थात् :—

- अपने-अपने शाखा कार्यालयों में पौधा किस्म के रजिस्ट्रीकरण के लिए फाइल किए गए आवेदनों की प्रतियां।
- अपने-अपने शाखा कार्यालयों के समक्ष कार्यवाहियों में फाइल किए गए दस्तावेजों की प्रतियां।

[फा.सं. 1-17/2012-एस.डी. V]

डा. अतनु पुरकायस्थ, संयुक्त सचिव

MINISTRY OF AGRICULTURE

(Department of Agriculture and Co-operation)

NOTIFICATION

New Delhi, the 17th December, 2012

S.O. 2931(E).—In exercise of the powers conferred by sub-section (3) of Section 13 of the Protection of Plant Varieties and Farmers' Rights Act, 2001 (53 of 2001), the Central Government hereby directs that the following documents shall be kept at each branch office of the Plant Varieties Registry, namely :—

- Copies of applications for registration of Plant Varieties filed in the respective branch office.
- Copies of documents in proceedings filed before the respective branch office.

[F. No. 1-17/2012-S.D.V.]

Dr. ATANU PURKAYASTHA, Jt. Secy.


भारत का राजपत्र
The Gazette of India

असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)
PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 641]

नई दिल्ली, मंगलवार, दिसम्बर 18, 2012/अग्रहायण 27, 1934

No. 641]

NEW DELHI, TUESDAY, DECEMBER 18, 2012/AGRAHAYANA 27, 1934

कृषि मंत्रालय

(कृषि और सहकारिता विभाग)

अधिसूचना

नई दिल्ली, 17 दिसम्बर, 2012

सा.का.नि. 902(अ).—केंद्रीय सरकार, पौधा किस्म और कृषक अधिकार संरक्षण अधिनियम, 2001 (2001 का 53) की धारा 96 की उप-धारा (2) के खंड (62) के साथ पठित धारा 62 की उप-धारा (1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए भारत के नियंत्रक और महालेखा परीक्षक के परामर्श से पौधा किस्म और कृषक अधिकार नियम, 2003 का और संशोधन करने के लिए निम्नलिखित नियम बनाते हैं, अर्थात् :—

1. संक्षिप्त नाम और प्रारंभ—(1) इन नियमों का संक्षिप्त नाम पौधा किस्म और कृषक अधिकार संरक्षण (संशोधन) नियम, 2012 है।

(2) ये उनके राजपत्र में प्रकाशन की तारीख को प्रवृत्त होंगे।

1. पौधा किस्म और कृषक अधिकार संरक्षण नियम, 2003 के अध्याय 8 में नियम, 74 के पश्चात् निम्नलिखित नियम अंतःस्थापित किया जाएगा, अर्थात् :—

“74.क लेखों का वार्षिक विवरण तैयार करने का प्रारूप—लेखों का वार्षिक विवरण तैयार करने का प्रारूप भारत के नियंत्रक और महालेखापरीक्षक द्वारा केंद्रीय स्थायत निकायों के लिए यथाविनिर्दिष्ट प्रारूप होगा।”

[फा. सं. 1-13/2012-एस. डी.-V]

डॉ. अतनु पुरकायस्थ, संयुक्त सचिव

टिप्पण.—मूल नियम भारत के राजपत्र, भाग II, खण्ड 3, उप-खण्ड (i) में सा.का.नि. 738(अ), तारीख 12 सितम्बर, 2003 द्वारा प्रकाशित किए गए थे और तत्पश्चात् सा.का.नि. 843(अ) तारीख 30 दिसम्बर, 2004, सा.का.नि. 731(अ) तारीख 14 अक्टूबर, 2008, सा.का.नि. 319(अ) तारीख 11 मई, 2009, सा.का.नि. 783(अ) तारीख 27 अक्टूबर, 2009, सा.का.नि. 901 (अ), तारीख 17 दिसम्बर, 2009 और सा.का.नि. 949(अ) तारीख 3 दिसम्बर, 2010 द्वारा संशोधित किए गए थे।

MINISTRY OF AGRICULTURE

(Department of Agriculture and Co-operation)

NOTIFICATION

New Delhi, the 17th December, 2012

G.S.R. 902(E).—In exercise of the powers conferred by clause (ixii) of sub-section (2) of Section 96 read with sub-section (1) of Section 62 of the Protection of Plant Varieties and Farmers' Rights Act, 2001 (53 of 2001) the Central Government hereby in consultation with the Comptroller and Auditor-General of India makes the following Rules to further amend the Protection of Plant Varieties and Farmers' Rights Rules, 2003, namely :—

1. Short Title and Commencement:— (1) These Rules may be called the Protection of Plant Varieties and Farmers' Rights (Amendment) Rules, 2012.

(2) They shall come into force on the date of their publication in Official Gazette.

2. In Chapter VIII of Protection of Plant Varieties and Farmers' Rights Rules, 2003, after Rule 74, the following rule shall be inserted namely:—

"74A.- Form for preparing annual statement of accounts—The form for preparing annual statement of accounts shall be as specified by the Comptroller and Auditor-General of India for Central autonomous bodies".

[F. No. 1-13/2012-SD-V]

Dr. ATANU PURKAYASTHA, Jt. Secy.

Note :—The principal rules were published in the Gazette of India, Part II, Section 3, Sub-section (i) by G.S.R. 738(E), dated the 12th September, 2003 and subsequently amended by G.S.R. 843(E), dated the 30th December, 2004, G.S.R. 731 (E), dated the 14th October, 2008, G.S.R. 319 (E), dated the 11th May, 2009, G. S.R. 783 (E), dated the 27th October, 2009, G.S.R. 901(E), dated the 17th December, 2009 and G. S.R. 949 (E), dated the 3rd December, 2010.



भारत का राजपत्र The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)

PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 640]

नई दिल्ली, मंगलवार, दिसम्बर 18, 2012/अग्रहायण 27, 1934

No. 640]

NEW DELHI, TUESDAY, DECEMBER 18, 2012/AGRAHAYANA 27, 1934

कृषि मंत्रालय

(कृषि और सहकारिता विभाग)

अधिसूचना

नई दिल्ली, 17 दिसम्बर, 2012

सा.का.नि. 901(अ).—केंद्रीय सरकार, पौधा किस्म और कृषक अधिकार संरक्षण अधिनियम, 2001 (2001 का 53) की धारा 96 की उपधारा (2) के खंड (8) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए पौधा किस्म और कृषक अधिकार संरक्षण नियम, 2003 का और संशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात् :—

1. संक्षिप्त नाम और प्रारंभ.—(1) इन नियमों का संक्षिप्त नाम पौधा किस्म और कृषक अधिकार संरक्षण (संशोधन) नियम, 2012 है।

(2) ये उनके राजपत्र में प्रकाशन की तारीख को प्रवृत्त होंगे।

2. (क) पौधा किस्म और कृषक अधिकार संरक्षण नियम, 2003 (जिसे इसमें इसके पश्चात् मूल नियम कहा गया है) के नियम 22 के पश्चात् निम्नलिखित नियम अंतःस्थापित किए जाएंगे, अर्थात् :—

(ख) चौथी अनुसूची के पश्चात् निम्नलिखित अनुसूची अंतःस्थापित की जाएगी, अर्थात् :—

“22.क लागत के संबंध में आदेश.— प्राधिकरण या रजिस्ट्रार पांचवी अनुसूची के अधीन लागत के लिए यथा उपदर्शित और जैसा कि मामले की सभी परिस्थितियों पर ध्यान देते हुए ये उचित समझे, आदेश कर सकेगा।

22.ख प्रतिवाद न किए गए प्रतिरोध के मामलों में लागत.—आवेदक द्वारा नियमों के अधीन सम्यकता संस्थित प्रतिरोध का प्रतिवाद न किए जाने पर, रजिस्ट्रार या विनिश्चय करते समय कि क्या विरोधी को खर्चा अधिनिर्णीत किया जाना चाहिए, इस पर विचार करेगा कि यदि विरोधी द्वारा आवेदक को प्रतिरोध का नोटिस फाइल करने से पहले युक्तियुक्त सूचना दी गई होती तो कार्यवाहियों से बचा जा सकता था।

22.ग नियम 22ख का अपवाद.—नियम 22ख में किसी बात के होते हुए भी दूसरी अनुसूची में विनिर्दिष्ट फीसों के संबंध में और कार्यवाहियों में उपयोग की गई और शपथ पत्रों में चसपा की गई स्टैप उस मामले के अनुसार होगी।”

‘पांचवी अनुसूची

प्राधिकरण या रजिस्ट्रार के समक्ष कार्यवाहियों के संबंध में धारा 11(ख) के अधीन अनुज्ञेय लागत का स्केल

क्रम सं.	वह मामला जिसके संबंध में खर्चा अधिनिर्णीत किया जाना है	रकम
1.	एक दिन की सुनवाई जिसमें साक्षियों का परीक्षण अंतर्बलित है।	1500 रुपये
2.	एक दिन की सुनवाई जिसमें साक्षियों का परीक्षण नहीं किया जाना है।	750 रुपये
3.	किसी पक्षकार की याचिका पर सुनवाई स्थगित किए जाने के लिए	2000 रुपये धन अन्य पक्षकारों के साक्षियों जिनकी उस दिन जांच की जानी थी, को पुनःआरंभ करने की वास्तविक लागत।
4.	किसी शपथ-पत्र से कलंकाल्पक सामग्री हटाने के लिए	500 रुपये
5.	निम्नलिखित के लिए — (क) साक्षियों की उपस्थिति (ख) निर्वाह भत्ता (ग) यात्रा भत्ता	1000 रुपये (नीचे दिए गए टिप्पण के अनुसार) प्रथम श्रेणी के लिए रेल या वायुयान या स्टीमर द्वारा किराया या दोनों ओर से द्वितीय श्रेणी और यदि रेल या स्टीमर परिवहन नहीं है तो साक्षियों के रैक और प्रास्थिति के आधार पर 15 रुपये या 10 रुपये प्रति कि.मी. : परंतु यह कि साक्षियों का निर्वाह भत्ता और यात्रा भत्ते में अधिकतम विहित की सीमा के अधीन रहते हुए साक्षियों की प्रास्थिति के अनुसार परिवर्तन होगा।”

[फा. सं. 1-14/2012-एस.डी. V]

डा. अतनु पुरकायस्थ, संयुक्त सचिव

टिप्पण :— मूल नियम भारत के राजपत्र, भाग II, खंड 3, उप-खंड (i) में सा.का.नि. 738 (अ) तारीख 12 सितंबर, 2003 द्वारा प्रकाशित किए गए थे और तत्पश्चात् सा.का.नि. 843(अ) तारीख 30 दिसंबर, 2004, सा.का.नि. 731(अ) तारीख 14 अक्टूबर, 2008, सा.का.नि. 319 (अ) तारीख 11 मई, 2009, सा.का.नि. 783(अ) तारीख 27 अक्टूबर, 2009, सा.का.नि. 901(अ) तारीख 17 दिसंबर, 2009 और सा.का.नि. 949(अ) तारीख 3 दिसंबर, 2010 द्वारा संशोधित किए गए थे।

MINISTRY OF AGRICULTURE

(Department of Agriculture and Co-operation)

NOTIFICATION

New Delhi, the 17th December, 2012

G.S.R. 901(E).—In exercise of the powers conferred by clause (viii) of sub-section (2) of Section 96 of the Protection of Plant Varieties and Farmers' Rights Act, 2001 (53 of 2001), the Central Government hereby makes the following rules further to amend the Protection of Plant Varieties and Farmers' Rights Rules, 2003 namely:—

1. **Short title and commencement.**—(1) These rules may be called Protection of Plant Varieties and Farmers' Rights (Amendment) Rules, 2012.

(2) They shall come into force on the date of their publication in Official Gazette.

2. (a) after rules 22 in the Protection of Plant Varieties and Farmers' Rights Rules, 2003 (hereinafter referred to as the principal rules), following rules shall be inserted, namely:—

(b) after Fourth Schedule, the following Schedule shall be inserted, namely:—

“ **22A. Orders as to costs.**— The Authority or the Registrar may make such orders as to costs as enumerated under the Fifth Schedule and as considered reasonable having regard to all the circumstances of the case :

Provided that the Authority or Registrar may, in its or his discretion award compensatory costs in any proceeding before it, which in its or his opinion is false or vexatious.

22B Costs in uncontested opposition cases.— Where any opposition duly instituted under the rules is not contested by the applicant, the Registrar in deciding whether costs should be awarded to the opponent shall consider whether the proceeding might have been avoided if reasonable notice had been given by the opponent to the applicant before the notice of opposition was filed.

22C Exception to rule 22B.— Notwithstanding anything in rule 22B, costs in respect of fees specified in Second Schedule and of all stamps used on and affixed to affidavits used in the proceedings shall follow the event.”

“THE FIFTH SCHEDULE

Scale of costs allowable under section 11(b) in respect of proceedings before the Authority or the Registrar.

Sl. No.	Matters in respect of which costs to be awarded	Amount
1.	For one day's hearing involving examination of witnesses	Rs. 1500
2.	For one day's hearing when there is no examination of witnesses.	Rs. 750
3.	For adjournment of hearing granted on the Petition of any party.	Rs. 2000 plus actual cost for petition for resummoning the other parties' witnesses who were due to be examined on the day.
4.	For striking out scandalous matter from an affidavit	Rs. 500
5.	For (a) attendance of witnesses (b) Subsistence allowance (c) Travelling allowance	Rs. 1000 (vide note below) The fare by rail or air or steamer for the first class or the second class each way and if there is no rail or steamer communication Rs. 15 or Rs. 10 per km. depending upon the rank and status of the witness: Provided that the rates of subsistence allowance and travelling allowance for witness shall vary according to the status of the witness subject to the maximum prescribed”.

[F. No. 1-14/2012-SD-V]

Dr. ATANU PURKAYASTHA, Jt. Secy.

Note:— The principal rules were published in the Gazette of India, Part II, Section 3, Sub-section (i) by G. S.R. 738 (E), dated the 12th September, 2003 and subsequently amended by G. S.R. 843 (E), dated the 30th December, 2004, G. S.R. 731 (E), dated the 14th October, 2008, G. S.R. 319 (E), dated the 11th May, 2009, G. S.R. 783 (E), dated the 27th October, 2009, G. S.R. 901 (E), dated the 17th December, 2009 and G. S.R. 949 (E), dated the 3rd December, 2010.

PUBLIC NOTICE

Sub: Notice is given under Rule 29 (8 and 9) of the PPV & FR Rules, 2003.

As a requirement under Rule 29 (8 and 9) of the PPV & FR Rules, 2003, it is hereby informed that the specific DUS test guideline for Eucalyptus (*Eucalyptus camaldulensis* Dehnh. and *Eucalyptus tereticornis* Sm.) and Casuarina (*Casuarina equisetifolia* L. and *Casuarina junghuhniana* Miq.) is hereby published in 'Plant Variety Journal of India', Vol. 07, No. 02, February 01, 2013. Interested parties may read these guidelines and act accordingly.

Sd/-
MANOJ SRIVASTAVA
REGISTRAR

Eucalypts (*Eucalyptus camaldulensis* Dehnh. and *Eucalyptus tereticornis* Sm.)

I. Subject

These test guidelines shall apply to all clonally propagated varieties of *Eucalyptus camaldulensis* Dehnh., *Eucalyptus tereticornis* Sm. and their hybrids.

II. Materials required

1. The Protection of Plant Varieties and Farmers' Rights Authority (PPV & FRA) shall decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered for registration under the Protection of Plant Varieties and Farmers' Rights (PPV & FRA) Act, 2001.
2. Applicants submitting such plant material from a country other than India shall make sure that all customs and quarantine requirements stipulated under relevant national legislations and regulations are complied with.
3. Clonally propagated plant material of 60 cm height from collar to the apical tip are required for DUS testing. The plants must have fully developed root system.
4. The minimum number of planting material to be supplied by the applicant or his nominee during June-July shall be 60 rooted plants. The plants should be in 250 cc root trainer with proper identification on each individual plant.
5. The age of the plants shall be 6 months while submitting for testing.
6. The plant material should be visibly healthy, not lacking in vigour or affected by any important pests or diseases.
7. The plant material should not have undergone any treatment, which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

III. Conduct of tests

Duration of test

The minimum duration of DUS tests shall normally up to two independent flowering cycles.

Testing Place

The tests shall normally be conducted at two locations. If any essential characteristics of the candidate variety are not expressed for visual observation at these locations, the variety shall be considered for further examination at another appropriate test site or under special test protocol on expression of interest of the applicant.

Conditions for Conducting the Examination

The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.

Test Design

The design of the tests should be such that plants or parts of plants may be removed for measurement or counting without prejudice to the observations which must be made up to the end of the growing cycle.

Test plot design

No. of rows	: one
Row to row distance	: 3 m
Plant to plant distance	: 2 m
No. of plants per replication	: 6
No. of replications	: 3

The test plot will be surrounded by one guard row. Additional test protocol for special purpose shall be established by the PPV & FR Authority.

On-site DUS testing

- a. On-site testing shall be conducted at the places specified by the applicant.
- b. The age of the trees at on-site shall be between 3 to 6 years.
- c. A trial with minimum of 18 trees in 1-2 blocks planted in uniform spacing shall be considered for on-site testing.
- d. The trees must be healthy and free from pest and disease and raised under standard management practices.
- e. The Expert Committee constituted by the PPV & FRA in consultation with the DUS Centre shall be authorized to inspect on-site testing and recording of the appropriate characters.

IV. Methods and Observations

- a. The characteristics described in the Table of characteristics shall be used for testing of varieties for their DUS (Section VII).
- b. The assessment of Distinctiveness and Stability of all observations shall be made on 6 plants or parts taken each of 6 plants, which will be equally divided among 3 replications (2 plants per replication).
- c. The assessment of Uniformity of characteristics shall be made in 6 plants per replication, with an acceptance probability of at least 95%. The maximum number of off-type allowed would be 1 in 18 plants.
- d. For the assessment of all colour characteristics, the Royal Horticultural Society (RHS) colour chart shall be used.
- e. All observations of bark and stem shall be made at 1.37 meters from ground level.
- f. All branch characters shall be observed in the middle of the crown.
- g. All observations of leaf shall be made in mature leaves at middle of the crown in the middle third of the youngest shoots not showing signs of active growth. A sample of 10 leaves per tree shall be taken for morphometric characterization.

- h. All juvenile leaf characters shall be recorded in one month old coppice shoots.
- i. Observations on the inflorescences shall be made at the time of full flowering on terminal panicles of typical shoots from the exposed regions of the tree.

V. Grouping of varieties

- 1. The candidate varieties for DUS testing shall be divided into groups to facilitate the assessment of Distinctiveness. Characteristics which are known from experience not to vary, or to vary only slightly, within a variety and which in their various states are fairly evenly distributed across all the varieties in the collection are suitable for grouping purpose.
- 2. Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctiveness; and (b) to organize the growing trial so that similar varieties are grouped together.
- 3. The following characteristics shall be used for grouping of Eucalypt varieties:
 - 1. Mature leaf: Shape (Characteristic 3)
 - 2. Mature leaf: Waxiness of upper side (Characteristic 12)
 - 3. Trunk: Clear bole height (Characteristic 13)
 - 4. Primary branch: Scar type (Characteristic 15)
 - 5. Primary branch: Attitude (Characteristic 20)
 - 6. Bark: Colour of fresh bark (Characteristic 24)
 - 7. Flower: Operculum Shape (Characteristic 28)

VI. Characteristics and symbols

- 1. To assess Distinctiveness, Uniformity and Stability, the characteristics and their states as given in the Table of characteristics (Section VII) shall be used.

2. Notes (1 to 9) shall be given for each state of expression for different characteristics for the purpose of electronic data processing.
3. Legend:
 - i. (*) Characteristics that shall be observed during every growing season on all varieties and shall always be included in the description of the variety, except when the state of expression of any of these characters is rendered impossible by the environmental conditions of the testing region. Under such exceptional situation, adequate explanation shall be provided.
 - ii. (+)See Explanation on the Table of characteristics in Section VIII. It is to be noted that for certain characteristics. The plant parts on which observations to be taken are given in the explanation or figure(s) for clarity and not the colour variation.
4. A decimal code in the sixth column of Table of characteristics indicates the stage for the observation of each characteristic during the growth and development of the variety. The relevant growth stages corresponding to the decimal code number are described below.

Code	Growth Stage
1	Coppice stage: Coppice shoots of minimum 30 cm tall
20	Tree is minimum 4 m tall; about 10 -15 well developed 1 meter long branches; few mature leaves start falling; few flower panicles starts at the terminal
24	Tree is minimum 5 m tall; the main stem measures 18 cm girth;Bark starts peeling;fruits are set at the terminal.
32	Tree is minimum 7 m tall; the main stem measures 24 cm girth; few flower panicles starts at terminal and primary branches.
36	Tree is minimum 8 m tall; the main stem measures 28 cm girth; fruits are set at the terminal and primary branches.

5. Type of assessment of characteristics indicated in column seven of Table of characteristics is as follows,

MG: Measurement by a single observation of a group of plants or parts of plants

MS: Measurement of a number of individual plants or parts of plants

VG: Visual assessment by a single observation of a group of plants or parts of plants

VS: Visual assessment by observation of individual plant or parts of plants.

VII. Table of characteristics

S. No.	Characteristics	State	Notes	Example clone	Stage of observation	Type of assessment
1 +	Juvenile leaf: Shape	Lanceolate	1	C16	1	VG
		Ovate	2	C101		
2	Juvenile leaf: Anthocyanin colouration	Absent or weak	1	IFGTB-EC1	1	VG
		Medium	3	C101		
		Strong	5	-		
3 * +	Mature leaf: Shape	Narrow Lanceolate	1	C15	20, 32	VG
		Lanceolate	2	IFGTB-EC3		
		Ovate	3	C206		
4 +	Mature leaf: Base Symmetry	Symmetric	1	C3, C33, C92, C100	20, 32	VG
		Asymmetric	9	C22		
5 * +	Mature leaf: Base Shape	Obtuse	1	C15, C16, C68	20, 32	VG
		Cuneate	2	C22		
		Attenuate	3	C206		
6 * +	Mature leaf: Apex Shape	Acute	1	C207, ITC10	20, 32	VG
		Obtuse	2	C278(KFRI10)		
		Subulate	3	C206		
7	Mature leaf: Blade area	Small (<20.0 cm ²)	3	C157, C207	20, 32	MG
		Medium (20.0 to 46.0 cm ²)	5	IFGTB-EC1		
		Large (>46.0 cm ²)	7	C205		
8	Mature leaf: Length	Short (<12.0 cm)	3	C157, C207	20, 32	MG
		Medium (12.0 to 21.0 cm)	5	IFGTB-EC3		
		Long (>21.0 cm)	7	C113		
9	Mature leaf: Breadth	Narrow (<2.5 cm)	3	C15	20, 32	MG
		Medium (2.5 to 4.0 cm)	5	IFGTB-EC1		
		Wide (>4.0 cm)	7	C206, C154		
10 *	Mature leaf: Petiole length	Short (<2.0 cm)	3	C191	20, 32	MG
		Intermediate (2.0-3.0 cm)	5	IFGTB-EC2		
		Long (>3.0 cm)	7	C75		
11 *	Mature leaf: Blade ratio	Slightly elongated (<4.0 times long leaf)	3	C206	20, 32	MG
		Moderately elongated (4-6 times long leaf)	5	IFGTB-EC3		

		Very elongated (>6 times long leaf)	7	C15, C22		
12	Mature leaf: Waxiness of upper side	Absent or weak	1	IFGTB-EC3	20, 32	VG
*		Medium	3	IFGTB-EC2		
		Strong	5	IFGTB-EC4		
13	Trunk: Clear bole Height	Below lower 1/3 rd height	3	C154	24, 36	VG
*		With in middle 1/3 rd height	5	IFGTB-EC1		
		Above top 1/3 rd height	7	ITC3		
14	Crown: Shape	Lanceolate	1	-	24, 36	VG
+		Conical	2	ITC3		
		Columnar	3	C154		
15	Primary branch: Scar type	Open	1	ITC3	24, 36	VG
*		Close	9	C123		
16	Primary branch: Scarshape	Inverted “V”	1	C15	24, 36	VG
+		Spherical	2	C100		
17	Primary branch: Scar periphery projection	Downward	1	C63, C188	24, 36	VG
*		Horizontal	2	C223, C187		
+		Flat	3	IFGTB-EC3		
		Depressed	4	ITC285		
18	Primary branch: Self pruning	Present	1	IFGTB-EC2	24, 36	VS
		Absent	9	C154		
19	Primary branch: Thickness	Small (<1/8 th of main stem)	3	IFGTB-EC3	24, 36	VS
*		Medium (1/8 th -1/4 th of main stem)	5	C123, ITC 285		
		Thick (>1/4 th of main stem)	7	C154, IFGTB-EC1		
20	Primary branch: Attitude	Upward	1	ITC 7	24, 36	VS
*		Horizontal	2	IFGTB-EC3		
+		Drooping	3	ITC10		
21	Bark: Texture	Rough	1	C76, ITC3	24, 36	VG
		Smooth	9	ITC7		
22	Bark: Annual Peeling	Absent	1	C76	24, 36	VG
		Present	9	C94		
23	Bark: Peeling type	Strip	1	C14	24, 36	VG
+		Flake	2	C94		
		Mixed	3	C198		
24	Bark: Colour of fresh bark	Light brown (Y-W 158, O-W 159)	1	C7, C9	24, 36	VG
*		Light green(G-W 157)	2	C198		
		Light grey (W N155A)	3	C124		
25	Bark: Colour of dried bark	Light brown (Grey-O N170D & N170C)	1	IFGTB-EC1	24, 36	VG
		Brown (Grey-O 174C & 174D)	2	C14		

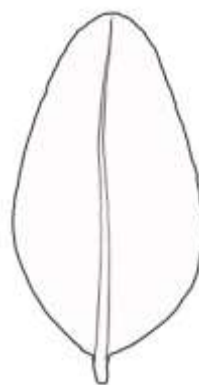
		Grey (Black 202C & 202D)	3	C76		
26	Bark: Colour of rhytidome bark	Light brown (Grey-Or 171D & N171C& 170C)	1	C63	24, 36	VG
		Dark brown (Grey-O 172)	2	C 94		
		Grey(Black 202C)	3	C75		
27	Trunk: Waxiness (excluding rhytidome)	Absent or weak	1	ITC10	24, 36	VG
		Medium	3	IFGTB-EC2		
		Strong	5	C191		
28 * +	Flower: Operculum shape	Hemispherical apiculate	1	C33	20, 32	VS
		Elongated	2	C209		
		Conical	3	C118,C68, C203		
29 * +	Fruit: Base shape	Conical	1	IFGTB-EC4	24, 36	VS
		Spherical	2	C6		
		Hemispherical	3	C86		
30 +	Fruit: Operculum scar	Absent	1	C20	24, 36	VS
		Present	9	C113		
31 *	Fruit: Pedicel length	Short (<4.5 mm)	3	IFGTB-EC4	24, 36	MG
		Medium (4.5 to 6.5 mm)	5	C20		
		Long (>6.5 mm)	7	C15		
32 *	Fruit: Peduncle length	Short (<1.0 cm)	3	C92	24, 36	MG
		Medium (1.0 to 1.5 cm)	5	IFGTB-EC3, C83		
		Long (>1.5 cm)	7	IFGTB-EC2		
33	Fruit: Width	Narrow (<5 mm)	3	IFGTB-EC3	24, 36	MG
		Medium (5-6 mm)	5	C113		
		Broad (>6 mm)	7	IFGTB-EC4		

VIII. Explanation for the table of characteristics

Characteristic 1: Juvenile leaf :Shape



1
Lanceolate



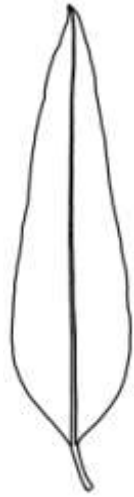
9
Ovate

Characteristic 3: Mature leaf: Shape



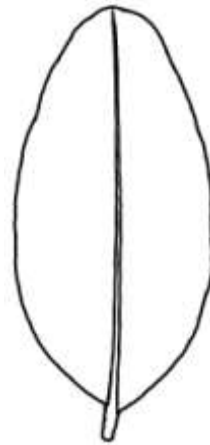
1

Narrow lanceolate



2

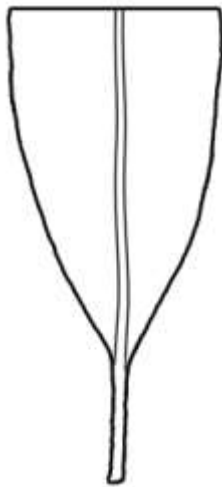
Lanceolate



3

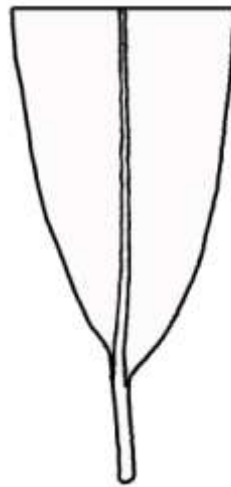
Ovate

Characteristic 4: Mature Leaf: Base symmetry



1

Symmetric



9

Asymmetric

Characteristic 5: Mature leaf: Base shape



1
Obtuse



2
Cuneate

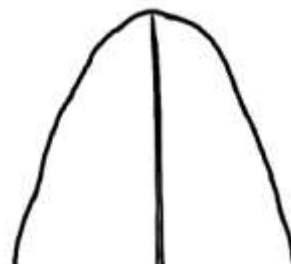


3
Attenuate

Characteristic 6: Mature leaf: Apex shape



1
Acute



2
Obtuse

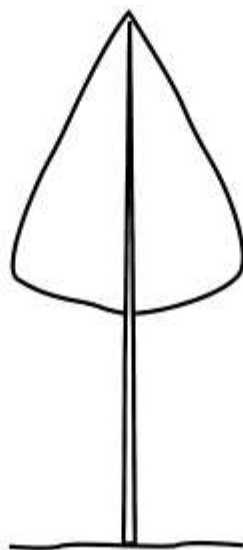


3
Subulate

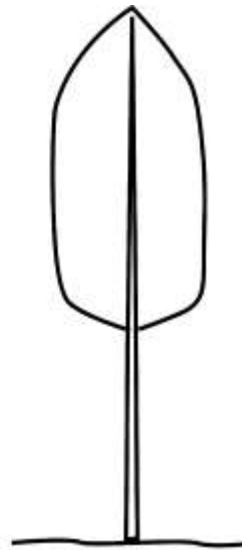
Characteristic 14: Crown: shape



1
Lanceolate

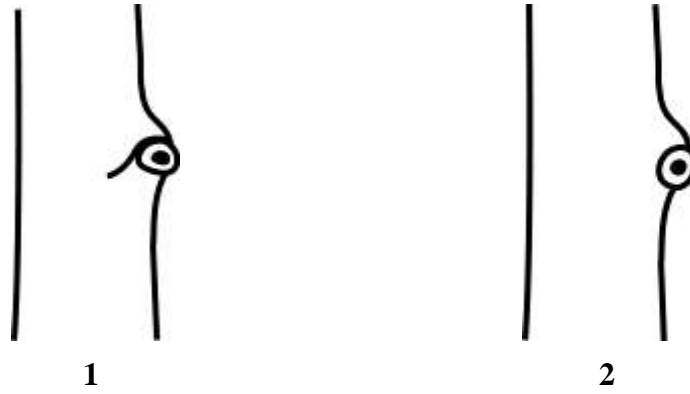


2
Conical



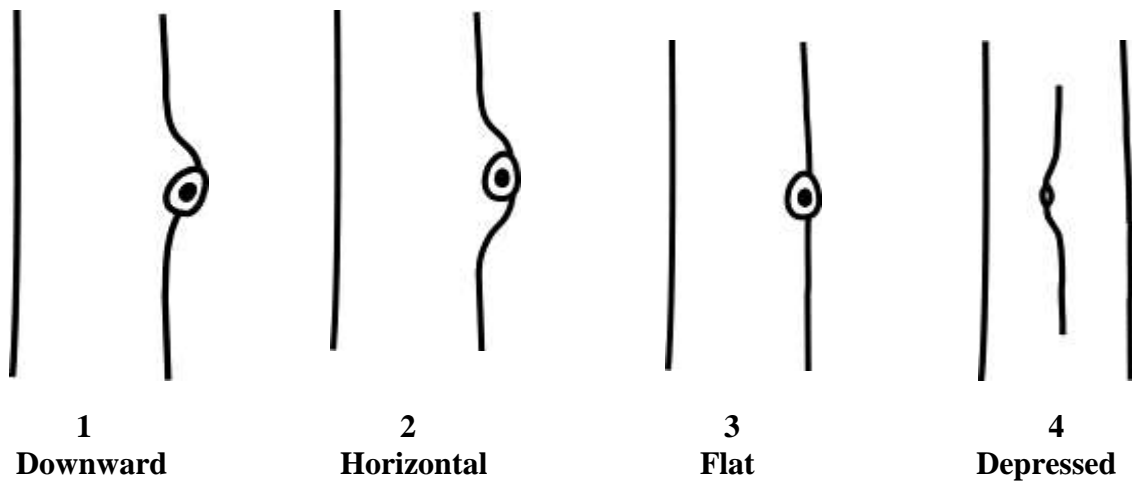
3
Columnar

Characteristic 16:Primary branch:Scar shape



Inverted "V" Spherical

Characteristic 17:Primary branch:Scar periphery projection



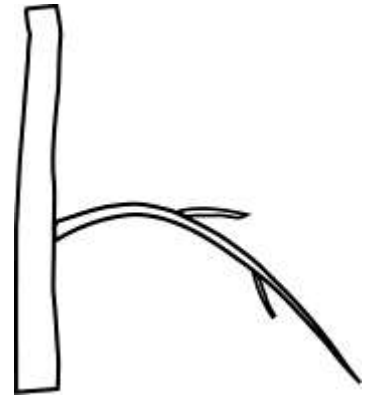
Characteristic 20: Primary branch: Attitude



1
Upward



2
Perpendicular



3
Drooping

Characteristic 23: Bark: Peeling type



1
Strip



2
Flakes



3
Mixed

Characteristic 28: Flower: Operculum shape



1

Hemispherical apiculate



2

Elongated



3

Conical

Characteristic 29: Fruit: Base shape



1

Conical



2

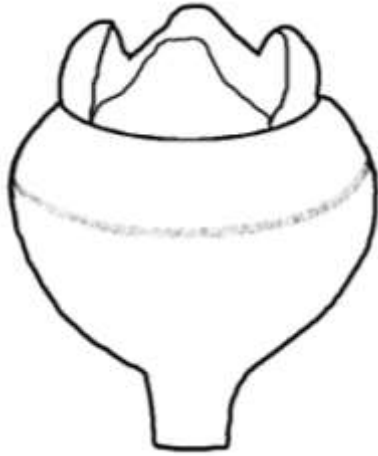
Spherical



3

Hemispherical

Characteristic 30:Fruit: Operculum scar



1
Absent



9
Present

X. DUS testing centre

Nodal Centre	Other Centre
IFGTB Research station, Coimbatore	IFGTB Regional Field Station, Chennai, Tamil Nadu
	Forest Research Institute, Dehradun

Casuarina (*Casuarinaequisetifolia*L. and *Casuarinajunghuhniiana*Miq.)

I. Subject

These test guidelines shall apply to all clonally propagated varieties of *Casuarina* viz. *Casuarinaequisetifolia* L. and *Casuarinajunghuhniiana*Miq., intra-specific hybrids and inter-specific hybrids.

II. Planting Material required

1. The Protection of Plant Varieties and Farmers' Rights Authority (PPV & FRA) shall decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered for registration under the Protection of Plant Varieties and Farmers' Rights (PPV & FRA) Act, 2001.
2. Applicants submitting such plant material from a country other than India shall make sure that all customs and quarantine requirements stipulated under relevant national legislations and regulations are complied with.
3. The minimum number of planting material to be supplied by the applicant or his nominee during June-July shall be 50 numbers rooted cuttings of the candidate variety.
4. The plant material shall be visibly healthy, not lacking in vigour or nutrient deficiency as well as free from pests or diseases. The planting material shall be at least three months old measuring a minimum 20 cm from collar to apical tip with a well-developed root system and proper identification for each plant.
5. The planting material should not have undergone any treatment unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

III. Conduct of Tests

1. The tests shall normally be conducted at two locations. If any essential characteristics of the candidate variety are not expressed for visual observation at these locations, the variety shall be considered for further examination at another appropriate test site or under special test protocol on expression of interest of the applicant.
2. The field tests shall be carried out under conditions favouring normal growth and expression of all characteristics.
3. The minimum duration of the DUS tests shall normally be at least two flowering seasons in different years.
4. Each test shall include 15 plants planted in three replications with five plants in each replication planted in a row at a spacing of 3 x 2 m. All the replications shall be sharing similar environmental conditions of the test location.
5. On-site assessment of adult trees: The Expert Committee constituted by the PPV & FRA in consultation with the DUS Centre shall be authorized to inspect the adult plants of the candidate variety 'on-site' and record the characteristics. A minimum of 15 trees of the candidate variety planted at uniform spacing should be available for inspection and examination for on-site DUS testing. The trees should be aged 2 to 4 years and healthy and free from pests and diseases and raised under standard management practices.
6. Additional test protocol for special purpose shall be established by the PPV & FR Authority.

IV. Methods and Observations

1. The characteristics described in the Table of characteristics (See section VII) shall be used for testing of candidate varieties for their DUS.
2. The assessment of Distinctiveness and Stability, observations will be made on 9 plants or parts of 9 plants, which will be equally divided among the replications (3 plants per replication).

3. The assessment of Uniformity of characteristics shall be made in 3 plants per replication with an acceptance probability of at least 95%. The maximum number of off-type allowed would be 1 in nine plants.
4. The stem and bark characteristics should be observed at a height of 1.37 m from ground level. Branching characteristics should be evaluated in the mid one-third portion of the crown.
5. The branchlet, flower and fruit characteristics should be evaluated from 10 samples each collected from nine trees. Samples should be collected from the longest primary branch in the mid portion of the crown.
6. Observations on the inflorescences should be made at the time of peak flowering on inflorescences borne on typical shoots from the exposed regions of the tree.
7. Observations on the mature fruit should be recorded when the fruit is ready for harvesting. At this stage the valves containing seeds (samara) are still closed but the fruit colour turns from green to brown.
8. For the assessment of all colour characteristics, the latest Royal Horticultural Society (RHS) colour chart shall be used.

V. Grouping of Varieties

1. The candidate varieties for DUS testing shall be divided into groups to facilitate the assessment of Distinctiveness. Characteristics which are known from experience not to vary, or to vary only slightly, within a variety and which in their various states are fairly evenly distributed across all the varieties in the collection are suitable for grouping purpose.
2. The following characteristics shall be used for grouping of Casuarinavarieties:
 1. Branchlet: Length (Characteristic 2)
 2. Branchlet: Leaves per node (Characteristic 4)
 3. Anthocyanin in the leaf tip (Characteristic 6)
 4. Lenticels: Grouping (Characteristic 10)
 5. Bark: Colour (Characteristic 16)
 6. Sexual system: (Characteristic 23)
 7. Male Flower: Anther colour(Characteristic 27)

8. Cone: Pedicel shape (Characteristic 34)

VI. Characteristics and symbols

1. To assess Distinctiveness, Uniformity and Stability, the characteristics and their states as given in the Table of characteristics (Section VII) shall be used.
2. Type of assessment of characteristics indicated in column seven of Table of characteristics is as follows.

MG: Measurement by a single observation of a group of plants or parts of plants

MS: Measurement of a number of individual plants or parts of plants

VG: Visual assessment by a single observation of a group of plants or parts of plants

VS: Visual assessment by observation of individual plant or parts of plants

3. Legend:

- a. (*) Characteristics that shall be observed during every growing season on all varieties and shall always be included in the description of the variety, except when the state of expression of any of these characters is rendered impossible by a preceding phonological characteristic or by the environmental conditions of the testing region. Under such exceptional situation, adequate explanation shall be provided.
- b. (+) See explanation on the Table of Characteristics in Section VIII. It is to be noted that for certain characteristics, the plant parts on which observation to be taken are given in the explanation or figure(s) for clarity and not the colour variation.

4. A decimal code number mentioned in the sixth column of Table of characteristics indicates the optimum stage for the observation of each characteristic during the growth and development of the plant. The relevant growth stages corresponding to the decimal code number are described below.

Decimal Code for the Growth Stage

Code	Growth Stage
12	Tree is minimum 1 m tall; minimum 5 well developed primary branches seen. The main stem turns woody.
18	Tree is minimum 3 m tall; internodal portions in the main stem are minimum 15 cm in the lower 20%. Lenticels clearly visible.
24	Tree is minimum 4 m tall; internodal portions in the main stem are minimum 15 cm in the lower 40%. Male flowering appears on deciduous branchlets and female flowers appear on primary and secondary branches.
30	Tree is minimum 5 m tall; Male flowering appears on deciduous branchlets and female flowers appear on primary and secondary branches. matured cones develop on primary and/or secondary branches.
36	Tree is minimum 6 m tall; Male flowering appears on deciduous branchlets and female flowers appear on primary and secondary branches. Cones set during stage 30 shed winged fruits and abscise. New cones develop on primary and/or secondary branches.

VII. Table of Characteristics

S. No.	Characteristic	State	Note	Example clone	Stage of observation	Type of assessment
1	2	3	4	5	6	7
1 (*)	Branchlet: Colour	Light green	1	CE30,CE40	12& 18	VG
		Dark green	2	CE93, CJ12		
		Bluish green	3	CE29		
		Yellowish green	4	CJ19, MTP2		
2 (*)	Branchlet: Length	Short (<15 cm)	3	CE138,CJ66	12 & 18	MS
		Intermediate (15-25 cm)	5	IFGTB-3,CJ48		
		Long (>25 cm)	7	CE48,CJ16		

3	Branchlet: Thickness	Thin (<0.3 mm)	3	CJ52	12 & 18	MG
		Intermediate (0.3- 0.6 mm)	5	IFGTB-3, CJ21		
		Thick (>0.6 mm)	7	CE48,CJ70		
4 (*)	Branchlet: Leaves per node	Less than 6 leaves	1	--	12 & 18	VS
		6 leaves	2	CE52, CE64		
		7 leaves	3	CE101, CE110		
		8 leaves	4	CE93,CJ23		
		9 leaves	5	CJ24		
		10 leaves	6	CJ25		
		More than 10 leaves	7	CJ10		
5	Branchlet: Internode length	Short (< 5 mm)	1	CJ 86,CJ 73	12 & 18	MG
		Medium (5- 8mm)	9	IFGTB1, CJ29, CJ 13		
		Long (>8mm)	7	CE54, CJ19, CJ64		
6 (*)	Anthocyanin in the leaf tip	Absent	1	CE101, CE51	12 & 18	VS
		Weak	2	--		
		Medium	3	--		
		Strong	4	CJ22		
7	Pubescence in leaf tips	Absent	1	CE73,CE100	12 & 18	VS
		Present	9	CE66,CE11, CJ47		
8	Leaf tip marks	Absent	1	CE100,CJ41	12 & 18	VS
		Present	9	CE109,CJ58		
9 (+)	Pruning Scars	Isosceles triangular	1	CE65, CJ74	18& 24	VS
		Equilateral triangular	2	CE59		
		Eye-shaped	3	CE107		
10 (*) (+)	Lenticels: Grouping	Individual	1	IFGTB- 4, CJ48,CE51	18 & 24	VS
		Vertical lines	2	CE74, CJ45,CJ81		
		Slanting / Curved lines	3	CE61,CE135		
		Cluster	4	CE73,CE107		
		Mixed	5	CE72, CE132, CJ28		
11	Lenticels: Density	Very Low (<20 per sq. cm)	1	CE109,CJ21,MTP1	18 & 24	MS
		Low (21-30per sq. cm)	3	CE74,CJ22		
		Intermediate (31-40per sq. cm)	5	CE51,CJ54		
		High (41-50per	7	CE40,CE107, CJ71		

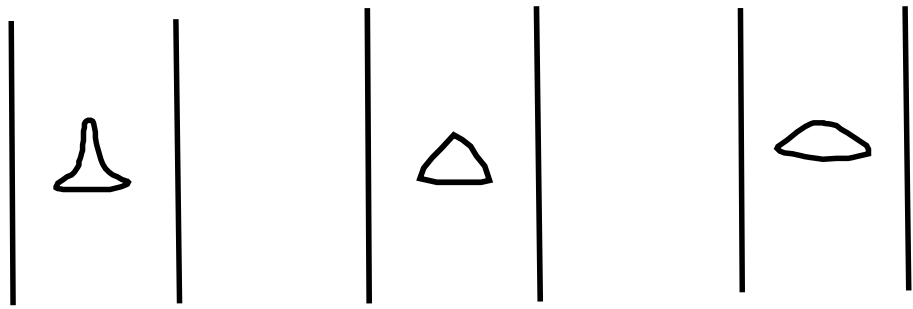
		sq. cm)				
		Very High (>50 per sq. cm)	9	IFGTB3		
12 (+)	Lenticel: Shape	Round	1	CE4	18 & 24	VS
		Oval	2	IFGTB1, CJ81		
		Eye shape	3	CE64, CJ32		
13	Lenticel: Size	Small (<0.5 mm)	3	IFGTB-4,CJ19	18 & 24	MS
		Medium (0.5-1.5 mm)	5	CE51, CJ29,MTP1		
		Large (>1.5 mm)	7	CE72		
14 (+)	Crown: Shape	Lanceolate	1	IFGTB -1, CJ11	24& 30	VG
		Conical	2	IFGTB-4,CH140		
		Columnar	3	CE75,CE101, CJ66		
15	Bark: Texture	Smooth	1	CE54, MTP 1, CJ19	24& 30	VS
		Rough	2	CJ22,CJ94		
		Very rough	3	CJ41, CJ59		
16 (*)	Bark: Colour	Grey	1	CE54,CJ 20, CJ52	24& 30	VS
		Purple	2	IFGTB3		
		Pinkish purple	3	CE49,CJ29,MTP 2		
		Brown	4	CE206,CJ13		
17	Protrusion on main stem	Absent	1	CE64,CJ41, MTP2	24& 30	VS
		Present	9	CE90, CE100		
18 (+)	Branching pattern	Single	1	CE41,CJ20	24& 30	VG
		Paired	2	CE54,CJ13		
		Cluster	3	--		
19 (+)	Branch: Angle	Upward (<60°)	1	CE51, CJ12, MTP 2	24& 30	VS
		Horizontal (60 to 90°)	9	CE111, CJ23		
20	Branch: Thickness	Thin (<1.5 cm)	3	CJ17,CJ72	24& 30	VG
		Medium (1.5-2.5 cm)	5	CE111, CJ18		
		Thick (>2.5 cm)	7	CJ16		
21	Protrusions on primary branches	Absent	1	CE61,CE49, MTP 1, CJ17	24& 30	VS
		Present	9	CE32, CE64		
22 (+)	Bearing of deciduous branchlets	Straight	3	CE107	24& 30	VG
		Drooping	5	CE100		
23 (*)	Sexual system	Not flowering	1	CJ13	24& 30	VS
		Dioecious Male	2	IFGTB4, CE107, CH140,		

				CJ22, CJ25		
		DioeciousFemale	3	IFGTB2, CE73, CJ11		
		Monoecious (Male + Female)	4	CE49, CE90, CE92		
24 (+)	Male Inflorescence: Position	Terminal	1	IFGTB4, CE107, CH140, CJ22, CJ25	24 & 30	VS
		Axillary	2	CJ23		
		Mixed	3	CJ54		
25	Male inflorescence: Length	Short (<1.5 cm)	3	IFGTB1, CE107	24 & 30	MG
		Medium(1.6 to 3.5 cm)	5	CE102, CJ25		
		Long (3.6 to 5.5 cm)	7	CJ48		
		Very long (>5.5 cm)	9	CJ23		
26	Male inflorescence: flowers per whorl	Less than 6 flowers	1	--	24 & 30	MS
		6 flowers	2	IFGTB4		
		7 flowers	3	CE101		
		8 flowers	4	CE107		
		9 flowers	5	CE92		
		10 flowers	6	--		
		More than 10	7	CJ69		
27 (*)	Male flower: Anther colour	Cream	1	CH890304,CJ23, CJ64	24 & 30	VS
		Yellow	2	CJ69		
		Pink	3	IFGTB4,CPCE890401,CJ25		
		Red	4	CJ41		
28	Cone: Length	Short (<1 cm)	3	CJ19, CJ55	30 & 36	MG
		Intermediate (1.1 to 2.5 cm)	5	CJ15, CJ18, CE193		
		Long (>2.5 cm)	7	CE109, CE134		
29 (+) (*)	Cone: Shape	Round	1	IFGTB 2, CJ19	30 & 36	MG
		Cylindrical	2	CE51, CJ18		
		Ovate	3	--		
30	Cone:Breadth	Narrow (<1 cm)	3	CJ21, CJ59	30 & 36	MG
		Intermediate (1-2 cm)	5	CE109, CJ18, CJ62		
		Broad (>2cm)	7	--		
31	Cone: Valves per whorl	Up to 6 valves	1	--	30 & 36	MG
		7 valves	2	CE54, CE134		
		8 valves	3	CE135		
		9 valves	4	CJ26		
		10 valves	5	CJ29		
		More than 10	6	--		
32	Cone: Valve	Spiny	1	CE49	30 & 36	VG

	texture	Blunt	9	CE136,CJ59		
33	Cone: Pedicel length	Short (<1 cm)	3	CE49,CJ19	30 & 36	MG
		Intermediate (1-2.5 cm)	5	CE65, CE73		
		Long (>2.5 cm)	7	--		
34 (* (+)	Cone: Pedicel shape	Straight	1	CE32, CJ15	30 & 36	VG
		Curved	9	CE73, CJ59		

VIII. Explanation for the Table of Characteristics

Characteristic 9: Stem Scars

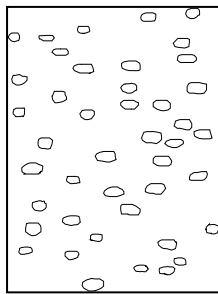


1
Isosceles triangular

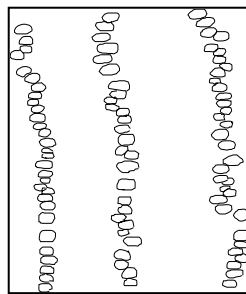
2
Equilateral triangular

3
Eye-shaped

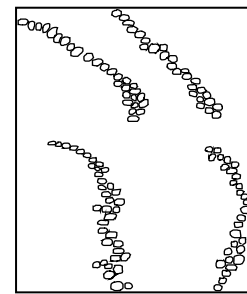
Characteristic 10: Lenticels: Grouping



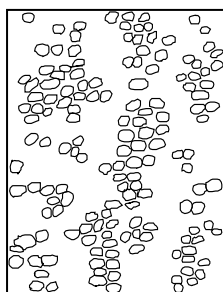
1
Random



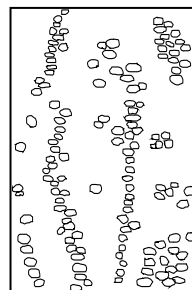
2
Beads Lines



3
Beads curved

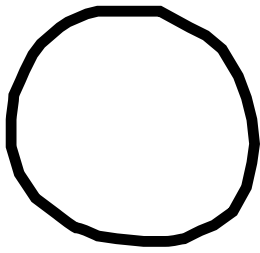


4
Aggregated

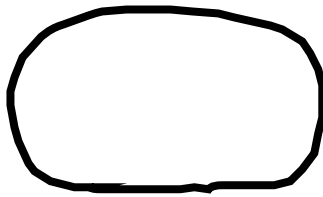


4
Aggregated

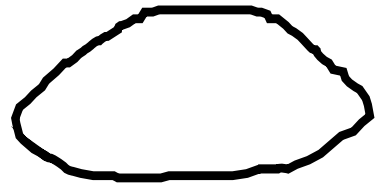
Characteristic 12: Lenticels: Shape



1
Circular

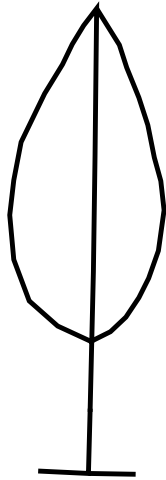


2
Oval

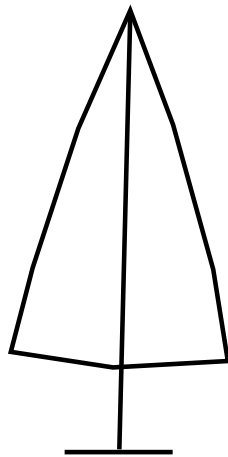


3
Eye-shaped

Characteristic 14: Crown: shape



1
Lanceolate

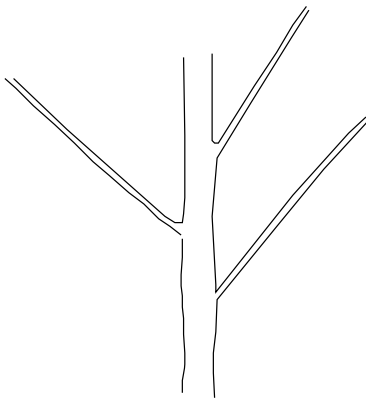


2
Conical

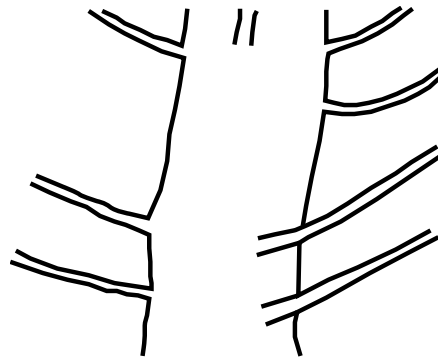


3
Columnar

Characteristic 18: Branching Pattern

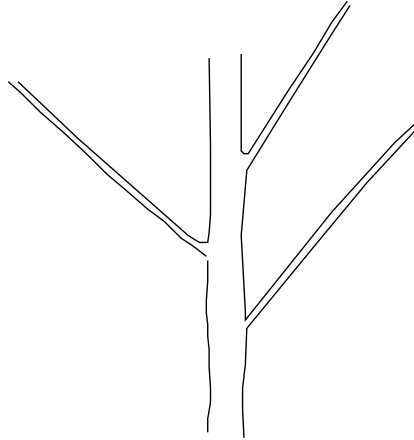


1
Single

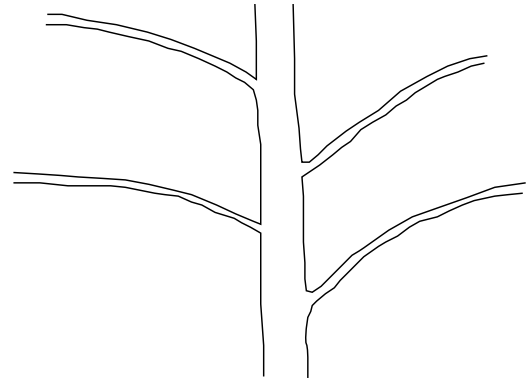


2
Paired

Characteristic 19: Branch: Angle

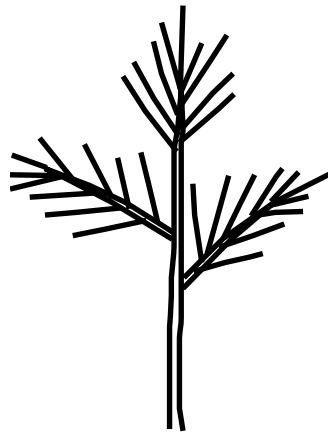


1
Upward

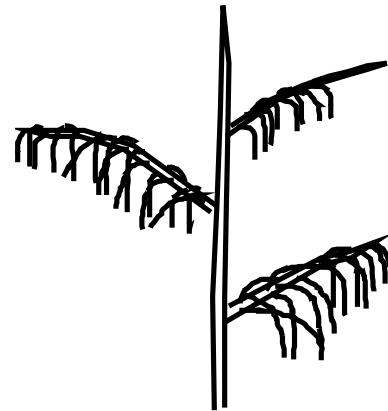


9
Horizontal

Characteristic 22: Bearing of deciduous branchlets

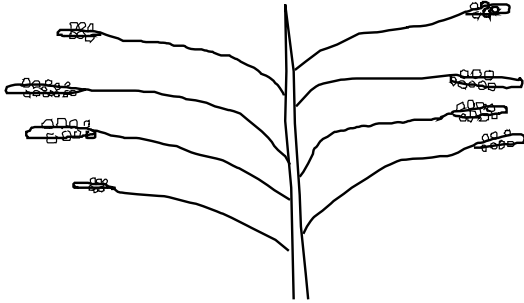


3
Straight

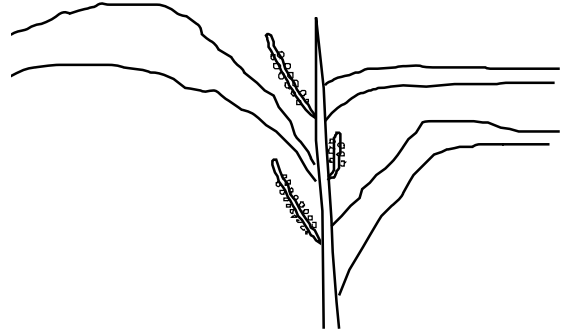


5
Drooping

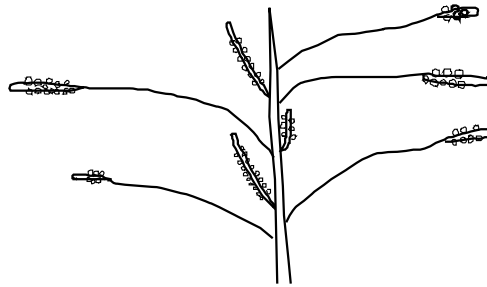
Characteristic 24: Male inflorescence: Position



1
Terminal

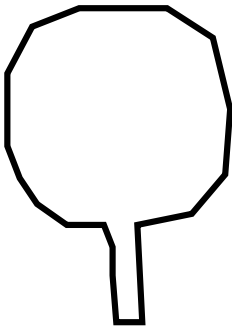


2
Axillary

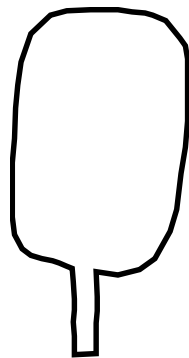


3
Mixed

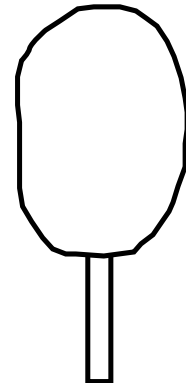
Characteristic 29: Cone: Shape



1
Round

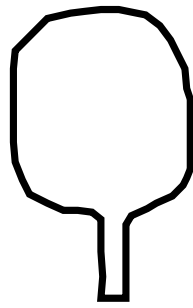


2
Cylindrical

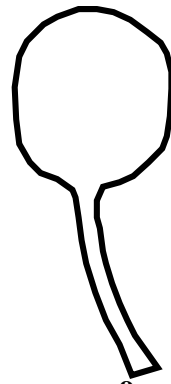


3
Ovate

Characteristic 34: Cone: Pedicel Shape

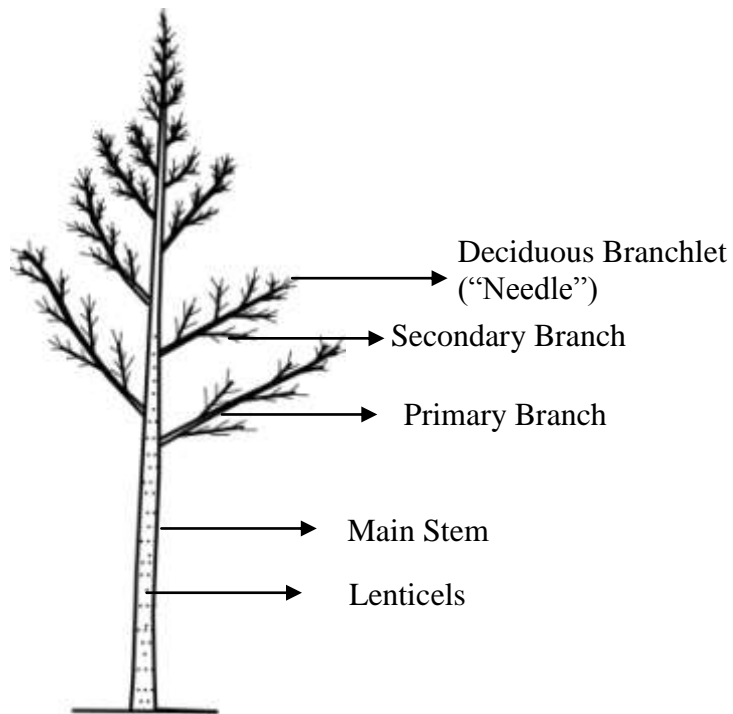


1
Straight

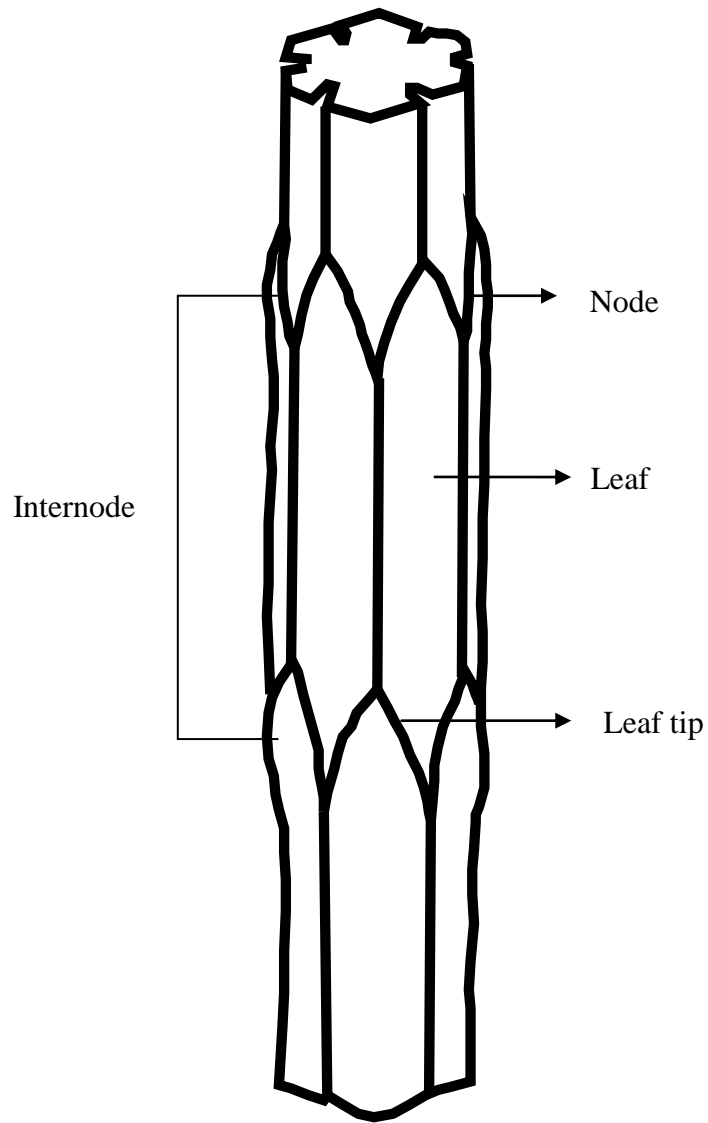


9
Curved

Morphology of Casuarina Tree



Morphology of Deciduous Branchlet



IX DUS Testing Centre

Nodal Centre	Other Centres
Institute of Forest Genetics and Tree Breeding, Coimbatore, Tamil Nadu.	IFGTB Regional Field Station, Chennai, Tamil Nadu. IFGTB Regional Field Station, Puducherry.

