

Character List

- #1. <Author>/
- #2. <Published>/
- #3. <Classification> Group/
 - 1. BEP <bamboos, rice grasses and pharoids>/
 - 2. PO <poids>/
 - 3. CH <chloridoids>/
 - 4. ADA <aristidoids, danthonioids, arundinoids>/
 - 5. CM <centothecoids, micraioids>/
 - 6. PA <*Panicaceae*>/
 - 7. AND <andropogonoids>/
- #4. (GPWG 2001) : Subfamily/
 - 1. Pharoideae/
 - 2. Pooideae/
 - 3. Bambusoideae/
 - 4. Ehrhartoideae/
 - 5. Centothecoideae/
 - 6. Arundinoideae/
 - 7. Danthonioideae/
 - 8. Aristidoideae/
 - 9. Micraioideae/
 - 10. Chloridoideae/
 - 11. Panicoideae/
- #5. Tribe <GPWG 2001 & Flora of Australia 43>/
 - 1. Phareae/
 - 2. Nardeae/
 - 3. Stipeae/
 - 4. Meliceae/
 - 5. Brachypodieae/
 - 6. Bromeae/
 - 7. Triticeae/
 - 8. Poeae/
 - 9. Bambuseae/
 - 10. Oryzeae/
 - 11. Ehrharteae/
 - 12. Centotheceae/
 - 13. Arundineae/
 - 14. Amphipogoneae/
 - 15. Danthonieae/
 - 16. 'Cyperochloae'/
 - 17. 'Spartochloae'/
- #6. <Tribe 2 GWPG 2001>/
 - 1. Aristideae/
 - 2. Spartochloae/
 - 3. Micraireae/
 - 4. Cyperochloae/
 - 5. Eriachneae/
 - 6. Pappophoreae/
 - 7. Triodeae/
 - 8. Cynodonteae/
 - 9. Isachneae/
 - 10. Paniceae/
 - 11. Neurachneae/
 - 12. Arundinelleae/
 - 13. Andropogoneae/
- #7. **Common name:**/
- #8. **Basionym** and/or **Replacement Name:** /
- #9. Name in Bentham/
- #10. **Type of Basionym or Protologue Information:** <*fide* TROPICOS or Synon.>/

#11. **Recent synonyms:** <in current use>/

#12. [2002]:/

#13. **Key references (books and floras):/**

1. [1810]. R.Brown, *Prodromus*/
2. [1878] G.Bentham, *Flora Australiensis* 71/
3. [1952] C.A.Gardner, *Flora of Western Australia* 1 *Gramineae*/
4. [1969] E.E.Henty, *Manual Grasses New Guinea*/
5. J.W.Vickery, *Flora of New South Wales, Gramineae*/
6. [1980] M.Lazarides, *Tropical Grasses S.E.Asial*/
7. [1981] M.Lazarides in J.Jessop (ed.), *Flora of Central Australia*/
8. [1983] J.C.Tothill & J.B.Hacker, *Grasses of Southern Queensland*/
9. [1987] N.G.Marchant et al, *Flora of the Perth Region* 2/
10. [1989] T.D.Stanley & E.Ross. *Flora of South East Queensland, Gramineae* 3/
11. [1992] J.R.Wheeler et al, *Flora of the Kimberley Region*/
12. [1994] D.I.Morris, *Student's Flora of Tasmania* 4B/
13. [1994] N.G.Walsh, *Flora of Victoria* 2/
14. [2000] I.D.Cowie, P.S.Short, M. Osterkamp Madsen, *Floodplain Flora*/
15. [2000] E.Edgar & H.E.Connor, *Flora of New Zealand* 5/
16. [2002] D.Sharp & B.K.Simon, *AusGrass, Grasses of Australia*/
17. [2002] J.Wheeler, N.Marchant & M.Lewington, *Flora of the South West*/
18. [2005] K.Mallet (ed.), *Flora of Australia* 44B: *Poaceae* 3/
19. [2006] J.Jessop, G.R.M.Dashorst, F.M.James, *Grasses of South Australia*/
20. [2008] S.W.L.Jacobs, R.D.B.Walley & D.J.B.Wheeler, *Grasses of New South Wales*/
21. [2009] A.Wilson (ed.). *Flora of Australia*, Vol 44A. *Poaceae* 2/
22. J.F.Veldkamp, *Flora Malesiana Poaceae* (ms)/

#14. **Illustrations:** <Books>/

1. [1952] C.A.Gardner, *Flora of Western Australia* 1 *Gramineae*/
2. [1983] J.C.Tothill & J.B.Hacker, *Grasses of Southern Queensland*/
3. [1984] N.T.Burbidge. rev. S.W.L.Jacobs, *Australian Grasses* /
4. [1989] T.D.Stanley & E.Ross. *Flora of South East Queensland, Gramineae* 3/
5. [1992] J.R.Wheeler et al, *Flora of the Kimberley Region* /
6. [1994] N.G.Walsh, *Flora of Victoria* 2/
7. [1994]. W.M.Curtis & D.M.Morris, *Student's Flora of Tasmania*, Pt 4B./
8. [2002] D.Sharp & B.K.Simon, *AusGrass, Grasses of Australia*/
9. [2005] K.Mallet (ed.), *Flora of Australia* 44B: *Poaceae* 3/
10. [2006] J.Jessop, G.R.M.Dashorst, F.M.James, *Grasses of South Australia* /
11. [2008] S.W.L.Jacobs, R.D.B.Whalley & D.J.B.Wheeler, *Grasses of New South Wales*, 4th edn/
12. [2009]. A.Wilson (ed.), *Flora of Australia* 44A: *Poaceae* 2/

#15. **Images:**/

1. Sharp, D. & Simon, B.K., *AusGrass. Grasses of Australia* (2002)/
2. Mallett, K.O. (ed.). *Flora of Australia*, Vol 44B. *Poaceae* (2004)/
3. J.T.Columbus 2008/
4. Wilson, A. (ed.). *Flora of Australia*, Vol 44A. *Poaceae* (2009)
/

#16. **Derivation:**/

#17. <Plant duration>/

1. annual/
2. perennial/
3. ephemeral/

#18. <Plant density>/

1. culms solitary/
2. cushion forming/
3. mat forming/
4. tufted/
5. pluricaespitose <separate clumps linked by rhizomes>/

#19. <Degree of perennation>/

1. persisting <implicit>/
2. short-lived <perennating organs weakly expressed and difficult to observe>/

#20. <Key couplet for bamboos>/

1. herbaceous <implicit>/

- 2. woody/
- #21. Clumped <degree of tuft density>/
 - 1. loosely tufted/
 - 2. moderately tufted/
 - 3. densely tufted/
- #22. Roots <unusual states>/
 - 1. simple <implicit>/
 - 2. bearing tubers/
 - 3. aromatic/
 - 4. woolly/
- #23. Cataphylls <presence>/
 - 1. absent/
 - 2. present/
- #24. Rhizomes <presence>/
 - 1. absent <implicit>/
 - 2. present/
- #25. Rhizomes <length>/
 - 1. short <often obliquely ascending>/
 - 2. elongated <running>/
- #26. Rhizomes <lepto- or pachymorph>/
 - 1. leptomorph <uniformly slender>/
 - 2. pachymorph <substantially thicker than culm at some point>/
- #27. Rhizomes <presence of scales>/
 - 1. not obviously scaly/
 - 2. scaly/
- #28. Rhizomes <consistency>/
 - 1. hollow/
 - 2. with peripheral air canals/
 - 3. spongy/
 - 4. fleshy/
 - 5. firm/
 - 6. wiry/
 - 7. tuberous/
 - 8. knotty/
 - 9. woody/
- #29. Rhizomes <indumentum>/
 - 1. glabrous/
 - 2. hairy <with straight hairs>/
 - 3. woolly <with crimped hairs>/
- #30. Stolons <presence>/
 - 1. absent <implicit>/
 - 2. present/
- #31. Stolons <equality of internodes>/
 - 1. with subequal internodes <leafy runners>/
 - 2. with alternating elongated and bunched internodes/
- #32. Rootstock <presence>/
 - 1. not evident/
 - 2. evident <knotty and woody>/
- #33. Basal leaf sheaths <base of basal leaf-sheaths; presence>/
 - 1. present <implicit>/
 - 2. absent <basal sheaths evanescent or scale-like>/
- #34. Basal leaf sheaths <consistency>/
 - 1. papery/
 - 2. herbaceous/
 - 3. scarios/
 - 4. coriaceous/
 - 5. indurate/
 - 6. fleshy/
 - 7. spongy/
- #35. Basal leaf sheaths <presence of bulb>/

1. not bulbous <implicit>/
 2. thickened and forming a bulb/
- #36. Basal leaf sheaths <colour>/
1. pallid/
 2. yellow/
 3. green/
 4. glaucous/
 5. grey/
 6. light brown/
 7. dark brown/
 8. red/
 9. purple/
- #37. Basal leaf sheaths <sheen>/
1. dull/
 2. glossy/
- #38. Basal leaf sheaths <ribbing & reticulation>/
1. without ribs/
 2. distinctly ribbed/
 3. reticulately nerved/
- #39. Basal leaf sheaths <indumentum> <ordered>/
1. glabrous/
 2. sparsely hairy/
 3. pubescent/
 4. pilose/
 5. hirsute/
 6. villous/
 7. woolly/
- #40. Basal leaf sheaths with <hair colour>/
1. white hairs <implicit>/
 2. grey hairs/
 3. yellow hairs/
 4. tawny hairs/
 5. dark brown hairs/
 6. red hairs/
 7. purple hairs/
- #41. Basal leaf sheaths <persistence>/
1. withering <when dead> <implicit>/
 2. persistent and investing base of culm/
- #42. Basal leaf sheaths with <kind of dead sheath investing culm>/
1. soft dead sheaths/
 2. compacted dead sheaths <not much altered>/
 3. curly dead sheaths <like wood shavings>/
 4. dead sheaths fracturing into segments/
 5. fibrous dead sheaths/
 6. reticulate dead sheaths/
- #43. Young shoots <origin>/
1. extravaginal/
 2. intravaginal/
- #44. Young shoots <compression>/
1. subterete <implicit>/
 2. flabellate <strongly compressed and interleaved like a fan>/
- #45. Glands <type of dwarf gland - wherever sited, but comment if ambiguous>/
1. absent/
 2. capitate/
 3. wart-like <convex>/
 4. raised crateriform/
 5. sunken crateriform/
 6. elongated/
 7. annular/
 8. lacunose/

- #46. Culms <habit>/
1. erect/
 2. geniculately ascending/
 3. decumbent <touching ground at knees>/
 4. prostrate <lying on ground>/
 5. sprawling <on low vegetation>/
 6. arching/
 7. aquatic/
- #47. Culms stature/
1. reed-like/
 2. robust to moderate/
 3. slender to delicate/
- #48. Culms <straightness>/
1. straight/
 2. curved/
 3. tortuous/
 4. zigzag/
- #49. Culms <inclination of tip - if a bamboo>/
1. erect at the tip/
 2. inclined at the tip/
 3. nodding at the tip/
 4. drooping at the tip/
 5. pendulous at the tip/
- #50. Culms <height>/
- cm tall/
- #51. Culms <diameter of lower internodes>/
- mm diam./
- #52. Culms <consistency>/
1. spongy/
 2. compressible/
 3. firm <implicit>/
 4. wiry/
 5. woody/
- #53. Culms <number of nodes>/
- noded/
- #54. Culms <site of uppermost node as % of total culm length>/
- % of their length below uppermost node/
- #55. Culms <nodal roots>/
1. without nodal roots/
 2. with prop roots/
 3. rooting from lower nodes/
 4. with root dots on the nodes/
 5. with aerial roots from the nodes <mainly bamboos>/
 6. with root thorns from the nodes/
 7. eventually collapsing and rooting from upper nodes/
- #56. Culms <fragility>/
1. tough <implicit>/
 2. disarticulating at the nodes <associated with axillary spikelets>/
- #57. Culms <presence of corms>/
1. not swollen at the base <implicit>/
 2. swollen at the base/
- #58. Culms forming <corm shape>/
1. an ovoid corm/
 2. moniliform corms/
 3. an elongated corm/
- #59. Mid-culm internodes <inequality of length - excluding peduncle>/
1. similar in length/
 2. abbreviated and bulging at the base <bamboos>/
 3. abbreviated and closely packed at the base/
 4. shorter and closely spaced at top of culm/

5. unequal, the upper longer/
 6. unequal, the lower longer/
 7. alternately elongated and bunched/
- #60. Mid-culm internodes <transverse section>/
1. terete/
 2. semiterete <flattened along one face>/
 3. channelled <along one face>/
 4. elliptical in section/
 5. quadrangular/
- #61. Mid-culm internodes <hollowness>/
1. hollow/
 2. solid/
 3. spongy/
 4. with septate pith/
- #62. Mid-culm internodes <wall thickness>/
1. thin-walled/
 2. thick-walled/
- #63. Mid-culm internodes <length>/
- cm long/
- #64. Mid-culm internodes <colour>/
1. white/
 2. yellow/
 3. light green/
 4. mid-green/
 5. dark green/
 6. glaucous/
 7. grey/
 8. brown/
 9. purple/
 10. black/
 11. bluish-green/
- #65. Mid-culm internodes <variegation>/
1. concolorous/
 2. striped/
 3. mottled/
- #66. Mid-culm internodes <presence of sessile glands>/
1. eglandular/
 2. glandular/
- #67. Mid-culm internodes <surface relief>/
1. estriate/
 2. striate/
 3. ridged/
- #68. Mid-culm internodes <roughness>/
1. smooth/
 2. scaberulous/
 3. antrorsely scabrous/
 4. retrorsely scabrous/
 5. papillose/
- #69. Mid-culm internodes <indumentum, at least below nodes> <ordered>/
1. mealy/
 2. pruinose/
 3. glabrous/
 4. pubescent/
 5. pilose/
 6. hirsute/
 7. hispid/
 8. woolly/
 9. with <longitudinal> pubescent line/
- #70. Mid-culm internodes with <hair type>/
1. simple hairs <implicit>/

- 2. tubercle-based hairs/
- 3. reflexed hairs/
- 4. capitate hairs/
- 5. clavellate hairs/
- 6. turgid hairs/
- #71. Mid-culm nodes <constriction>/
 - 1. constricted/
 - 2. flush with internodes/
 - 3. swollen/
 - 4. flanged/
- #72. Mid-culm nodes <colour>/
 - 1. pallid/
 - 2. green/
 - 3. brown/
 - 4. purple/
 - 5. black/
- #73. Mid-culm nodes <exudate>/
 - 1. without exudate/
 - 2. viscid/
- #74. Mid-culm nodes <indumentum - comment on colour>/
 - 1. glabrous/
 - 2. pubescent/
 - 3. bearded/
- #75. Mid-culm nodes <presence of supra-nodal ridge>/
 - 1. without obvious supra-nodal ridge/
 - 2. with distinct supra-nodal ridge/
- #76. Lateral branches <extent of aerial branching>/
 - 1. simple/
 - 2. sparsely branched/
 - 3. branched/
 - 4. fastigiate/
 - 5. suffrutescent/
 - 6. dendroid <bamboos>/
- #77. Lateral <aerial> branches <intra- or extravaginal>/
 - 1. extravaginal/
 - 2. intravaginal/
 - 3. infravaginal/
- #78. Lateral branches arising from <where>/
 - 1. lower culm/
 - 2. mid culm/
 - 3. upper culm/
- #79. Lateral branches <inclination> <ordered>/
 - 1. erect <0–15 degrees>/
 - 2. ascending <16–60 degrees>/
 - 3. spreading <61–90 degrees>/
 - 4. reflexed/
- #80. Buds or branches <presence on lower culm>/
 - 1. present on lower part of culm/
 - 2. absent from lower part of culm/
- #81. Bud complement <number>/
 - /
- #82. Bud prophyll <length of principal prophyll>/
 - mm long/
- #83. Bud prophyll <number of keels>/
 - 1. 1-keeled/
 - 2. 2-keeled/
- #84. Bud prophyll margins <fusion>/
 - 1. free/
 - 2. fused/
- #85. Branch complement <constancy>/

1. constant/
 2. variable/
- #86. Branch complement <number> <ordered>/
1. one/
 2. two/
 3. three/
 4. several <4–10>/
 5. many/
- #87. Branch complement <arrangement>/
1. solitary/
 2. in a horizontal line <at the same level>/
 3. in an irregular line/
 4. in a clump/
 5. girdling the culm/
 6. flabellate <around a triangular space>/
- #88. Branch complement <origin>/
1. apparently arising below the node/
 2. at the node <implicit>/
 3. subtended by a bare patch above the node/
- #89. Branch complement with <equality>/
1. subequal branches/
 2. 1 branch dominant/
 3. 2 branches dominant/
 4. 3 branches dominant/
 5. interspersed leafless fibrillar branches/
- #90. Branch complement <thickness relative to stem>/
1. as thick as stem <at least the dominants>/
 2. thinner than stem/
- #91. Culm-sheaths <presence; they occur below foliage, mainly in bamboos>/
1. absent <implicit>/
 2. present/
- #92. Culm-sheaths <persistence>/
1. persistent/
 2. tardily deciduous <often hanging from the culm>/
 3. deciduous but leaving a persistent girdle/
 4. deciduous/
- #93. Culm-sheaths <length>/
- cm long/
- #94. Culm-sheaths <length as a fraction of internode>/
- length of internode/
- #95. Culm-sheaths <length-width ratio>/
- times as long as wide/
- #96. Culm-sheaths <presence of basal lobes>/
1. without basal lobes <implicit>/
 2. with basal lobes/
- #97. Culm-sheaths <consistency>/
1. chartaceous/
 2. coriaceous/
- #98. Culm-sheaths <colour when fresh>/
1. white/
 2. yellow/
 3. green/
 4. glaucous/
 5. brown/
 6. red/
 7. purple/
- #99. Culm-sheaths <variegation>/
1. concolorous/
 2. striped/
 3. obscurely mottled with last colour/

4. distinctly mottled with last colour/
- #100. Culm-sheaths <roughness>/
 1. smooth/
 2. antrorsely scabrous/
 3. retrorsely scabrous/
- #101. Culm-sheaths <surface indumentum>/
 1. glabrous <except for shoulders and margins>/
 2. puberulous/
 3. pubescent/
 4. pilose/
 5. hispid/
- #102. Culm-sheaths hairy <where>/
 1. throughout/
 2. above/
 3. below/
 4. at the base/
- #103. Culm-sheaths with <inclination of hairs>/
 1. appressed hairs/
 2. erect hairs/
 3. reflexed hairs/
- #104. Culm-sheaths with <hair colour>/
 1. white hairs/
 2. grey hairs/
 3. yellow hairs/
 4. tawny hairs/
 5. dark brown hairs/
 6. red hairs/
 7. purple hairs/
 8. black hairs/
- #105. Culm-sheaths <presence of marginal hairs>/
 1. glabrous on margins/
 2. hairy on margins/
- #106. Culm-sheaths <shape of apex>/
 1. concave at apex/
 2. truncate at apex/
 3. convex at apex/
 4. triangular at apex/
 5. asymmetrical at apex/
- #107. Culm-sheaths <presence of auricles>/
 1. without auricles/
 2. auriculate/
- #108. Culm-sheaths with <auricle apex>/
 1. obtuse auricles/
 2. acute auricles/
- #109. Culm-sheaths with <equality of auricles>/
 1. equal auricles/
 2. subequal auricles/
 3. unequal auricles/
- #110. Culm-sheaths with <auricle length>/
 - mm high auricles/
- #111. Culm-sheaths with <auricle width>/
 - mm wide auricles/
- #112. Culm-sheaths <hairs on shoulders, or auricles when present>/
 1. glabrous on shoulders/
 2. pubescent on shoulders/
 3. ciliate on shoulders/
 4. setose on shoulders/
- #113. Culm-sheaths shoulders with <straight or curved hairs>/
 1. straight hairs/
 2. curved hairs/

- #114. Culm-sheaths shoulders with <hair length>/
mm long hairs/
- #115. Culm-sheath ligule <height>/
mm high/
- #116. Culm-sheath ligule <colour>/
 - 1. pallid/
 - 2. green/
 - 3. brown/
 - 4. reddish/
 - 5. purple/
- #117. Culm-sheath ligule <apical ornament>/
 - 1. entire/
 - 2. dentate/
 - 3. lacerate/
 - 4. fimbriate <lacerations bearing a group of long hairs>/
 - 5. ciliolate/
 - 6. ciliate/
- #118. Culm-sheath blade <outline>/
 - 1. inconspicuous/
 - 2. linear/
 - 3. lanceolate/
 - 4. narrowly ovate/
 - 5. ovate/
 - 6. triangular/
- #119. Culm-sheath blade <basal constriction>/
 - 1. constricted at base <semi-petiolate>/
 - 2. narrower than sheath/
 - 3. as wide as sheath at base <attached across its whole width> <implicit>/
 - 4. cordate/
- #120. Culm-sheath blade <persistence>/
 - 1. indistinctly demarcated from sheath/
 - 2. demarcated but persistent/
 - 3. deciduous/
- #121. Culm-sheath blade <carriage>/
 - 1. erect/
 - 2. spreading/
 - 3. reflexed/
- #122. Culm-sheath blade <length>/
cm long/
- #123. Culm-sheath blade <width>/
mm wide/
- #124. Culm-sheath blade <wrinkling>/
 - 1. flat/
 - 2. wrinkled/
- #125. Culm-sheath blade <indumentum>/
 - 1. glabrous on surface/
 - 2. scabrid/
 - 3. pubescent/
 - 4. hispid/
 - 5. with ciliate margins/
- #126. Culm-sheath blade <shape of apex>/
 - 1. obtuse/
 - 2. acute/
 - 3. acuminate/
 - 4. attenuate/
 - 5. cuspidate/
 - 6. mucronate/
- #127. Leaves <basal or cauline>/
 - 1. mostly basal/
 - 2. basal and cauline/

3. cauline <comment if herbaceous without butt sheaths>/
- #128. Leaves <number in leaf complement - if cauline>/
per branch <or culm when unbranched; refers to foliage culms if distinct from flowering culms. Zero if not
in distinct complements>/
- #129. Leaves <phyllotaxy>/
1. apparently irregular <implicit>/
 2. distichous/
 3. spiral/
- #130. Leaves <differentiation of sheath and blade>/
1. differentiated into sheath and blade <implicit>/
 2. without demarcation between sheath and blade <no abaxial collar; ligule may be present>/
 3. with sheath almost obsolete/
 4. with blades commonly suppressed, transferring photosynthetic function to sheath and culm/
- #131. Leaves <heterophylly>/
1. all alike <implicit>/
 2. heterophyllous being wider on the culm/
 3. much reduced on the culm <when foliage basal, else see culm-sheaths>/
 4. heterophyllous with a basal winter rosette <vernal leaves described>/
 5. heterophyllous with the distal narrower and retrorsely scabrid at the apex/
 6. heterophyllous <unspecified - explain in comment>/
- #132. Leaf-sheaths <looseness>/
1. solid and functionally replacing culm/
 2. tight <on the culm>/
 3. loose/
 4. inflated <refers to ordinary leaves, not those subtending an inflorescence or cleistogenes>/
 5. deciduous/
- #133. Leaf-sheaths <presence of basal thickening; but see butt-sheath if bulbous>/
1. unthickened at base/
 2. thickened at base/
- #134. Leaf-sheaths <marginal union>/
1. open for most of their length/
 2. tubular for much of their length/
- #135. Leaf-sheaths with <% closed>/
% of their length closed/
- #136. Leaf-sheaths with <involute margins>/
1. flat margins/
 2. infolded margins/
- #137. Leaf-sheaths <length>/
cm long/
- #138. Leaf-sheaths <length relative to internode>/
1. obsolete on upper internodes/
 2. mostly shorter than adjacent culm internode <upper nodes visible>/
 3. subequal to internodes <or variable>/
 4. longer than adjacent culm internode <overlapping>/
- #139. Leaf-sheaths <width relative to blade>/
1. narrower than blade at the collar/
 2. as wide as blade at the collar/
 3. wider than blade at the collar/
- #140. Leaf-sheaths <presence of sessile glands>/
1. eglandular/
 2. glandular <on surface, midnerve or margins>/
- #141. Leaf-sheaths <stickiness>/
1. without exudate <implicit>/
 2. pruinose/
 3. viscid/
 4. resinous/
- #142. Leaf-sheaths <presence of keel>/
1. without keel <or thickening>/
 2. medianly thickened/
 3. keeled <but not winged>/

- 4. with winged keel/
- #143. Leaf-sheaths <venation>/
 - 1. indistinctly nerved/
 - 2. striately nerved/
 - 3. reticulately nerved/
 - 4. ribbed/
- #144. Leaf-sheaths <roughness>/
 - 1. smooth/
 - 2. scaberulous/
 - 3. antrorsely scabrous/
 - 4. retrorsely scabrous/
 - 5. papillose/
 - 6. punctate/
 - 7. transversely wrinkled/
- #145. Leaf-sheaths <surface indumentum>/
 - 1. glabrous on surface <excepting mouth & margin>/
 - 2. hairy/
- #146. Leaf-sheaths <indumentum type>/
 - 1. puberulous/
 - 2. pubescent/
 - 3. pilose/
 - 4. hirsute/
 - 5. hispid/
 - 6. woolly/
- #147. Leaf-sheaths with <hair type>/
 - 1. simple hairs <implicit>/
 - 2. tubercle-based hairs/
 - 3. reflexed hairs/
 - 4. hooked hairs/
 - 5. capitate hairs/
 - 6. clavellate hairs/
 - 7. turgid hairs/
- #148. Leaf-sheaths hairs <colour>/
 - 1. white/
 - 2. grey/
 - 3. yellow/
 - 4. tawny/
 - 5. dark brown/
 - 6. red/
 - 7. purple/
 - 8. black/
- #149. Leaf-sheaths outer margin <presence of hairs>/
 - 1. glabrous/
 - 2. hairy/
- #150. Leaf-sheaths inner surface <indumentum>/
 - 1. glabrous/
 - 2. puberulous/
- #151. Orifice surface indumentum <beside ligule, or on auricles> <ordered>/
 - 1. scanty <a few bristles>/
 - 2. glabrous/
 - 3. pubescent/
 - 4. ciliate/
 - 5. bearded/
 - 6. setose/
 - 7. woolly/
- #152. Orifice hairs <terete or flat>/
 - 1. terete/
 - 2. flat/
- #153. Orifice hairs <carriage>/
 - 1. erect/

- 2. spreading/
- 3. curly/
- 4. deciduous/
- #154. Orifice hairs <length>/
 - mm long/
- #155. Orifice hairs <colour>/
 - 1. pale/
 - 2. dark/
- #156. Leaf-sheath auricles <presence>/
 - 1. absent <implicit>/
 - 2. present/
- #157. Leaf-sheath auricles <type>/
 - 1. erect <usually adnate to ligule>/
 - 2. erect and connate forming a tooth opposite blade <when sheath tubular>/
 - 3. falcate/
- #158. Leaf-sheath auricles <length>/
 - mm long/
- #159. Leaf-sheath auricles <shape of apex>/
 - 1. obtuse/
 - 2. acute/
 - 3. acuminate/
- #160. Ligule <structure - at midculm node when cauline foliage present> <mandatory>/
 - 1. an eciliate membrane <apical hairs absent>/
 - 2. a fringed membrane/
 - 3. a fringe of hairs <membrane absent or obscure>/
 - 4. absent/
- #161. Ligule <fringe type>/
 - 1. a ciliolate membrane <apical hairs shorter than membrane>/
 - 2. a ciliate membrane <apical hairs as long as, or longer than, membrane>/
- #162. Ligule <length on culm leaves>/
 - mm long/
- #163. Ligule <length on basal shoots when different>/
 - mm long on basal shoots/
- #164. Ligule <consistency>/
 - 1. hyaline/
 - 2. membranous/
 - 3. scarious/
- #165. Ligule <colour>/
 - 1. translucent/
 - 2. white/
 - 3. brown/
 - 4. red/
 - 5. purple/
- #166. Ligule <abaxial indumentum>/
 - 1. abaxially glabrous/
 - 2. abaxially scaberulous/
 - 3. abaxially hairy/
 - 4. abaxially pilose/
 - 5. ciliate from base of abaxial surface/
 - 6. setose from base of abaxial surface/
 - 7. with a secondary abaxial membrane/
- #167. Ligule <apex incision>/
 - 1. entire/
 - 2. erose/
 - 3. bilobed/
 - 4. trilobed/
 - 5. lacerate/
- #168. Ligule <shape of apex>/
 - 1. truncate/
 - 2. obtuse/

- 3. acute/
- 4. acuminate/
- #169. Collar <abaxial surface at junction between sheath and blade - colour>/
 - 1. pallid/
 - 2. concolorous <with sheath and blade>/
 - 3. dark/
- #170. Collar <external ligule>/
 - 1. without external ligule <implicit>/
 - 2. with <membranous> external ligule/
- #171. Collar <indumentum of collar, or external ligule>/
 - 1. glabrous/
 - 2. indumented/
- #172. Collar <indumentum type>/
 - 1. pubescent/
 - 2. ciliate/
 - 3. pilose/
 - 4. bearded/
- #173. Collar with hairs <length>/
 - mm long/
- #174. Leaf-blade base <shape>/
 - 1. tapering to the midrib <but not discretely petiolate>/
 - 2. simple <narrowing or slightly rounded> <implicit>/
 - 3. cuneate/
 - 4. truncate/
 - 5. broadly rounded/
 - 6. cordate/
 - 7. amplexicaul/
 - 8. sagittate/
- #175. Leaf-blade base <symmetry>/
 - 1. symmetrical/
 - 2. asymmetrical/
- #176. Leaf-blade base <presence of false petiole>/
 - 1. without a false petiole <implicit>/
 - 2. with a brief petiole-like connection to sheath <mainly bamboos>/
 - 3. with a false petiole <elongated, at least in the upper leaves>/
- #177. Leaf-blade base petiole <length>/
 - cm long/
- #178. Leaf-blade base petiole <indumentum>/
 - 1. glabrous/
 - 2. pubescent/
 - 3. pilose/
- #179. Leaf-blades <carriage>/
 - 1. appressed/
 - 2. erect/
 - 3. ascending <implicit>/
 - 4. spreading/
 - 5. drooping/
 - 6. recurved/
 - 7. floating <flat on the water>/
- #180. Leaf-blades <straightness at maturity>/
 - 1. straight <implicit>/
 - 2. curved/
 - 3. curled/
 - 4. flexuous/
 - 5. tortuous <spirally twisted>/
- #181. Leaf-blades <inversion>/
 - 1. not inverted <implicit>/
 - 2. inverted <twisted to bring lower epidermis uppermost>/
- #182. Leaf-blades <persistence>/
 - 1. persistent <implicit>/

- 2. disarticulating from the sheaths/
- 3. deciduous with part of sheath attached/
- #183. Leaf-blades <outline>/
 - 1. acuminate/
 - 2. filiform/
 - 3. linear <implicit>/
 - 4. lanceolate/
 - 5. elliptic/
 - 6. oblong/
 - 7. ovate/
 - 8. triangular/
- #184. Leaf-blades <direction of taper>/
 - 1. tapering towards sheath <widest in distal half>/
 - 2. tapering towards tip <widest near base>/
 - 3. tapering towards tip and sheath <widest in middle>/
 - 4. parallel-sided <equally wide for most of length>/
- #185. Leaf-blades <vernation>/
 - 1. flat <implicit>/
 - 2. plicate <pleated>/
 - 3. conduplicate <folded>/
 - 4. involute/
 - 5. convolute/
 - 6. revolute/
 - 7. terete <apparently without lamina>/
- #186. Leaf-blades <outline of transverse section>/
 - 1. linear in section/
 - 2. angular in section/
 - 3. elliptic in section/
 - 4. circular in section/
- #187. Leaf-blades <length>/
 - cm long/
- #188. Leaf-blades <width>/
 - mm wide/
- #189. Leaf-blades <length of uppermost leaf>/
 - cm long at summit of culm/
- #190. Leaf-blades <width in winter rosette>/
 - mm wide in winter rosette/
- #191. Leaf-blades <consistency>/
 - 1. membranous/
 - 2. herbaceous <implicit>/
 - 3. fleshy/
 - 4. coriaceous/
 - 5. indurate/
- #192. Leaf-blades <stiffness>/
 - 1. rigid/
 - 2. firm <implicit>/
 - 3. flaccid/
- #193. Leaf-blades <colour>/
 - 1. yellowish green/
 - 2. light green/
 - 3. mid-green/
 - 4. dark green/
 - 5. glaucous/
 - 6. grey-green/
 - 7. red/
 - 8. purple/
- #194. Leaf-blades <whether discolourous>/
 - 1. concolorous/
 - 2. discolorous <different colours above and below>/
 - 3. with undersurface a different shade on either side of midrib/

- 4. variegated <describe in comment>/
- 5. withering along margins/
- #195. Leaf-blades <presence of sessile glands - other than margins>/
 - 1. eglandular/
 - 2. glandular <on surface or midnerve>/
- #196. Leaf-blades <exudate>/
 - 1. without exudate <implicit>/
 - 2. pruinose/
 - 3. viscid/
 - 4. resinous/
- #197. Leaf-blades <presence of scent>/
 - 1. without scent <implicit>/
 - 2. aromatic/
- #198. Leaf-blade midrib <distinctness on upper surface>/
 - 1. indistinct/
 - 2. evident/
 - 3. conspicuous/
 - 4. widened/
- #199. Leaf-blade midrib <emergence on lower surface>/
 - 1. scarcely raised beneath/
 - 2. prominent beneath <but not keeled>/
 - 3. keeled beneath/
- #200. Leaf-blade venation <clarity>/
 - 1. indistinct <except for midrib>/
 - 2. distinct/
 - 3. prominent/
- #201. Leaf-blade venation <slanting>/
 - 1. parallel <implicit>/
 - 2. slanting obliquely from midrib/
- #202. Leaf-blade venation comprising <number of vascular bundles>/
 - vascular bundles/
- #203. Leaf-blade venation of <number of orders>/
 - orders <counting midrib as first>/
- #204. Leaf-blade venation with <number of second order nerves>/
 - secondary nerves/
- #205. Leaf-blade venation with <number of inner ridges>/
 - inner ridges/
- #206. Leaf-blade venation with sclerenchyma strands <presence above or below nerves>/
 - 1. absent/
 - 2. below nerves/
 - 3. above some nerves/
 - 4. above all nerves/
- #207. Leaf-blade venation with <number of sclerenchyma strands - mainly Festuca>/
 - subepidermal sclerenchyma strands/
- #208. Leaf-blade venation with <separate> subepidermal sclerenchyma strands <equality of size>/
 - 1. similar in size/
 - 2. unequal in size <apart from midrib and margins>/
 - 3. enlarged at midrib/
 - 4. enlarged at leaf margins/
- #209. Leaf-blade venation with subepidermal sclerenchyma <attachment to nerves>/
 - 1. free from nerves/
 - 2. attached to nerves above/
 - 3. attached to nerves below/
 - 4. attached to nerves above and below/
- #210. Leaf-blade venation <presence of abaxial subepidermal sclerenchyma layer>/
 - 1. without layer of subepidermal sclerenchyma masking nerve striation/
 - 2. with sclerenchyma strands widened to form a discontinuous subepidermal layer/
 - 3. with unevenly thickened subepidermal sclerenchyma layer on the underside/
 - 4. with continuous uniform subepidermal sclerenchyma layer on the underside/
- #211. Leaf-blade venation <presence of cross nerves>/

1. without <apparent> cross nerves <implicit>/
 2. with obscure cross nerves <requiring careful inspection>/
 3. with distinct cross nerves <obvious under x10 lens>/
- #212. Leaf-blade surface <presence of grooves or ribs>/
1. ungrooved/
 2. grooved along midline/
 3. grooved on either side of midline/
 4. ribbed/
- #213. Leaf-blade surface grooved <which side grooved or ribbed>/
1. adaxially <upper>/
 2. abaxially <lower>/
- #214. Leaf-blade surface with <shape of ribs>/
1. rounded ribs/
 2. rectangular ribs/
 3. ribs raised into sinuous lamellae/
- #215. Leaf-blade surface <roughness>/
1. smooth/
 2. scaberulous/
 3. scabrous/
 4. papillose/
- #216. Leaf-blade surface rough <which side>/
1. adaxially <upper>/
 2. abaxially <lower>/
 3. on both sides/
- #217. Leaf-blade surface <indumentum>/
1. glabrous/
 2. indumented/
- #218. Leaf-blade surface <indumentum type> <ordered>/
1. puberulous/
 2. pubescent/
 3. pilose/
 4. hirsute/
 5. hispid/
 6. woolly/
- #219. Leaf-blade surface hairless <extent when glabrous>/
1. throughout/
 2. except near base/
- #220. Leaf-blade surface <hair density>/
1. sparsely hairy/
 2. moderately hairy <implicit>/
 3. densely hairy/
- #221. Leaf-blade surface hairy <which side>/
1. adaxially <upper>/
 2. abaxially <lower>/
 3. on both sides/
- #222. Leaf-blade surface with <hair type>/
1. simple hairs <implicit>/
 2. tubercle-based hairs/
 3. capitate hairs/
 4. clavellate hairs/
 5. turgid hairs/
- #223. Leaf-blade margins <thickening>/
1. unthickened/
 2. cartilaginous/
- #224. Leaf-blade margins <presence of glands>/
1. eglandular/
 2. glandular/
- #225. Leaf-blade margins <indentation>/
1. entire <implicit>/
 2. undulate/

- 3. crenate <crinkled, at least on one margin>/
- 4. serrulate/
- #226. Leaf-blade margins <roughness> <ordered>/
 - 1. smooth/
 - 2. scaberulous/
 - 3. scabrous/
 - 4. spinulose/
- #227. Leaf-blade margins <hairiness>/
 - 1. glabrous/
 - 2. pubescent/
 - 3. ciliate/
 - 4. tuberculate-ciliate/
 - 5. with tufts of hair/
 - 6. tuberculate <without hair>/
- #228. Leaf-blade margins hairy <where>/
 - 1. all along <implicit>/
 - 2. at base <only>/
- #229. Leaf-blade apex <shape> <ordered>/
 - 1. obtuse/
 - 2. abruptly acute/
 - 3. acute/
 - 4. acuminate/
 - 5. attenuate/
 - 6. caudate/
- #230. Leaf-blade apex <pungency>/
 - 1. muticous <implicit>/
 - 2. pungent <pricking the fingers>/
- #231. Leaf-blade apex <termination>/
 - 1. soon splitting/
 - 2. hooded/
 - 3. asymmetrical/
 - 4. simple <implicit>/
 - 5. apiculate/
 - 6. hardened/
 - 7. callose/
 - 8. filiform/
- #232. Leaf-blade apex <vesture>/
 - 1. without special vesture <undifferentiated from lamina> <implicit>/
 - 2. smooth/
 - 3. antrorsely scabrous/
 - 4. retrorsely scabrous/
 - 5. hairy/
- #233. <Plant sexuality>/
 - 1. bisexual <implicit>/
 - 2. gynodioecious ("male", in this context, indicating the bisexual state) <describe female, and comment on bisexual state in male section>/
 - 3. monoecious/
 - 4. androdioecious/
 - 5. dioecious <comment if known to be dichogamous rather than dioecious>/
- #234. <Plant sexuality if monoecious>/
 - 1. with male and female spikelets in the same inflorescence/
 - 2. with male and female spikelets in different inflorescences <implicit>/
 - 3. with male terminal and mixed axillary inflorescences/
 - 4. with a male and a female inflorescence subtended by the same spatheole <Coix>/
- #235. Inflorescences <whether arranged within a synflorescence>/
 - 1. arranged within a synflorescence <with supporting spathes or spatheoles>/
 - 2. not arranged within a synflorescence/
- #236. Synflorescence <type of inflorescence aggregation> <mandatory>/
 - 1. simple <discrete and lacking subtending bracts, or rarely with rudiments> <implicit>/
 - 2. a spathate aggregation of <ramose> inflorescences <the latter terminating branches>/

3. bractiferous <a bracteate or spathate system bearing single spikelets or dwarf bracteolate fascicles in the axils - bamboos only>/
- #237. Synflorescence <shape when compound or bractiferous>/
1. scanty/
 2. linear/
 3. paniculate/
 4. fastigiate <about the axis>/
 5. fasciculate <the spatheoles in bunches>/
 6. globose/
 7. stellate/
 8. clustered at the nodes <bamboos>/
- #238. Synflorescence in <shape of clusters - if nodal>/
1. globose clusters/
 2. stellate clusters/
 3. oblong clusters/
 4. compact unilateral clumps/
 5. untidy tufts/
- #239. Synflorescence <length of synflorescence or nodal cluster - if compound or bractiferous>/
cm long/
- #240. Synflorescence <density of synflorescence or nodal cluster - if compound or bractiferous>/
1. dense/
 2. lax/
 3. open/
- #241. Synflorescence <separation of clusters - if nodal>/
cm between clusters/
- #242. Synflorescence <internode indumentum - if nodal>/
1. glabrous on internodes/
 2. scabrid on internodes/
 3. hispidulous on internodes/
 4. pubescent on internodes/
 5. pilose on internodes/
- #243. Synflorescence with <shape of principal subtending bracts - if bractiferous>/
1. glumaceous subtending bracts/
 2. spathaceous subtending bracts/
 3. foliaceous subtending bracts/
- #244. Synflorescence bracts <length - if bractiferous>/
mm long/
- #245. Synflorescence <presence of spikelet buds - if bractiferous>/
1. without axillary buds at base of spikelet <semelauctant>/
 2. with axillary buds at base of spikelet <iterauctant>/
- #246. Synflorescence <presence of dwarf shoots - if compound or bractiferous>/
1. with simple <homogeneous> branching/
 2. with ultimate <large> bract subtending a compact bracteolate fascicle of spikelets <mostly bamboos>/
 3. with principal spatheoles embracing a compact fascicle of racemes, each subtended by a subsidiary bract/
 4. with multiple branching from a dwarf shoot in penultimate spathe <Andropogoneae>/
- #247. Synflorescence <presence of prophylls - if compound or bractiferous>/
1. without prophylls <adjoining spikelet> <implicit>/
 2. prophyllate below lateral spikelets/
- #248. Synflorescence with <number of prophyll keels>/
1. unkeeled prophylls/
 2. 1-keeled prophylls/
 3. 2-keeled prophylls/
- #249. Synflorescence <relation to leaves - if nodal>/
1. leafy between clusters/
 2. leafless between clusters <pseudo-racemose>/
 3. leafless between <clusters and> branches <pseudo-paniculate>/
- #250. Synflorescence <total length - if nodal>/
cm long overall/
- #251. Synflorescence <on leafless culm>/

1. on the same culm as leaves <implicit>/
 2. on a specialized culm bearing a single <rarely more> leaf-blade/
 3. on a separate leafless culm/
- #252. Inflorescence <shape at arms length>/
1. solid/
 2. compound/
 3. digitate/
 4. subdigitate/
 5. unknown/
- #253. Inflorescence <when solid>/
1. a raceme <spikelets all pedicelled>/
 2. a spike <spikelets all sessile>/
 3. a rame <spikelets both sessile and pedicelled>/
 4. a panicle/
 5. of only a few spikelets/
- #254. Inflorescence <when compound>/
1. a panicle <open>/
 2. a panicle of racemes/
 3. a panicle of rames/
 4. a panicle of paired rames/
 5. a <congested or contracted> panicle/
 6. a panicle of spikes/
 7. of only a few spikelets/
 8. of pedicelled spikelet clusters/
 9. composed of rames/
 10. composed of spikes/
- #255. Inflorescence <when digitate or subdigitate>/
1. with spicate branches/
 2. with racemose branches/
 3. with ramose branches/
 4. of only a few spikelets/
- #256. Inflorescence <type - refers to true inflorescence (i.e., above uppermost sheath) in a compound system; inapplicable if bractiferous> <mandatory>/
1. a panicle <including spiciform panicles with dwarf laterals more or less accrescent to a central axis, and Pennisetum spp with 1 involucre bristle>/
 2. a panicle with branches tipped by a rame <or heteromorphic triad; Andropogoneae. Enter under panicle; raceme shape, length & number of spikelets; rhachis; rhachis internode>/
 3. composed of racemes <these occasionally bearing secondary lateral racemelets (rarely variable between panicle and raceme, and then scored for both). Triads or contiguous pairs shed as a whole from a tough central axis are racemes; the term is also used here for a broadly winged rhachis bearing involucre clusters (Chlorocalymma, Trachys). Single spikelets subtended by 1 sterile bristle and deciduous with it are homology problems; they are treated as reduced racemes (except Pennisetum). Single spikelets without rhachis extension are treated as spikelets, regardless of supposed homology (Boutelouinae, Zoysiinae, Stenotaphrum)>/
 4. composed of rames/
 5. comprising only a few spikelets <and type undefinable>/
 6. composed of spikes/
- #257. Inflorescence comprising <number of spikelets if few>/ fertile spikelets/
- #258. Inflorescence <location of fertile inflorescence>/
1. terminal <on culms and principal branches> <implicit>/
 2. terminal and axillary <excluding cleistogenes; including compound systems>/
 3. axillary <only>/
- #259. Inflorescence <whether overtopping basal leaves>/
1. aerial <implicit>/
 2. shorter than basal leaves/
- #260. Inflorescence bearing <juvenility>/
1. well-developed spikelets at emergence <implicit>/
 2. juvenile spikelets at emergence/
- #261. Inflorescence <tumbleweed>/

1. not deciduous as a whole <unless composed of a single spikelet> <implicit>/
 2. deciduous as a whole/
- #262. Inflorescence <presence of rudimentary bracts within inflorescence; see also subtending leaf, peduncle tip and basal sterile spikelets>/
1. without bracts <implicit>/
 2. bracteate at branch bases/
 3. bracteate at pedicel base/
- #263. Inflorescence subtended by <type of subtending leaf>/
1. an unspecialized leaf-sheath <implicit>/
 2. an inflated leaf-sheath <lightly inflated, with blade>/
 3. a spatheole <or spathe, much modified with rudimentary blade>/
 4. sheathless <or inconspicuously sheathed> blades/
 5. bracts/
- #264. Inflorescence <exsertion from sheath>/
1. exserted <implicit>/
 2. embraced at base by subtending leaf/
 3. enclosed <by sheath or spatheole>/
- #265. Inflorescence with <number, when several emerging from a sheath>/ peduncles per sheath/
- #266. Axillary inflorescences present <location>/
1. throughout the plant/
 2. in upper axils/
 3. in lower axils/
- #267. Axillary inflorescences <comparison with terminal - if the latter fertile>/
1. similar to terminal/
 2. different from terminal/
 3. intermingled with terminal/
- #268. Axillary inflorescences <shape>/
1. open/
 2. loosely contracted/
 3. compact/
 4. enclosed/
- #269. Spatheole <form; excluding secondary bractlets when present>/
1. cymbiform or tubular <implicit>/
 2. expanded/
 3. glumaceous/
- #270. Spatheole <outline> <ordered>/
1. linear/
 2. lanceolate/
 3. elliptic/
 4. oblong/
 5. ovate/
 6. globose/
- #271. Spatheole <length>/
- cm long/
- #272. Spatheole <consistency>/
1. hyaline/
 2. membranous/
 3. chartaceous/
 4. herbaceous/
 5. scarious/
 6. coriaceous/
 7. indurate/
- #273. Spatheole <colour>/
1. yellow/
 2. green/
 3. glaucous/
 4. grey/
 5. brown/
 6. red/

7. purple/
- #274. Spatheole <presence of tubercles>/
1. without tubercles/
 2. tuberculate/
- #275. Spatheole <indumentum> <ordered>/
1. glabrous/
 2. puberulous/
 3. pubescent/
 4. pilose/
 5. hirsute/
 6. setose/
- #276. Peduncle <presence>/
1. brief, the inflorescence sessile/
 2. distinct <implicit>/
- #277. Peduncle <flexion>/
1. straight <implicit>/
 2. nodding/
 3. flexuous/
 4. deflexed/
- #278. Peduncle <transverse section>/
1. terete/
 2. elliptic in section/
 3. angular/
 4. flattened/
- #279. Peduncle <length>/
- cm long/
- #280. Peduncle <presence of glands>/
1. eglandular/
 2. glandular/
- #281. Peduncle <roughness below inflorescence>/
1. smooth/
 2. scaberulous above/
 3. antrorsely scabrous above/
 4. retrorsely scabrous above/
 5. tuberculate above/
- #282. Peduncle <indumentum below inflorescence> <ordered>/
1. glabrous/
 2. pubescent above/
 3. pilose above/
 4. hirsute above/
 5. hispid above/
- #283. Peduncle <apical expansion>/
1. cylindrical at apex/
 2. widened at apex/
 3. expanded into a conical flask at apex/
 4. tipped by a glumaceous appendage <of uncertain homology; see also subtending leaf, indeterminate bracts within inflorescence, and basal sterile spikelets>/
- #284. Peduncle <persistence>/
1. persistent <on culm> <implicit>/
 2. fracturing <part way along>/
 3. disarticulating <with all or part of the inflorescence>/
- #285. Peduncle disarticulating <with uppermost sheath>/
1. above uppermost sheath/
 2. below uppermost sheaths <or spatheole>/
- #286. Peduncle base <shape - if disarticulating and leafless>/
1. blunt/
 2. pungent/
- #287. Panicle <type>/
1. open/
 2. contracted/

- 3. spiciform/
- 4. glomerate/
- 5. capitate/
- #288. Panicle <outline> <ordered>/
 - 1. linear/
 - 2. lanceolate/
 - 3. elliptic/
 - 4. oblong/
 - 5. ovate/
 - 6. pyramidal/
 - 7. globose/
 - 8. obovate/
 - 9. corymbose/
- #289. Panicle <interruption>/
 - 1. continuous <confluent if glomerate>/
 - 2. interrupted/
- #290. Panicle <density>/
 - 1. dense/
 - 2. loose/
 - 3. effuse/
- #291. Panicle <taper - if spiciform>/
 - 1. truncate or rounded at the ends <implicit>/
 - 2. tapering above/
 - 3. tapering below/
- #292. Panicle <one-sided>/
 - 1. equilateral <implicit>/
 - 2. nodding <to one side>/
 - 3. secund/
- #293. Panicle <straightness>/
 - 1. straight/
 - 2. curved/
 - 3. flexuous/
- #294. Panicle <length>/
 - cm long/
- #295. Panicle bearing <sparse>/
 - 1. many spikelets <implicit>/
 - 2. few spikelets <few enough to count>/
- #296. Panicle <width>/
 - cm wide/
- #297. Panicle <% of culm length>/
 - % of <total> culm length/
- #298. Panicle <spikelet distribution - if open or contracted, but not raceme-tipped>/
 - 1. evenly furnished <with spikelets> <implicit>/
 - 2. contracted about primary branches/
 - 3. contracted about secondary branches/
 - 4. with spikelets clumped along branches/
 - 5. gathered into fascicles/
 - 6. with spikelets clustered towards branch tips/
- #299. Primary panicle branches <accrescence>/
 - 1. free <implicit>/
 - 2. accrescent to a central axis/
- #300. Primary panicle branches <or clusters - number>/
 - in number/
- #301. Primary panicle branches <development - if accrescent to a central axis. Rest of branches inapplicable, but see central axis>/
 - 1. with evident branchlets on axis/
 - 2. with lateral <branch or pedicel> stumps on axis/
 - 3. with sessile scars on axis/
- #302. Primary panicle branches <carriage>/
 - 1. appressed <erect>/

- 2. ascending/
- 3. spreading/
- 4. drooping/
- 5. reflexed/
- #303. Primary panicle branches <spacing>/
 - 1. closely spaced/
 - 2. moderately spaced/
 - 3. distant/
- #304. Primary panicle branches <number at lowest node>/
 - nate/
- #305. Primary panicle branches <whorled>/
 - 1. not whorled <implicit>/
 - 2. whorled at lower nodes <only>/
 - 3. whorled at most nodes/
- #306. Primary panicle branches <amount of branching> <ordered>/
 - 1. indistinct the panicle almost racemose/
 - 2. simple/
 - 3. sparsely divided/
 - 4. moderately divided <implicit>/
 - 5. profusely divided/
- #307. Primary panicle branches subdividing <orders of branching>/
 - times <not counting pedicels>/
- #308. Primary panicle branches branching <type of branching>/
 - 1. laterally <implicit>/
 - 2. dichotomously <dividing into equal parts>/
 - 3. divaricately <widely divergent>/
- #309. Primary panicle branches rebranched <origin of proximal secondary branches>/
 - 1. near base/
 - 2. below middle/
 - 3. at middle/
 - 4. above middle/
- #310. Primary panicle branches <length>/
 - cm long/
- #311. Primary panicle branches with lower <length as fraction of panicle>/
 - length of panicle/
- #312. Primary panicle branches bearing <number of spikelets>/
 - fertile spikelets on each lower branch/
- #313. Primary panicle branches <naked or sterile below - if open or contracted>/
 - 1. naked below <implicit>/
 - 2. bearing spikelets almost to the base/
 - 3. bearing sterile spikelets below, fertile at tip/
 - 4. elongating after flowering/
- #314. Primary panicle branches <presence of sterile branches>/
 - 1. without sterile bristles <implicit>/
 - 2. sterile at the tips <with or without other sterile branches>/
 - 3. <wholly> sterile at lowest node/
- #315. Panicle axis <conspicuousness>/
 - 1. dominant/
 - 2. distinct/
 - 3. differing little from branches/
- #316. Panicle axis <number of nodes>/
 - noded/
- #317. Panicle axis with lower internodes <length>/
 - cm long/
- #318. Panicle axis <transverse section>/
 - 1. terete/
 - 2. with rounded ribs/
 - 3. angular <or long angular ribs>/
 - 4. with briefly decurrent <angular> ribs/
 - 5. flat/

- #319. Panicle axis <presence of glands>/
 - 1. eglandular/
 - 2. glandular/
- #320. Panicle axis <roughness> <ordered>/
 - 1. smooth/
 - 2. with occasional prickles/
 - 3. scaberulous/
 - 4. <antrorsely> scabrous/
 - 5. retrorsely scabrous/
 - 6. tuberculate/
- #321. Panicle axis <indumentum> <ordered>/
 - 1. with scattered hairs/
 - 2. glabrous <implicit>/
 - 3. puberulous/
 - 4. pubescent/
 - 5. pilose/
 - 6. hirsute/
 - 7. villous/
 - 8. plumose/
 - 9. hispidulous/
 - 10. hispid/
- #322. Panicle axis with <hair type>/
 - 1. simple hairs <implicit>/
 - 2. tubercle-based hairs/
 - 3. hooked hairs/
 - 4. capitate hairs/
 - 5. clavellate hairs/
- #323. Panicle axis bearing <persistence of branches>/
 - 1. persistent branches <but may be tipped by a fragile raceme> <implicit>/
 - 2. deciduous <elongated> branches/
 - 3. deciduous spikelet clusters <or involucre>/
- #324. Panicle branches <stiffness>/
 - 1. stiff/
 - 2. flexible <implicit>/
 - 3. capillary/
- #325. Panicle branches <curvature>/
 - 1. straight/
 - 2. arcuate/
 - 3. flexuous/
 - 4. sinuous/
 - 5. zig-zag/
 - 6. tangled/
 - 7. abruptly recurved near tip/
- #326. Panicle branches <transverse section>/
 - 1. terete/
 - 2. channelled/
 - 3. angular/
 - 4. flat/
- #327. Panicle branches <apical expansion, usually when bearing racemes>/
 - 1. parallel-sided/
 - 2. apically expanded/
- #328. Panicle branches <whether secund>/
 - 1. multilateral <or irregular>/
 - 2. secund/
- #329. Panicle branches bearing <spikelet density>/
 - 1. congested spikelets/
 - 2. approximate spikelets/
 - 3. distant spikelets/
 - 4. the terminal spikelet distant on a long pedicel/
- #330. Panicle branches <presence of sessile glands>/

- 1. eglandular/
- 2. glandular/
- #331. Panicle branches <exudate>/
 - 1. without exudate <implicit>/
 - 2. pruinose/
 - 3. viscid/
 - 4. resinous/
- #332. Panicle branches <roughness> <ordered>/
 - 1. smooth/
 - 2. with occasional prickles/
 - 3. scaberulous/
 - 4. <antrorsely> scabrous/
 - 5. retrorsely scabrous/
 - 6. tuberculate/
- #333. Panicle branches rough <where>/
 - 1. proximally/
 - 2. throughout/
 - 3. distally/
- #334. Panicle branches <surface indumentum> <ordered>/
 - 1. with scattered hairs/
 - 2. glabrous <implicit>/
 - 3. puberulous/
 - 4. pubescent/
 - 5. pilose/
 - 6. hirsute/
 - 7. villous/
 - 8. plumose/
 - 9. hispidulous/
 - 10. hispid/
- #335. Panicle branches hairy <where>/
 - 1. generally <implicit>/
 - 2. at tip/
- #336. Panicle branches with <hair type>/
 - 1. simple hairs <implicit>/
 - 2. tubercle-based hairs/
 - 3. hooked hairs/
 - 4. capitate hairs/
 - 5. clavellate hairs/
 - 6. turgid hairs/
- #337. Panicle branches <axillary hairs>/
 - 1. glabrous in axils/
 - 2. pubescent in axils/
 - 3. bearded in axils/
- #338. Panicle branches <presence of pulvini>/
 - 1. with insignificant pulvini/
 - 2. with prominent pulvini/
- #339. Panicle branches terminating in a <bristle length if sterile only at tip (not involucrel)>/
 - mm long bristle/
- #340. Spikes <numerous>/
 - 1. few/
 - 2. numerous/
- #341. Spikes <number>/
- #342. Spikes <disposition>/
 - 1. single/
 - 2. paired/
 - 3. digitate/
 - 4. borne on a central axis/
- #343. Spikes <spacing>/
 - 1. closely spaced/
- #344. Spikes <compaction>/

1. in a head/
- #345. Spikes <carriage>/
 1. sunken/
 2. appressed/
 3. erect/
 4. ascending/
 5. spreading <horizontally>/
 6. radiating/
 7. drooping/
 8. reflexed/
- #346. Spikes <outline>/
 1. linear/
 2. closely spaced/
 3. oblong/
- #347. Spikes <curvature>/
 1. straight/
 2. arcuate/
 3. flexuous/
- #348. Spikes <number of sides bearing fertile spikelets>/
 1. unilateral/
 2. bilateral/
- #349. Spikes <length>/
 - cm long/
- #350. Spikes <width, including spikelets>/
 - mm wide/
- #351. Spikes bearing <few or many spikelets>/
 1. 1 spikelet/
 2. a triad of spikelets/
 3. few fertile spikelets/
 4. many spikelets/
- #352. Spikes bearing <number of fertile spikelets if few>/
 - fertile spikelets on each/
- #353. Spike internodes <shape>/
 1. cuneate/
 2. oblong/
- #354. Spike internodes <length>/
 - mm long/
- #355. Spike internode tip <shape>/
 1. transverse/
 2. oblique/
- #356. Spike internode tip <concavity>/
 1. crateriform/
- #357. Spike internode tip <obliquity>/
 1. transverse/
 2. oblique/
- #358. Rames <numerous>/
 1. few/
 2. numerous/
- #359. Rames <number>/
- #360. Rames <disposition>/
 1. single/
 2. paired/
 3. digitate/
- #361. Rames <spacing>/
 1. /
 2. /
- #362. Rames <special cases if paired or digitate>/
 1. end to end/
 2. appressed to back/
- #363. Rames <carriage>/

1. erect/
 2. deflexed/
 3. spreading/
- #364. Rames <outline>/
1. linear/
 2. moliniform/
 3. oblong/
 4. cuneate/
 5. ascending/
 6. drooping/
- #365. Rames <curvature>/
1. straight/
 2. arcuate/
 3. sinuous/
- #366. Rames <whether cylindrical>/
1. ragged/
 2. smoothly terete/
- #367. Rames <number of sides bearing fertile spikelets>/
1. unilateral/
 2. bilateral/
 3. paucilateral/
 4. multilateral/
- #368. Rames <length>/
- cm long/
- #369. Rames <width>/
- mm wide/
- #370. Rames bearing <few or many spikelets>/
1. 1 spikelet <of any kind>/
 2. a triad of spikelets <usually 1 fertile, 2 sterile>/
 3. a few fertile spikelets/
 4. many spikelets/
- #371. Rames bearing <no. of fertile spikelets>/
- fertile spikelets on each/
- #372. Racemes <numerous>/
1. few <up to 30> <implicit>/
 2. numerous/
- #373. Racemes <number>/
- /
- #374. Racemes <disposition>/
1. single/
 2. paired/
 3. digitate/
 4. borne along a central axis/
- #375. Racemes <spacing>/
1. simply spaced <in 1 whorl or moderately dispersed> <implicit>/
 2. the lowest whorled <the rest scattered>/
 3. in several whorls/
 4. distant/
 5. closely spaced/
- #376. Racemes <compaction>/
1. not compacted <implicit>/
 2. in a unilateral false spike/
 3. in a bilateral false spike/
 4. in a multilateral false spike/
 5. in an interrupted false spike/
 6. in a head/
- #377. Racemes <special cases if paired or digitate>/
1. side by side <implicit>/
 2. end to end/
 3. appressed back to back/

- 4. intertwined/
- 5. with abortive upper raceme represented by a single sterile spikelet/
- #378. Racemes <carriage>/
 - 1. sunken/
 - 2. appressed/
 - 3. erect/
 - 4. ascending <implicit>/
 - 5. spreading <horizontally>/
 - 6. radiating <in all directions>/
 - 7. drooping/
 - 8. deflexed/
- #379. Racemes <outline>/
 - 1. linear <implicit>/
 - 2. moniliform/
 - 3. lanceolate/
 - 4. oblong/
 - 5. ovate/
 - 6. globose/
 - 7. obovate/
 - 8. clavate/
 - 9. cuneate/
- #380. Racemes <curvature>/
 - 1. straight <implicit>/
 - 2. arcuate/
 - 3. flexuous/
 - 4. sinuous <or zig-zag>/
 - 5. incurved/
 - 6. corkscrew spiralled/
 - 7. watch-spring spiralled/
- #381. Racemes <whether cylindrical, the spikelets flush with internodes to form a rat tail>/
 - 1. ragged <implicit>/
 - 2. smoothly terete/
- #382. Racemes <number of sides bearing fertile spikelets>/
 - 1. unilateral/
 - 2. bilateral/
 - 3. paucilateral <indefinite or irregular>/
 - 4. multilateral <bottle-brush>/
- #383. Racemes <length>/
 - cm long/
- #384. Racemes <width, including spikelets>/
 - mm wide/
- #385. Racemes bearing <few or many spikelets>/
 - 1. 1 spikelet <of any kind>/
 - 2. a triad of spikelets <usually 1 fertile, 2 sterile>/
 - 3. few fertile spikelets/
 - 4. many spikelets <implicit>/
- #386. Racemes bearing <number of fertile spikelets if few>/
 - fertile spikelets on each/
- #387. Racemes <presence of secondary branches>/
 - 1. simple <implicit>/
 - 2. with branchlets <only> at base of longer racemes/
 - 3. secondarily branched/
- #388. Racemes <with> secondary branches <shape>/
 - 1. racemulose/
 - 2. glomerate/
 - 3. involucrel/
- #389. Central inflorescence axis <length>/
 - cm long/
- #390. Central inflorescence axis <consistency>/
 - 1. unspecialized <terete or angular> <implicit>/

- 2. flattened <but not foliaceous>/
- 3. winged/
- 4. foliaceous/
- 5. corky/
- 6. woody/
- #391. Central inflorescence axis <fragility>/
 - 1. tough <implicit>/
 - 2. fracturing into irregular segments/
 - 3. disarticulating at nodes/
- #392. Central inflorescence axis <indumentum>/
 - 1. glabrous/
 - 2. indumented/
- #393. Central inflorescence axis <indumentum type> <ordered>/
 - 1. with scattered hairs/
 - 2. puberulous/
 - 3. pubescent/
 - 4. pilose/
 - 5. hirsute/
 - 6. villous/
 - 7. hispid/
- #394. Central inflorescence axis tip <shape>/
 - 1. without extension <implicit>/
 - 2. with blunt extension/
 - 3. subulate/
 - 4. filiform/
 - 5. spinose/
- #395. Rhachis <presence>/
 - 1. evident <above lowest spikelet> <implicit>/
 - 2. obsolete <raceme-base may be present>/
- #396. Rhachis <fragility>/
 - 1. tough <or obsolete> <implicit>/
 - 2. fracturing into irregular segments/
 - 3. fragile at the nodes/
 - 4. fragile but the lowest <fertile> internode fused to peduncle/
- #397. Rhachis <including raceme-base - persistence, if tough but not single>/
 - 1. persistent <implicit>/
 - 2. deciduous from axis/
- #398. Rhachis <persistence of secondary branches>/
 - 1. with persistent <on the rhachis> secondary branchlets <implicit>/
 - 2. with separately deciduous secondary branchlets/
- #399. Rhachis <presence of wings>/
 - 1. wingless <implicit>/
 - 2. narrowly winged/
 - 3. broadly winged <wider than midrib>/
- #400. Rhachis <consistency - if broadly winged>/
 - 1. membranous/
 - 2. herbaceous <implicit>/
 - 3. foliaceous/
- #401. Rhachis <folding - if winged>/
 - 1. not appreciably folded <implicit>/
 - 2. folded longitudinally to embrace spikelets/
 - 3. folded transversely to form a capsule/
 - 4. forming pockets/
- #402. Rhachis with <shape of midrib if winged>/
 - 1. sharp-edged midrib/
 - 2. rounded midrib/
- #403. Rhachis <cross-section - inapplicable if broadly winged>/
 - 1. flattened/
 - 2. angular <including triquetrous>/
 - 3. subterete/

- 4. semiterete <flat or slightly hollowed on one face>/
- 5. subcylindrical and excavated/
- 6. enlarged into a woody cob/
- #404. Rhachis <width>/
 - mm wide/
- #405. Rhachis <colour - comment on actual colour>/
 - 1. light-coloured/
 - 2. drab <green or stramineous>/
 - 3. dark-coloured/
- #406. Rhachis <surface roughness>/
 - 1. smooth on surface/
 - 2. scabrous on surface/
 - 3. scaberulous on surface/
- #407. Rhachis <surface indumentum> <ordered>/
 - 1. with scattered hairs/
 - 2. glabrous on surface/
 - 3. puberulous on surface/
 - 4. pubescent on surface/
 - 5. pilose on surface/
 - 6. hirsute on surface/
 - 7. villous on surface/
 - 8. plumose on surface/
 - 9. woolly on surface/
 - 10. with clusters of setae/
- #408. Rhachis <marginal or edge roughness> <ordered>/
 - 1. smooth on margins/
 - 2. scaberulous on margins/
 - 3. scabrous on margins/
 - 4. spinulose on margins/
 - 5. tuberculate on margins/
- #409. Rhachis <marginal or edge hairs> <ordered>/
 - 1. glabrous on margins/
 - 2. pubescent on margins/
 - 3. ciliate on margins/
 - 4. villous on margins/
 - 5. plumose on margins/
 - 6. setose on margins/
- #410. Rhachis terminating in a <presence of sterile tip>/
 - 1. spikelet <fertile or underdeveloped (incl terminal triplet in Andropogoneae)> <implicit>/
 - 2. <modified> sterile spikelet/
 - 3. barren extension/
- #411. Rhachis extension <shape>/
 - 1. inconspicuous/
 - 2. flattened/
 - 3. subulate/
 - 4. bristle-like/
 - 5. a forked bristle/
 - 6. a fan of bristles/
- #412. Rhachis extension <length>/
 - mm long/
- #413. Rhachis hairs <above or below on internode>/
 - 1. evenly distributed/
 - 2. lengthening towards internode tip/
 - 3. mainly at internode tip/
 - 4. on upper part of internode/
 - 5. on lower part of internode/
- #414. Rhachis hairs <on how many margins or edges>/
 - 1. on 1 margin/
 - 2. on 2 margins/
 - 3. on 3 margins/

- #415. Rhachis hairs <colour of principal hairs>/
1. white/
 2. grey/
 3. yellow/
 4. tawny/
 5. dark brown/
 6. red/
 7. purple/
- #416. Rhachis hairs <length of principal hairs>/
mm long/
- #417. Spikelet packing <orientation relative to lower glume - if unambiguous>/
1. adaxial/
 2. abaxial/
 3. alternately adaxial and abaxial <Thrasya>/
 4. broadside to rhachis/
- #418. Spikelet packing <whether opposite - if bilateral>/
1. alternate <implicit>/
 2. opposite/
- #419. Spikelet packing <density>/
1. imbricate/
 2. approximate <implicit>/
 3. lax/
 4. distant/
- #420. Spikelet packing with <equality of internodes>/
1. subequal internodes <implicit>/
 2. lowest <fertile> internode elongated/
 3. upper internodes elongated/
- #421. Spikelet packing <per cm>/
spikelets per cm/
- #422. Spikelet packing <distance between spikelets in same row (comment if ambiguous) as a % of their length>/
% of their length apart/
- #423. Spikelet packing <regularity of rows>/
1. irregular/
 2. regular/
- #424. Spikelet packing <number of rows if evident>/
-rowed/
- #425. Rame internodes <shape>/
1. filiform/
 2. cuneate/
 3. clavate/
 4. linear/
 5. oblong/
 6. columnar/
 7. inflated/
- #426. Rame internodes <length>/
mm long/
- #427. Rame internodes <length as % of spikelet>/
% length of fertile spikelet/
- #428. Rame internodes <special cases if fragile>/
1. flat and forming a U or V shape with the pedicel in rear view/
 2. bearing a sterile companion laterally <its pedicel fused to and shorter than internode>/
 3. adherent to upper glume of sessile spikelet/
- #429. Rame internode tip <obliquity>/
1. transverse/
 2. oblique/
- #430. Rame internode tip <concavity>/
1. flat/
 2. cupiliform/
 3. crateriform/

- #431. Rame internode tip with <rim features>/
1. simple rim/
 2. hairy rim/
 3. scarious rim/
- #432. Rame internode tip <shape>/
1. flat/
 2. not enlarged/
 3. clavate/
- #433. Raceme internodes <shape>/
1. indefinite <rhachis continuous without evident segments; length then measured between origins of pedicels or pedicel groups> <implicit>/
 2. filiform/
 3. linear/
 4. columnar <cultrate>/
 5. oblong/
 6. clavate <linear below, widening above - but tip scored separately>/
 7. cuneate/
 8. pyriform/
 9. inflated/
 10. hour-glass shaped/
- #434. Raceme internodes <length>/
- mm long/
- #435. Raceme internodes <length as % of spikelet>/
- % length of fertile spikelet/
- #436. Raceme internodes <abscission mode - if fragile>/
1. falling with spikelet alongside <implicit>/
 2. falling with spikelet above/
 3. falling in segments of 1–2 fertile nodes surmounted by 1–3 nodes of sterile spikelets, these alternating along the raceme/
- #437. Raceme internodes <special cases - if fragile>/
1. unspecialized <implicit>/
 2. flat and forming a U or V shape with the pedicel in rear view/
 3. with a basal circular pore between internode and pedicel/
 4. together with the pedicel framing edges of sessile spikelets/
 5. adherent to upper glume of sessile spikelet/
 6. bearing a sterile companion laterally <its pedicel fused to and shorter than internode>/
 7. with the lower <fertile> often bearing triads <instead of a pair>/
- #438. Raceme internode tip <obliquity>/
1. transverse/
 2. oblique/
- #439. Raceme internode tip <concavity>/
1. flat/
 2. cupuliform/
 3. crateriform/
 4. notched/
- #440. Raceme internode tip with <rim features>/
1. simple rim/
 2. lobed rim/
 3. scarious rim/
 4. hairy rim/
- #441. Raceme internode tip <shape>/
1. not enlarged <relative to body of internode>/
 2. clavate <gradually widening>/
 3. pyriform/
 4. discoid/
- #442. Rame-bases <shape - of partial peduncle or naked rhachis supporting individual racemes, when more than one>/
1. brief/
 2. linear/
 3. filiform/

- 4. flattened <strap shaped>/
- #443. Rame-bases <length>/
- #444. Rame-bases <indumentum>/
 - 1. glabrous/
 - 2. pubescent/
 - 3. pilose/
 - 4. hirsute/
- #445. Rame bases <persistence>/
 - 1. persistent/
 - 2. shed with the raceme/
- #446. Rame-bases <presence of appendage>/
 - 1. unappendaged <implicit>/
 - 2. scariously rimmed/
 - 3. shortly lobed/
 - 4. extended into an oblong appendage/
 - 5. extended into a flask-like appendage/
- #447. Rame-bases <equality>/
 - 1. subequal/
 - 2. unequal/
- #448. Rame-bases hairy <where>/
 - 1. generally/
 - 2. at tip/
 - 3. on margins/
 - 4. at base/
 - 5. in axils/
- #449. Rame bases with <hair length>/
 - mm long hairs/
- #450. Rame bases with <length of appendage>/
 - mm long appendage/
- #451. Raceme-bases <shape - of partial peduncle or naked rhachis supporting individual racemes, when more than one>/
 - 1. brief <insignificant but sometimes bearing ornamentation> <implicit>/
 - 2. filiform/
 - 3. linear/
 - 4. cuneate/
 - 5. flattened <strap-shaped>/
 - 6. swollen/
- #452. Raceme-bases <branching - if racemes digitate>/
 - 1. simple <implicit>/
 - 2. dichotomously branched/
- #453. Raceme-bases <equality>/
 - 1. subequal/
 - 2. unequal (the longer measured)/
- #454. Raceme-bases <length>/
 - mm long/
- #455. Raceme-bases <indumentum> <ordered>/
 - 1. glabrous/
 - 2. pubescent/
 - 3. pilose/
 - 4. hirsute/
 - 5. plumose/
 - 6. stiffly setose/
- #456. Raceme-bases hairy <where>/
 - 1. generally <implicit>/
 - 2. at tip/
 - 3. on margins/
 - 4. at base/
 - 5. in axils/
- #457. Raceme-bases with <hair length>/
 - mm long hairs/

- #458. Raceme-bases with <length of appendage>/
mm long appendage/
- #459. Raceme-bases <persistence>/
1. persistent <on plant>/
2. shed with the raceme/
- #460. Raceme-bases <shape of base - if deciduous>/
1. truncate/
2. obtuse/
3. acute/
4. pungent/
- #461. Sexes <segregation - if monoecious on same inflorescence>/
1. mixed/
2. segregated/
- #462. Sexes <segregated> on <same or separate branches>/
1. unisexual branches/
2. bisexual branches/
- #463. Sexes with male <above or below - if segregated>/
1. above/
2. conjugate <unisexual branches at same level>/
3. below/
- #464. Sexes with <number of male spikelets>/
male spikelets per branch/
- #465. Spikelets <inclination relative to branch>/
1. embracing internode/
2. sunken/
3. squeezed between internode and pedicel <Andropogoneae - if pedicel free>/
4. appressed/
5. ascending/
6. spreading/
7. pectinate/
8. pendulous/
9. deflexed/
- #466. Spikelets <kinds of cluster. The clusters may include sterile and monoecious male spikelets. A deciduous inflorescence does not count as a single cluster, but may contain clusters. Inapplicable if bractiferous>/
1. solitary/
2. in pairs, one sessile and fertile and the other (companion) spikelet pedicelled <may include barren pedicels>/
3. in pairs/
4. in threes <not counting terminal triplet in a rame of paired spikelets>/
5. clustered at each node <more than 3 spikelets, but not involucreal>/
6. in a cluster of closely packed nodes/
7. subtended by an involucre <may be of only a few bristles or sterile spikelets; not counting basal sterile spikelets>/
- #467. Spikelets <presence of pedicels, which may be connate>/
1. sessile <or sessile with pedicel represented by a brief stump>/
2. sessile and pedicelled/
3. pedicelled/
- #468. Spikelets <number in cluster>/
in the cluster/
- #469. Spikelets <similarity, other than size>/
1. all alike <implicit>/
2. heteromorphic <comment on difference>/
- #470. Spikelets <equality if clustered>/
1. subequal/
2. the upper smaller/
3. the lower smaller/
4. the lateral <when level> smaller/
5. the central <when level> smaller/
- #471. Spikelets <relative pedicel length, if clustered with pedicelled sterile (or male) spikelets>/
1. on shorter pedicels than sterile/

- 2. on similar pedicels to sterile/
- 3. on longer pedicels than sterile/
- #472. Spikelets <number of sessile in cluster, if some fertile spikelets pedicelled>/ sessile/
- #473. Companion spikelets <presence of pedicels>/
 - 1. sessile/
 - 2. sessile & pedicelled/
 - 3. pedicelled/
- #474. Companion spikelets <number in cluster>/ in the cluster/
- #475. Male spikelets <diclinous male, presence of pedicels>/
 - 1. sessile/
 - 2. sessile and pedicelled/
 - 3. pedicelled/
- #476. Male spikelets <number in cluster>/ in a cluster/
- #477. Involucre composed of <type>/
 - 1. bristles <may include some sterile spikelets>/
 - 2. imperfect spikelets <only - includes Anthephora>/
- #478. Involucre <union of parts>/
 - 1. free throughout <implicit>/
 - 2. united into a herbaceous lobed scale/
 - 3. connate into a disc below/
 - 4. connate into a cup below/
 - 5. with pedicels forming a cup/
 - 6. with pedicels forming a long tube/
- #479. Involucre with <length of disc or cup>/ mm connate/
- #480. Involucre <shape of whole involucre> <ordered>/
 - 1. linear/
 - 2. lanceolate/
 - 3. elliptic/
 - 4. oblong/
 - 5. ovate/
 - 6. globose/
 - 7. oblate/
 - 8. obovate/
 - 9. flabellate/
 - 10. cuneate/
- #481. Involucre <length overall, but excluding single emergent bristle when present>/ mm long/
- #482. Involucre base <shape>/
 - 1. truncate/
 - 2. obtuse/
 - 3. obconical/
 - 4. bluntly stipitate/
 - 5. pungently stipitate/
- #483. Involucre base <length>/ mm long/
- #484. Involucre base <indumentum>/
 - 1. glabrous/
 - 2. pubescent/
 - 3. pilose/
 - 4. villous/
- #485. Involucral bristles <persistence>/
 - 1. persistent/
 - 2. deciduous with the fertile spikelets/
- #486. Involucral bristles <branching>/
 - 1. simple <implicit>/
 - 2. branched/

- #487. Involucral bristles <few or many>/
 1. few <implicit>/
 2. numerous/
- #488. Involucral bristles <whorls>/
 1. in one whorl/
 2. with an outer whorl of thinner bristles/
 3. emerging irregularly from body of a burr/
- #489. Involucral bristles <number>/
 in principal whorl <excluding the whorl of short outer bristles, if present>/
- #490. Involucral bristles <number per spikelet if assignable - spikelets include abortive ones>/
 per spikelet/
- #491. Involucral inner bristles <relative length of inner and outer>/
 1. shorter than outer/
 2. subequal to outer/
 3. longer than outer/
- #492. Involucral bristles <presence of 1 longer bristle>/
 1. with longest bristle scarcely emergent/
 2. with one conspicuously longer bristle/
- #493. Involucral bristles <length above union of longest>/
 mm long/
- #494. Involucral bristles <flattening>/
 1. terete/
 2. flattened/
 3. expanded <narrowly elliptic and cartilaginous>/
- #495. Involucral bristles <presence of grooves>/
 1. without grooves/
 2. grooved on the face/
- #496. Involucral bristles <stiffness>/
 1. flexible/
 2. rigid/
- #497. Involucral bristles <stickiness>/
 1. without exudate <implicit>/
 2. viscid/
- #498. Involucral bristles <roughness>/
 1. smooth/
 2. antrorsely scaberulous <only>/
 3. retrorsely scaberulous <at least partly>/
- #499. Involucral bristles retrorse <whether wholly or partly>/
 1. entirely/
 2. above, antrorse below/
 3. mingled with antrorse scabridity/
- #500. Involucral bristles <indumentum> <ordered>/
 1. glabrous/
 2. pubescent/
 3. ciliate <or pilose>/
 4. villous/
 5. plumose/
 6. woolly/
- #501. Involucral bristles <shape of tip>/
 1. obtuse/
 2. acute/
 3. spinose/
 4. attenuate <implicit>/
- #502. Pedicels <presence. Refers to principal pedicels - usually supporting sterile spikelets in Andropogoneae -
 but clarify in comment if ambiguous. Not counting basal sterile spikelets>/
 1. absent <or square and inconspicuous> <implicit>/
 2. present <or square and ornamented>/
- #503. Pedicels <fusion>/
 1. free <implicit>/
 2. adnate at the base to lower glume of sessile spikelet/

- 3. with the longest <of several> adnate below to <unjointed> rhachis/
- 4. fused to internode/
- 5. fused to each other/
- #504. Pedicels united <how much - if fused to internode or each other>/
 - 1. wholly/
 - 2. along margins <or some of them. When fused to each other>/
 - 3. at tip/
 - 4. below/
- #505. Pedicels <shape>/
 - 1. filiform/
 - 2. linear/
 - 3. columnar <cultrate>/
 - 4. oblong/
 - 5. narrowly elliptic/
 - 6. clavate <linear below, widening above - but tip scored separately>/
 - 7. cuneate/
 - 8. pyriform/
 - 9. inflated/
 - 10. reduced to a stump <but bearing ornamentation, the spikelets subsessile>/
- #506. Pedicels <transverse section>/
 - 1. terete/
 - 2. semiterete/
 - 3. angular/
 - 4. flattened/
 - 5. foliaceous/
- #507. Pedicels <curvature>/
 - 1. straight/
 - 2. curved/
 - 3. flexuous/
 - 4. sinuous/
 - 5. recurved/
- #508. Pedicels <equality>/
 - 1. subequal/
 - 2. unequal/
- #509. Pedicels <length; generally of principals in a raceme or laterals in a panicle>/
 - mm long/
- #510. Pedicels <length as % of fertile spikelet>/
 - % of length of fertile spikelet/
- #511. Pedicels <length as % of internode - mainly Andropogoneae>/
 - % of length of internode/
- #512. Pedicels <length of terminal if different>/
 - mm long at branch tip/
- #513. Pedicels <presence of glands>/
 - 1. eglandular/
 - 2. glandular/
- #514. Pedicels <presence of translucent median line>/
 - 1. without a translucent median line <implicit>/
 - 2. with a translucent median line (also present in internodes)/
- #515. Pedicels <roughness>/
 - 1. smooth/
 - 2. scaberulous/
 - 3. scabrous/
- #516. Pedicels <indumentum>/
 - 1. glabrous/
 - 2. indumented/
- #517. Pedicels <indumentum type> <ordered>/
 - 1. ciliate <or pilose>/
 - 2. bearing a few <long> hairs/
 - 3. puberulous/
 - 4. pubescent/

- 5. villous/
- 6. plumose/
- 7. setose <hispid>/
- #518. Pedicels hairy <at tip or base>/
 - 1. all along/
 - 2. all along but hairs longer above/
 - 3. at tip <only>/
 - 4. above/
 - 5. in the middle/
 - 6. below/
 - 7. at base/
- #519. Pedicels hairy on <surface or margins>/
 - 1. surface/
 - 2. margins <more than 1>/
 - 3. one margin/
- #520. Pedicels with <hair colour>/
 - 1. white hairs/
 - 2. grey hairs/
 - 3. yellow hairs/
 - 4. tawny hairs/
 - 5. dark brown hairs/
 - 6. red hairs/
 - 7. purple hairs/
- #521. Pedicels with <length of hairs>/
 - mm long hairs/
- #522. Pedicels <with> tip <shape>/
 - 1. rectangular/
 - 2. oblique/
 - 3. widened <but shape indefinite>/
 - 4. discoid/
 - 5. cupuliform/
 - 6. globular/
 - 7. pyriform/
 - 8. lobed/
- #523. Pedicels <presence of appendages>/
 - 1. without appendage <implicit>/
 - 2. winged/
 - 3. auriculate <laterally>/
 - 4. toothed <a distinct apical tooth, as opposed to irregular lobes>/
 - 5. bibracteate <Oryza>/
- #524. Basal sterile spikelets <presence at base of inflorescence or individual racemes, but excluding companions in isolated triads>/
 - 1. absent <implicit>/
 - 2. represented by a single scale <glume or vestige>/
 - 3. rudimentary <but of several scales>/
 - 4. well-developed/
- #525. Basal sterile spikelets <number in inflorescence; or lower raceme when more than 1, but indicate this in comment>/
 - in number/
- #526. Basal sterile spikelets <number in upper raceme or rame>/
 - in upper racemes <or rame>/
- #527. Basal sterile spikelets <whether clustered>/
 - 1. single/
 - 2. paired/
 - 3. paired with a fertile pedicelled spikelet <but confined to base so not regular companions>/
- #528. Basal sterile spikelets <whether involucrel>/
 - 1. not involucrel <implicit>/
 - 2. forming an involucre about the fertile/
- #529. Basal sterile spikelets <special internodes>/
 - 1. with normal internodes <implicit>/

- 2. with both pairs arising at about the same level/
- 3. with swollen internode in lower raceme/
- #530. Basal sterile spikelets <presence of pedicels>/
 - 1. sessile <pedicels at most square>/
 - 2. sessile and pedicelled/
 - 3. pedicelled/
- #531. Basal sterile spikelets <persistence>/
 - 1. persistent <or tardily deciduous> <implicit>/
 - 2. deciduous with the fertile/
 - 3. separately deciduous/
- #532. Basal sterile spikelet pedicels <fusion to internode>/
 - 1. free <implicit>/
 - 2. fused to internode in lower raceme/
- #533. Basal sterile spikelet pedicels <shape>/
 - 1. linear/
 - 2. oblong/
 - 3. swollen <barrel-shaped> in lower raceme/
 - 4. square/
- #534. Basal sterile spikelet pedicels <length>/
 - mm long/
- #535. Basal sterile spikelets <sex, if well-developed>/
 - 1. barren/
 - 2. male/
- #536. Basal sterile spikelets <outline> <ordered>/
 - 1. linear/
 - 2. lanceolate/
 - 3. elliptic/
 - 4. oblong/
 - 5. ovate/
 - 6. orbicular/
 - 7. oblate/
 - 8. obovate/
 - 9. flabellate/
 - 10. cuneate/
- #537. Basal sterile spikelets <length>/
 - mm long/
- #538. Basal sterile spikelets <size relative to fertile>/
 - 1. smaller than fertile/
 - 2. equalling fertile/
 - 3. larger than fertile/
- #539. Basal sterile spikelet glumes <consistency of lower or only glume>/
 - 1. membranous/
 - 2. chartaceous/
 - 3. herbaceous/
 - 4. scarious/
 - 5. cartilaginous/
 - 6. coriaceous/
 - 7. indurate/
- #540. Basal sterile spikelet glumes <presence of wing>/
 - 1. wingless <implicit>/
 - 2. winged on keel/
 - 3. winged on margins/
- #541. Basal sterile spikelet glumes <presence of depressions>/
 - 1. without depressions <implicit>/
 - 2. pitted/
 - 3. lacunose/
- #542. Basal sterile spikelet glumes <roughness>/
 - 1. smooth/
 - 2. scaberulous/
 - 3. scabrous/

- 4. tuberculate/
- 5. rugose/
- #543. Basal sterile spikelet glumes <surface indumentum>/
 - 1. glabrous/
 - 2. pubescent/
 - 3. pilose/
 - 4. hirsute/
 - 5. villous/
 - 6. setose/
- #544. Basal sterile spikelet glumes with <hair colour>/
 - 1. white hairs/
 - 2. grey hairs/
 - 3. yellow hairs/
 - 4. tawny hairs/
 - 5. dark brown hairs/
 - 6. red hairs/
 - 7. purple hairs/
- #545. Basal sterile spikelet glumes <marginal vestiture>/
 - 1. smooth on margins/
 - 2. scabrous on margins/
 - 3. tuberculate on margins/
 - 4. ciliate on margins/
 - 5. setose on margins/
- #546. Basal sterile spikelet glumes <shape of apex>/
 - 1. emarginate/
 - 2. truncate/
 - 3. obtuse/
 - 4. acute/
 - 5. acuminate/
 - 6. attenuate/
 - 7. setaceously acuminate/
- #547. Basal sterile spikelet lower glume <presence of awn>/
 - 1. muticous/
 - 2. mucronate/
 - 3. awned/
- #548. Basal sterile spikelet lemmas <presence of awn>/
 - 1. awnless/
 - 2. awned/
- #549. Companion spikelets <presence, accompanying fertile spikelets in body of inflorescence; include isolated triads and barren pedicels>/
 - 1. absent <implicit>/
 - 2. represented by barren pedicels/
 - 3. represented by awns <record only number of awns, spikelet length and persistence, glume surface indumentum>/
 - 4. represented by single glumes/
 - 5. rudimentary <as to size>/
 - 6. developed/
 - 7. represented by two glumes/
- #550. Companion spikelets <similarity to fertile>/
 - 1. similar in size to fertile spikelets/
 - 2. smaller than fertile spikelets/
 - 3. larger than fertile spikelets/
- #551. Companion spikelets <sexuality>/
 - 1. bisexual/
 - 2. female/
 - 3. male/
 - 4. sterile/
- #552. Companion spikelets comprising <number of awn-like scales>/
 - 1. 1 awn/
 - 2. 2 awns/

- 3. a tuft of awns/
- #553. Companion spikelets <presence of lemmas - if applicable>/
 - 1. comprising 2 unequal glumes without lemmas/
 - 2. comprising 2 subequal glumes without lemmas/
 - 3. containing empty lemmas/
 - 4. male/
 - 5. male with a few bisexual/
- #554. Companion spikelets <symmetry>/
 - 1. symmetrical/
 - 2. asymmetrical/
- #555. Companion spikelets <outline, unless awn-like> <ordered>/
 - 1. linear/
 - 2. lanceolate/
 - 3. elliptic/
 - 4. oblong/
 - 5. ovate/
 - 6. orbicular/
 - 7. oblate/
 - 8. obovate/
 - 9. flabellate/
 - 10. cuneate/
- #556. Companion spikelets <if developed - compression>/
 - 1. laterally compressed/
 - 2. subterete/
 - 3. dorsally compressed/
- #557. Companion spikelets <length; including awn-like spikelets>/
 - mm long/
- #558. Companion spikelets <length relative to fertile, unless awn-like>/
 - 1. shorter than fertile/
 - 2. as long as fertile/
 - 3. longer than fertile/
- #559. Companion spikelets <persistence>/
 - 1. persistent/
 - 2. deciduous with the fertile <of its own segment when racemose>/
 - 3. fused to and deciduous with fertile spikelet belonging to segment above/
 - 4. separately deciduous/
- #560. Companion spikelet callus <presence>/
 - 1. indistinct <implicit>/
 - 2. square/
 - 3. oblong/
 - 4. cuneate/
 - 5. linear/
- #561. Companion spikelet callus <length>/
 - mm long/
- #562. Companion spikelet callus <shape of base>/
 - 1. 2-toothed/
 - 2. emarginate/
 - 3. truncate/
 - 4. obtuse/
 - 5. acute/
 - 6. pungent/
- #563. Companion spikelet glumes <union>/
 - 1. free/
 - 2. united below/
- #564. Companion spikelet glumes <equality of width>/
 - 1. similar in width/
 - 2. markedly unequal in width/
- #565. Companion spikelet glumes <lower or only glume - consistency>/
 - 1. membranous/
 - 2. chartaceous/

- 3. herbaceous/
- 4. cartilaginous/
- 5. coriaceous/
- 6. indurate/
- 7. subulate <apical characters inapplicable>/
- #566. Companion spikelet glumes <consistency of margins>/
 - 1. similar <consistency> on margins <implicit>/
 - 2. thinner on margins/
 - 3. thicker on margins/
- #567. Companion spikelet glumes <length>/
 - mm long/
- #568. Companion spikelet glumes <presence of glands>/
 - 1. eglandular/
 - 2. glandular/
- #569. Companion spikelet glumes <presence of keels>/
 - 1. without keels/
 - 2. keeled/
- #570. Companion spikelet glumes <presence of wings>/
 - 1. wingless <implicit>/
 - 2. winged on keels/
 - 3. winged on margins/
- #571. Companion spikelet glumes <nerve distinctness>/
 - 1. inconspicuously nerved/
 - 2. distinctly nerved/
 - 3. ribbed/
- #572. Companion spikelet glumes <nerve number>/
 - nerved/
- #573. Companion spikelet glumes <presence of depressions>/
 - 1. without depressions <implicit>/
 - 2. pitted/
 - 3. lacunose/
 - 4. sulcate/
 - 5. concave/
- #574. Companion spikelet glumes <surface roughness, incl awn-like spikelets> <ordered>/
 - 1. smooth/
 - 2. scaberulous/
 - 3. scabrous/
 - 4. spinulose/
 - 5. tuberculate/
 - 6. muricate/
 - 7. rugose/
- #575. Companion spikelet glumes <surface indumentum, incl awn-like spikelets> <ordered>/
 - 1. glabrous/
 - 2. puberulous/
 - 3. pubescent/
 - 4. pilose/
 - 5. hirsute/
 - 6. villous/
 - 7. plumose/
 - 8. setose/
- #576. Companion spikelet glumes with <hair colour>/
 - 1. white hairs <implicit>/
 - 2. grey hairs/
 - 3. yellow hairs/
 - 4. tawny hairs/
 - 5. dark brown hairs/
 - 6. red hairs/
 - 7. purple hairs/
- #577. Companion spikelet glumes <marginal roughness>/
 - 1. smooth on margins/

- 2. scaberulous on margins/
- 3. scabrous on margins/
- 4. spinulose on margins/
- 5. tuberculate on margins/
- #578. Companion spikelet glumes <marginal hairs>/
 - 1. eciliate on margins/
 - 2. ciliolate on margins/
 - 3. ciliate on margins/
 - 4. setose on margins/
- #579. Companion spikelet glumes <incision>/
 - 1. entire/
 - 2. erose/
 - 3. dentate/
 - 4. lobed/
- #580. Companion spikelet glumes <number of teeth or lobes>/
 - fid/
- #581. Companion spikelet glumes <shape of apex> <ordered>/
 - 1. emarginate/
 - 2. truncate/
 - 3. obtuse/
 - 4. acute/
 - 5. acuminate/
 - 6. attenuate/
 - 7. setaceously acuminate/
 - 8. caudate/
- #582. Companion spikelet glumes <presence of awn>/
 - 1. muticous/
 - 2. pungent/
 - 3. mucronate/
 - 4. awned/
- #583. Companion spikelet glumes <number of awns, if both glumes present>/
 - 1. one glume awned/
 - 2. both glumes awned/
 - 3. several-awned <more than 1 per glume>/
- #584. Companion spikelet glumes with <awn length>/
 - mm long awn/
- #585. Companion spikelet glumes awn <whether hairy>/
 - 1. glabrous <implicit>/
 - 2. pubescent/
 - 3. ciliate/
 - 4. plumose/
- #586. Companion spikelet lemmas <number>/
 - /
- #587. Companion spikelet lemmas <exsertion>/
 - 1. exserted from glumes/
 - 2. enclosed by glumes/
- #588. Companion spikelet lemmas <length>/
 - mm long/
- #589. Companion spikelet lemmas <incision>/
 - 1. entire/
 - 2. dentate/
 - 3. lobed/
- #590. Companion spikelet lemmas <presence of awns>/
 - 1. muticous/
 - 2. 1-awned/
 - 3. several-awned/
- #591. Companion spikelet lemmas with <awn length>/
 - mm long awn/
- #592. Apical sterile spikelets <presence at apex of inflorescence or individual racemes, but excluding companions forming pairs or triads with fertile spikelets>/

1. absent <implicit>/
 2. awn-like/
 3. rudimentary <much smaller than fertile>/
 4. barren <with well developed glumes>/
 5. male/
- #593. Apical sterile spikelets <number>/
in number/
- #594. Apical sterile spikelets <continuity with fertile portion>/
1. continuous with fertile portion of inflorescence/
 2. abruptly narrower than fertile portion of inflorescence/
- #595. Apical sterile spikelets <length>/
mm long/
- #596. Fertile spikelets <no. of florets>/
1. 1-flowered/
 2. 2-flowered/
 3. at least 3-flowered/
 4. many flowered/
- #597. Fertile spikelets <no of florets and sexuality>/
1. 2-flowered, the lower floret barren (rarely male), the upper fertile <rarely with rachilla extension or rudiment>/
 2. 2-flowered, both fertile/
 3. 1 or more flowered, with 1 fertile floret/
 4. many flowered, with at least 2 fertile florets/
 5. 1-flowered/
- #598. Fertile spikelets comprising <number of basal sterile florets or vestiges, if present>/
basal sterile florets/
- #599. Fertile spikelets comprising <number of fertile florets>/
fertile floret(s)/
- #600. Fertile spikelets <sexuality, when two flowered>/
1. lower floret sterile, upper fertile/
 2. lower floret male, upper fertile/
 3. lower floret sterile or male, upper fertile/
 4. lower floret fertile, upper sterile/
 5. <both fertile>/
- #601. Fertile spikelets <key couplet for 1-flowered groups> <mandatory>/
1. with 1 fertile floret <with or without additional sterile florets>/
 2. with 2 or more fertile florets/
- #602. Fertile spikelets <presence of apical florets>/
1. without rachilla extension <beyond uppermost fertile floret>/
 2. with a barren rachilla extension/
 3. with diminished <sterile or smaller> florets at the apex/
- #603. Fertile spikelets <outline> <ordered>/
1. linear/
 2. lanceolate/
 3. elliptic/
 4. oblong/
 5. ovate/
 6. orbicular/
 7. oblate/
 8. obovate/
 9. oblanceolate/
 10. rhomboid <incl scutate, pentagonal>/
 11. cuneate/
- #604. Fertile spikelets <comparative width of outline>/
1. narrowly proportioned/
 2. moderately proportioned <implicit>/
 3. broadly proportioned/
- #605. Fertile spikelets <distinctive solid shape>/
1. of unremarkable solid shape <implicit>/
 2. thorn-like/

- 3. fusiform/
- 4. turbinate/
- 5. urceolate/
- 6. cochleate/
- 7. hemispherical/
- 8. globose/
- #606. Fertile spikelets with <shape of base above callus>/
 - 1. cordate base/
 - 2. truncate base/
 - 3. obtuse base/
 - 4. acute base/
 - 5. attenuate base/
- #607. Fertile spikelets <straightness>/
 - 1. straight <implicit>/
 - 2. curved/
 - 3. tilted on the pedicel/
- #608. Fertile spikelets <compression of fertile> <mandatory>/
 - 1. laterally compressed/
 - 2. terete/
 - 3. dorsally compressed/
- #609. Fertile spikelets compressed <how much>/
 - 1. slightly <spikelets plump>/
 - 2. moderately <implicit>/
 - 3. strongly/
- #610. Fertile spikelets <profile curvature>/
 - 1. symmetrical <implicit>/
 - 2. gibbous/
 - 3. turgidly plano-convex <the flat side slightly gibbous>/
 - 4. plano-convex/
 - 5. concavo-convex/
- #611. Fertile spikelets <shape of apex> <ordered>/
 - 1. truncate/
 - 2. obtuse/
 - 3. subacute/
 - 4. acute/
 - 5. acuminate/
 - 6. cuspidate/
 - 7. rostrate/
 - 8. caudate/
- #612. Fertile spikelets <length>/
 - mm long/
- #613. Fertile spikelets <width>/
 - mm wide/
- #614. Fertile spikelets with hairs extending <length of hairs, if any, beyond apex>/
 - mm beyond apex/
- #615. Fertile spikelets <abscission> <mandatory>/
 - 1. persistent on plant <cereals>/
 - 2. falling entire/
 - 3. breaking up at maturity/
- #616. Fertile spikelets deciduous <site of abscission - if falling entire>/
 - 1. from the base <implicit>/
 - 2. with the pedicel <but no other organ. There is a homology problem, and a square or oblong stipe is treated as the callus of a sessile spikelet>/
 - 3. in a cluster with fused pedicels <and sometimes a basal extension, but no other organ>/
 - 4. with accessory branch structures/
- #617. Fertile spikelets <secondary abscission - if falling entire>/
 - 1. without secondary abscission <implicit>/
 - 2. readily shedding glumes/
 - 3. readily shedding fertile florets/
 - 4. readily shedding apical florets/

- #618. Pedicel base <shape - if falling attached to its spikelet (or cluster when pedicels fused)>/
1. truncate/
 2. acute/
 3. pungent/
 4. hooked/
- #619. Spikelets <rhachilla persistence - if spikelets break up>/
1. rhachilla deciduous <excepting glumes & sterile florets> <implicit>/
 2. rhachilla persistent <at least proximally, until lemmas have been shed>/
- #620. Spikelets disarticulating <where - if rhachilla deciduous>/
1. below each fertile floret <or below sterile if attached>/
 2. between fertile florets but the lowest falling with glumes attached/
 3. between fertile florets but the distal falling as a whole/
 4. below groups of fertile florets/
 5. above glumes but not between florets <when 2 or more fertile>/
- #621. Spikelets <palea retention on persistent rhachilla>/
1. retaining paleas/
 2. shedding paleas/
- #622. Spikelets <extent of rhachilla toughness>/
1. tough throughout <implicit>/
 2. fragile above/
 3. becoming fragile after lemmas shed/
- #623. Spikelets with the distal <fertile> florets <where disarticulating - if rhachilla partially tough>/
1. disarticulating separately/
 2. disarticulating into irregular segments/
 3. falling as a whole/
- #624. Spikelet callus <shape> <ordered>/
1. brief <implicit>/
 2. square <as long as wide>/
 3. oblong/
 4. cuneate/
 5. linear/
 6. globular/
 7. toroidal/
- #625. Spikelet callus <curvature>/
1. straight/
 2. curved/
- #626. Spikelet callus <whether adnate to glume>/
1. free from lower glume <implicit>/
 2. incorporating lowest rhachilla internode with adnate lower glume/
 3. supplemented by thickened base of upper glume/
- #627. Spikelet callus <length>/
- mm long/
- #628. Spikelet callus <indumentum> <ordered>/
1. glabrous/
 2. pubescent/
 3. pilose/
 4. bearded/
- #629. Spikelet callus hairy <where>/
1. throughout/
 2. above/
 3. below/
 4. on the sides/
- #630. Spikelet callus base <shape>/
1. truncate/
 2. obtuse/
 3. acute/
 4. pungent/
 5. 2-toothed/
- #631. Spikelet callus <presence of central peg - if truncate>/
1. simple <implicit>/

- 2. with central boss/
- 3. with central peg/
- #632. Spikelet callus <angle of attachment>/
 - 1. attached transversely/
 - 2. attached obliquely/
 - 3. inserted/
- #633. Spikelet callus with <shape of scar>/
 - 1. circular scar/
 - 2. elliptic scar/
 - 3. linear scar/
- #634. Spikelet callus hairs <colour>/
 - 1. white/
 - 2. grey/
 - 3. yellow/
 - 4. tawny/
 - 5. dark brown/
 - 6. red/
 - 7. purple/
- #635. Spikelet callus hairs <length>/
 - mm long/
- #636. Spikelet callus hairs <length as % of spikelet>/
 - % of length of spikelet/
- #637. Rhachilla internodes <elongation between glumes and lowest fertile floret>/
 - 1. brief up to lowest fertile floret <implicit>/
 - 2. elongated between glumes/
 - 3. elongated below <proximal> basal sterile floret/
 - 4. elongated between basal sterile florets <when more than 1>/
 - 5. elongated below proximal fertile floret/
- #638. Rhachilla elongation <thickness>/
 - 1. stout/
 - 2. slender/
 - 3. sinuous but straightening at maturity to extrude floret/
- #639. Rhachilla elongation <length>/
 - mm long/
- #640. Rhachilla elongation <indumentum>/
 - 1. glabrous <implicit>/
 - 2. scabrous/
 - 3. pubescent/
 - 4. pilose/
- #641. Rhachilla internodes <presence between fertile florets - if more than 1>/
 - 1. suppressed between <fertile> florets <these arising at about the same level>/
 - 2. definite <between fertile florets. Subsequent characters refer to these internodes; for sterile terminal segments see rhachilla extension> <implicit>/
- #642. Rhachilla internodes <transverse section>/
 - 1. terete/
 - 2. angular/
 - 3. compressed/
 - 4. flattened/
- #643. Rhachilla internodes <thickening>/
 - 1. narrow <implicit>/
 - 2. clavate/
 - 3. thickened/
 - 4. spongy and fused to embedded lemmas/
- #644. Rhachilla internodes <alignment>/
 - 1. straight <implicit>/
 - 2. curved/
 - 3. zig-zag/
 - 4. springy and forming a hair trap/
- #645. Rhachilla internodes <length>/
 - mm long/

- #646. Rhachilla internodes <visibility>/
 1. obscured by lemmas/
 2. eventually visible <entirely or partly> between lemmas/
 #647. Rhachilla internodes <surface roughness>/
 1. smooth/
 2. scaberulous/
 #648. Rhachilla internodes <indumentum> <ordered>/
 1. glabrous <implicit>/
 2. sparsely hairy/
 3. pubescent/
 4. pilose/
 5. villous/
 #649. Rhachilla internodes hairy <extent>/
 1. all along <implicit>/
 2. all along but hairs longer above/
 3. at tip <only>/
 4. above/
 5. below/
 #650. Rhachilla internodes with <hair length>/
 mm long hairs/
 #651. Floret callus <presence: a callus forms the foot of a deciduous floret (or of sterile florets if attached); the
 rhachilla internode, which falls with and alongside the floret, may be evident or obsolete>/
 1. brief <implicit>/
 2. evident <not much longer than wide>/
 3. elongated/
 #652. Floret callus <curvature>/
 1. straight <implicit>/
 2. curved/
 #653. Floret callus <length>/
 mm long/
 #654. Floret callus <presence of wings>/
 1. without wings <implicit>/
 2. winged <or scarred>/
 3. subtended by a fleshy frill/
 #655. Floret callus with <type of wings>/
 1. apical wings adnate to lemma/
 2. apical wings shrivelled to concave scars <in dried state>/
 3. apical wings reduced to convex swellings/
 4. free apical wings/
 5. lateral wings/
 #656. Floret callus with this appendage <length of wings or frill>/
 mm long/
 #657. Floret callus <indumentum>/
 1. glabrous/
 2. sparsely hairy/
 3. pubescent/
 4. pilose/
 5. bearded/
 6. woolly/
 #658. Floret callus hairy <where>/
 1. on the surface/
 2. on the margins <dorsally subglabrous>/
 3. in a ring above/
 4. in a ring below/
 5. in rings above and below/
 6. in 1 tuft/
 7. in 2 tufts/
 8. in 4 tufts/
 #659. Floret callus with <longer hairs where>/
 1. subequal hairs/

- 2. longer hairs above/
- 3. longer hairs below/
- 4. longer hairs above and below/
- #660. Floret callus <shape of base>/
 - 1. truncate <or emarginate; not expanded>/
 - 2. obtuse <implicit>/
 - 3. acute/
 - 4. pungent/
 - 5. unequally 2-toothed <pungent tooth with lateral spur>/
 - 6. 2-toothed/
 - 7. expanded/
- #661. Floret callus <disarticulation>/
 - 1. disarticulating transversely/
 - 2. disarticulating obliquely/
 - 3. fracturing irregularly/
- #662. Floret callus with <shape of scar>/
 - 1. circular scar/
 - 2. elliptic scar/
 - 3. linear scar/
- #663. Floret callus hairs <length>/
 - mm long/
- #664. Floret callus hairs <length as fraction of lemma CHECK%>/
 - length of lemma/
- #665. Glumes <presence>/
 - 1. both absent or obscure/
 - 2. one, the lower absent or obscure/
 - 3. one, the upper absent or obscure/
 - 4. one to two the lower present in some spikelets <often the sessile of a pair>/
 - 5. two <implicit>/
 - 6. several <more than 2, or indefinite number in bamboos>/
- #666. Glumes comprising <number of gemmiferous bracts between distal prophyll and empty glumes>/
 - gemmiferous bracts/
- #667. Glumes <number>/
 - empty glumes/
- #668. Glumes <whether lateral>/
 - 1. opposite <implicit>/
 - 2. lateral <opposite, but rotated with respect to lemma>/
 - 3. oblique <not strictly opposite>/
 - 4. collateral <side by side>/
 - 5. whorled/
- #669. Glumes <union>/
 - 1. free <implicit>/
 - 2. connate along margins below/
- #670. Glumes <fraction connate>/
 - of their length connate/
- #671. Glumes <persistence - if spikelets break up>/
 - 1. persistent <on branch>/
 - 2. lower persistent, upper deciduous/
 - 3. lower deciduous, upper persistent/
 - 4. <both> deciduous/
 - 5. deciduous <together> with pedicel attached/
- #672. Glumes <similarity, apart from some difference in size>/
 - 1. similar <in shape, texture, etc>/
 - 2. dissimilar/
- #673. Glumes <relative width>/
 - 1. with lower narrower than upper/
 - 2. subequal in width/
 - 3. with lower wider than upper/
- #674. Glumes <consistency relative to fertile lemma>/
 - 1. thinner than fertile lemma/

- 2. similar to fertile lemma in texture <implicit>/
- 3. firmer than fertile lemma/
- #675. Glumes <sheen>/
 - 1. dull <implicit>/
 - 2. shiny/
- #676. Glumes <divergence>/
 - 1. incurved at apex/
 - 2. parallel to lemmas <implicit>/
 - 3. recurved at apex/
 - 4. gaping/
- #677. Glumes <length of longer relative to rest of spikelet, excluding awns>/
 - 1. shorter than spikelet/
 - 2. reaching apex of florets/
 - 3. exceeding apex of florets/
- #678. Lower glume <outline> <ordered>/
 - 1. subulate <or bristle-like, with indefinite or briefly triangular body - apical characters inapplicable except for incision>/
 - 2. linear/
 - 3. lanceolate/
 - 4. elliptic/
 - 5. oblong/
 - 6. ovate/
 - 7. orbicular/
 - 8. oblate/
 - 9. obovate/
 - 10. flabellate/
 - 11. cuneate/
- #679. Lower glume <symmetry>/
 - 1. symmetrical/
 - 2. asymmetrical/
- #680. Lower glume <clasping>/
 - 1. not clasping/
 - 2. clasping <base of spikelet to form a collar - mainly Paniceae>/
 - 3. auriculate at base/
- #681. Lower glume <gibbosity>/
 - 1. not gibbous <implicit>/
 - 2. gibbous/
 - 3. saccate/
- #682. Lower glume <length>/
 - mm long/
- #683. Lower glume <length as fraction of upper CHECK%>/
 - % length of upper glume/
- #684. Lower glume <length as fraction of spikelet (mainly Paniceae)>/
 - % of length of spikelet/
- #685. Lower glume <consistency>/
 - 1. hyaline/
 - 2. membranous/
 - 3. chartaceous/
 - 4. herbaceous/
 - 5. scarious/
 - 6. cartilaginous/
 - 7. coriaceous/
 - 8. indurate/
- #686. Lower glume <apical consistency>/
 - 1. of similar consistency above <implicit>/
 - 2. much thinner above/
 - 3. firmer above/
- #687. Lower glume <marginal consistency>/
 - 1. of similar consistency on margins <implicit>/
 - 2. much thinner on margins/

3. firmer on margins/
- #688. Lower glume <colour>/
 1. pallid/
 2. yellow/
 3. light green/
 4. mid-green/
 5. dark green/
 6. glaucous/
 7. grey/
 8. light brown/
 9. dark brown/
 10. red/
 11. purple/
 12. black/
- #689. Lower glume <presence of sessile glands>/
 1. eglandular/
 2. glandular/
- #690. Lower glume <stickiness>/
 1. without exudate <implicit>/
 2. viscid/
 3. resinous/
- #691. Lower glume <oil streaks>/
 1. without oil streaks <implicit>/
 2. with oil streaks/
- #692. Lower glume <presence of keels>/
 1. without keels/
 2. keeled/
- #693. Lower glume <number of keels>/
 1. 1-keeled/
 2. 2-keeled <or inflexed>/
- #694. Lower glume keel-less <extent>/
 1. throughout/
 2. except near apex/
- #695. Lower glume keeled <extent>/
 1. all along <implicit>/
 2. above/
 3. below/
- #696. Lower glume keeled <position - if 2-keeled>/
 1. dorsally/
 2. dorsally below, flaring to lateral above/
 3. laterally/
 4. frontally/
- #697. Lower glume keeled <distinctness>/
 1. sharply <implicit>/
 2. obtusely <with abrupt flexion rather than sharp keel>/
- #698. Lower glume <presence of wings>/
 1. wingless <implicit>/
 2. winged on keel/
 3. winged on margins/
- #699. Lower glume winged <width>/
 1. broadly/
 2. moderately <implicit>/
 3. narrowly/
- #700. Lower glume winged <extent>/
 1. all along/
 2. near apex/
 3. above/
 4. in the middle/
 5. below/
- #701. Lower glume <nerve number>/

- nerved/
- #702. Lower glume <with> midnerve <extension to apex>/
 1. extending to apex/
 2. falling short of apex/
- #703. Lower glume midnerve <midnerve or keels - roughness. Knobs and spines on 2-keeled glumes are treated as surface(flank) roughness> <ordered>/
 1. smooth/
 2. scaberulous/
 3. scabrous/
 4. spinulose/
 5. tuberculate/
 6. with pectinate knobs/
- #704. Lower glume midnerve <presence of hairs(except tufts) or spines>/
 1. eciliate <implicit>/
 2. ciliolate/
 3. ciliate/
 4. pectinately ciliate <stiff and evenly spaced>/
 5. pectinately spinose/
 6. pubescent <when different from surface>/
- #705. Lower glume lateral nerves <clarity>/
 1. absent/
 2. obscure/
 3. distinct <implicit>/
 4. prominent/
 5. <equally> thickened/
 6. unequally thickened/
- #706. Lower glume lateral nerves <presence of ribs>/
 1. without ribs <implicit>/
 2. ribbed/
- #707. Lower glume lateral nerves <presence of cross-nerves or branching>/
 1. without connecting nerves/
 2. transversely connected at apex <only>/
 3. with cross-nerves/
 4. <dichotomously> branching above/
- #708. Lower glume lateral nerves <divergence>/
 1. meeting <and uniting> at apex/
 2. convergent at apex/
 3. parallel at apex/
 4. divergent at apex/
- #709. Lower glume lateral nerves <extension to apex>/
 1. excurrent/
 2. all extending to apex/
 3. with some <but not all> extending to apex/
 4. all falling short of apex/
- #710. Lower glume lateral nerves <presence in keel>/
 1. dissociated from keel <keel 1-nerved> <implicit>/
 2. several in each keel/
- #711. Lower glume intercarinal nerves <presence - if 2-keeled>/
 1. absent/
 2. obscure/
 3. distinct/
 4. absent below, prominent above/
- #712. Lower glume intercarinal nerves <number>/
 - in number/
- #713. Lower glume surface <depression in transverse section>/
 1. convex <implicit>/
 2. flat/
 3. concave/
 4. with V-shaped depression <between keels>/
 5. with a longitudinal median groove/

- 6. grooved on either side of midnerve/
- 7. deeply depressed <between keels>/
- #714. Lower glume surface impressed <extent of flattening or depression>/
 - 1. throughout <implicit>/
 - 2. above/
 - 3. below/
 - 4. with a boss blocking lower end/
- #715. Lower glume surface <roughness> <ordered>/
 - 1. smooth <implicit>/
 - 2. asperulous/
 - 3. scabrous/
 - 4. spinose/
 - 5. with hooked spines/
 - 6. tuberculate/
 - 7. wrinkled/
 - 8. muricate <pattern of knobs>/
 - 9. rugose/
 - 10. cancellate <latticed pattern>/
 - 11. areolate <pattern of depressions>/
- #716. Lower glume surface rough <where, excluding keels>/
 - 1. generally <implicit>/
 - 2. at apex/
 - 3. above/
 - 4. in the middle/
 - 5. below/
 - 6. on flanks <only>/
 - 7. on nerves/
 - 8. between nerves/
 - 9. in lines <unrelated to nerves>/
 - 10. in transverse rows/
- #717. Lower glume surface <presence of waist>/
 - 1. not waisted <implicit>/
 - 2. laterally waisted/
 - 3. transversely waisted <extending across back>/
- #718. Lower glume surface <presence of pits>/
 - 1. without pits <implicit>/
 - 2. pitted/
 - 3. lacunose/
 - 4. fenestrate/
- #719. Lower glume surface <general indumentum>/
 - 1. glabrous <except for keel, margins & special indumentum> <implicit>/
 - 2. indumented/
- #720. Lower glume surface <general indumentum type> <ordered>/
 - 1. puberulous/
 - 2. pubescent/
 - 3. pilose/
 - 4. hirsute/
 - 5. villous/
 - 6. hispidulous/
 - 7. hispid/
 - 8. setose/
 - 9. woolly/
- #721. Lower glume surface hairy <where>/
 - 1. generally <implicit>/
 - 2. at apex/
 - 3. above/
 - 4. in the middle/
 - 5. below/
 - 6. at base/
 - 7. on nerves/

- 8. between nerves/
- 9. in lines <unrelated to nerves>/
- #722. Lower glume surface with <hair type>/
 - 1. simple hairs <implicit>/
 - 2. tubercle-based hairs/
 - 3. hooked hairs/
 - 4. capitate hairs/
 - 5. clavate hairs/
 - 6. turgid hairs/
- #723. Lower glume surface <special indumentum - tufts>/
 - 1. without hair tufts <implicit>/
 - 2. with basal tufts of hair/
 - 3. with marginal tufts of hair/
 - 4. with a dorsal tuft of hair/
 - 5. with tufts of hair along primary nerve/
 - 6. with transverse tufts of hair/
 - 7. with a transverse fringe of hair/
 - 8. with an apical beard/
- #724. Lower glume inner surface <indumentum>/
 - 1. glabrous/
 - 2. scabrous/
 - 3. pubescent/
 - 4. pilose/
 - 5. villous/
- #725. Lower glume margins <inrolled>/
 - 1. flat/
 - 2. inrolled/
- #726. Lower glume margins <hairiness>/
 - 1. eciliate <implicit>/
 - 2. ciliolate/
 - 3. ciliate/
 - 4. tuberculately ciliate/
 - 5. setose/
- #727. Lower glume hairs <colour of principal hairs>/
 - 1. white/
 - 2. grey/
 - 3. yellow/
 - 4. tawny/
 - 5. dark brown/
 - 6. red/
 - 7. purple/
 - 8. black/
- #728. Lower glume hairs <length of principal hairs>/
 - mm long/
- #729. Lower glume apex <incision>/
 - 1. entire <implicit>/
 - 2. erose/
 - 3. with a unilateral tooth/
 - 4. dentate/
 - 5. lobed/
- #730. Lower glume apex <number of teeth or lobes>/
 - fid/
- #731. Lower glume apex <shape of apex or tip of lobes> <ordered>/
 - 1. emarginate/
 - 2. truncate/
 - 3. obtuse/
 - 4. acute/
 - 5. acuminate/
 - 6. attenuate/
 - 7. setaceously acuminate/

- 8. cuspidate/
- 9. rostrate/
- 10. caudate/
- 11. laterally pinched <compressed>/
- #732. Lower glume <with> apex <presence of awn>/
 - 1. muticous <implicit>/
 - 2. mucronate/
 - 3. awned/
 - 4. awned only on distal spikelets/
- #733. Lower glume <with> apex <no. of awns>/
 - awned/
- #734. Lower glume awn <position>/
 - 1. terminal <from apex or sinus> <implicit>/
 - 2. subapical/
 - 3. dorsal/
- #735. Lower glume awn <length>/
 - mm long/
- #736. Lower glume awn <whether hooked>/
 - 1. straight <implicit>/
 - 2. hooked/
- #737. Lower glume awn <vesture>/
 - 1. without vesture <implicit>/
 - 2. viscid/
 - 3. ciliolate/
 - 4. ciliate/
- #738. Upper glume <outline - of uppermost if more than 2> <ordered>/
 - 1. subulate <or bristle-like with indefinite or briefly triangular body - apical characters inapplicable except for incision>/
 - 2. linear/
 - 3. lanceolate/
 - 4. elliptic/
 - 5. oblong/
 - 6. ovate/
 - 7. orbicular/
 - 8. oblate/
 - 9. obovate/
 - 10. flabellate/
 - 11. cuneate/
- #739. Upper glume <symmetry>/
 - 1. symmetrical/
 - 2. asymmetrical/
- #740. Upper glume <presence of basal auricles>/
 - 1. without auricles <implicit>/
 - 2. auriculate at base/
- #741. Upper glume dorsally <straightness of back in profile>/
 - 1. convex in profile/
 - 2. straight in profile/
 - 3. concave in profile/
- #742. Upper glume <gibbosity>/
 - 1. not gibbous <implicit>/
 - 2. gibbous/
 - 3. saccate/
 - 4. spurred/
 - 5. waisted/
- #743. Upper glume <length>/
 - mm long/
- #744. Upper glume <length as fraction of lemma>/
 - % of length of adjacent fertile lemma/
- #745. Upper glume <length as fraction of spikelet>/
 - % of length of spikelet/

- #746. Upper glume <width relative to fertile lemma>/
1. narrower than lemma/
2. as wide as lemma/
3. wider than lemma/
#747. Upper glume <consistency>/
1. hyaline/
2. membranous/
3. chartaceous/
4. herbaceous/
5. scarious/
6. cartilaginous/
7. coriaceous/
8. indurate/
#748. Upper glume <apical consistency>/
1. of similar consistency above <implicit>/
2. much thinner above/
3. firmer above/
#749. Upper glume with <marginal consistency>/
1. undifferentiated margins <implicit>/
2. hyaline margins/
3. membranous margins/
4. chartaceous margins/
5. scarious margins/
6. cartilaginous margins/
#750. Upper glume <fenestration>/
1. not thinner in the body <implicit>/
2. thinner along midline/
#751. Upper glume <colour>/
1. pallid/
2. yellow/
3. light green/
4. mid-green/
5. dark green/
6. glaucous/
7. grey/
8. light brown/
9. dark brown/
10. red/
11. purple/
12. black/
#752. Upper glume <presence of sessile glands>/
1. eglandular/
2. glandular/
#753. Upper glume <exudate>/
1. without exudate <implicit>/
2. viscid/
3. resinous/
#754. Upper glume <keels>/
1. without keels/
2. keeled/
#755. Upper glume <no. of keels>/
1. 1-keeled/
2. 2-keeled/
#756. Upper glume keel-less <extent>/
1. throughout/
2. except near apex/
#757. Upper glume keeled <extent>/
1. all along <implicit>/
2. above/
3. below/

- #758. Upper glume <presence of wings>/
1. wingless <implicit>/
 2. winged on keel/
 3. winged on margins/
- #759. Upper glume winged <extent>/
1. all along/
 2. near apex/
 3. above/
 4. in the middle/
 5. below/
- #760. Upper glume <nerve number>/
- nerved/
- #761. Upper glume midnerve <clarity of mid or keel nerve>/
1. absent/
 2. obscure/
 3. distinct <implicit>/
 4. conspicuous/
 5. thickened/
- #762. Upper glume midnerve <depression>/
1. not depressed <implicit>/
 2. depressed/
 3. grooved on either side/
- #763. Upper glume midnerve <roughness> <ordered>/
1. smooth/
 2. scaberulous/
 3. scabrous/
 4. spinulose/
 5. tuberculate/
 6. with pectinate knobs/
- #764. Upper glume midnerve <presence of hairs(except tufts) or spines>/
1. eciliate <implicit>/
 2. ciliolate/
 3. ciliate/
 4. pectinately ciliate <stiff and evenly spaced>/
 5. pectinately spinose/
 6. pubescent <when different from surface>/
- #765. Upper glume lateral nerves <clarity>/
1. absent/
 2. obscure/
 3. distinct <implicit>/
 4. prominent/
 5. <equally> thickened/
 6. unequally thickened/
- #766. Upper glume lateral nerves <presence of ribs>/
1. without ribs <implicit>/
 2. ribbed/
- #767. Upper glume lateral nerves <presence of cross-nerves>/
1. without cross-nerves <implicit>/
 2. transversely connected at apex <only>/
 3. with cross-nerves/
- #768. Upper glume lateral nerves <divergence - mainly Triticeae>/
1. meeting <and uniting> at apex/
 2. convergent at apex/
 3. parallel at apex/
 4. divergent at apex/
- #769. Upper glume lateral nerves <extension to apex>/
1. excurrent/
 2. all extending to apex/
 3. with some <but not all> extending to apex/
 4. all falling short of apex/

- #770. Upper glume surface <roughness> <ordered>/
1. smooth <implicit>/
 2. asperulous/
 3. scabrous/
 4. spinose/
 5. with hooked spines/
 6. papillose/
 7. tuberculate/
 8. wrinkled/
 9. rugose/
- #771. Upper glume surface rough <where>/
1. generally <implicit>/
 2. at apex/
 3. above/
 4. in the middle/
 5. below/
 6. on nerves/
 7. between nerves/
 8. in lines <unrelated to nerves>/
- #772. Upper glume surface <general indumentum>/
1. glabrous <except for keel, margins & special indumentum> <implicit>/
 2. indumented/
- #773. Upper glume surface <indumentum type> <ordered>/
1. puberulous/
 2. pubescent/
 3. pilose/
 4. hirsute/
 5. villous/
 6. hispidulous/
 7. hispid/
 8. setose/
 9. woolly/
- #774. Upper glume surface hairy <where>/
1. generally <implicit>/
 2. at apex/
 3. above/
 4. in the middle/
 5. below/
 6. at base/
 7. on nerves/
 8. between nerves/
 9. in lines <unrelated to nerves>/
- #775. Upper glume surface with <hair type>/
1. simple hairs <implicit>/
 2. tubercle-based hairs/
 3. hooked hairs/
 4. capitate hairs/
 5. clavate hairs/
 6. turgid hairs/
 7. verruculose hairs/
- #776. Upper glume surface <special indumentum - tufts>/
1. without hair tufts <implicit>/
 2. with basal tufts of hair/
 3. with marginal tufts of hair/
 4. with a dorsal tuft of hair/
 5. with tufts of hair along primary nerve/
 6. with transverse tufts of hair/
 7. with a transverse fringe of hair/
 8. with an apical beard/
- #777. Upper glume inner surface <indumentum>/

- 1. glabrous/
- 2. scabrous/
- 3. pubescent/
- 4. pilose/
- 5. villous/
- #778. Upper glume margins <roughness>/
 - 1. smooth/
 - 2. scaberulous/
 - 3. scabrous/
 - 4. spinulose/
 - 5. tuberculate/
- #779. Upper glume margins <hairiness>/
 - 1. eciliate <implicit>/
 - 2. ciliolate/
 - 3. ciliate/
 - 4. villous/
 - 5. setose/
 - 6. pubescent/
- #780. Upper glume hairs <colour of principal hairs>/
 - 1. white/
 - 2. grey/
 - 3. yellow/
 - 4. tawny/
 - 5. dark brown/
 - 6. red/
 - 7. purple/
 - 8. black/
- #781. Upper glume hairs <length of principal hairs>/
 - mm long/
- #782. Upper glume apex <incision>/
 - 1. entire <implicit>/
 - 2. erose/
 - 3. with a unilateral tooth/
 - 4. dentate/
 - 5. lobed/
- #783. Upper glume apex <number of teeth or lobes>/
 - fid/
- #784. Upper glume apex <shape of apex or tip of lobes> <ordered>/
 - 1. emarginate/
 - 2. truncate/
 - 3. obtuse/
 - 4. acute/
 - 5. acuminate/
 - 6. attenuate/
 - 7. setaceously acuminate/
 - 8. cuspidate/
 - 9. rostrate/
 - 10. caudate/
 - 11. laterally pinched <compressed>/
- #785. Upper glume apex <presence of awns>/
 - 1. muticous <implicit>/
 - 2. mucronate/
 - 3. awned/
 - 4. awned only on distal spikelets/
- #786. Upper glume <no. of awns>/
 - awned/
- #787. Upper glume awn <position>/
 - 1. terminal <from apex or sinus> <implicit>/
 - 2. subapical/
 - 3. dorsal/

- 4. oblique/
- #788. Upper glume awn <length>/
mm long/
- #789. Upper glume awn <presence of hairs>/
 - 1. glabrous/
 - 2. hispidulous/
 - 3. ciliate/
 - 4. plumose/
- #790. Basal sterile florets <presence, including vestiges - controlling character for dependencies>/
 - 1. absent <implicit>/
 - 2. 1/
 - 3. 2 or more/
- #791. Basal sterile florets <similarity if more than 1>/
 - 1. similar/
 - 2. dissimilar/
- #792. Basal sterile florets <reduction to vestiges>/
 - 1. developed <implicit>/
 - 2. with vestigial lower floret/
 - 3. both vestigial/
- #793. Basal sterile florets <sex>/
 - 1. male/
 - 2. barren/
- #794. Basal sterile florets <presence of palea>/
 - 1. with palea/
 - 2. without significant palea <may be rudimentary; lemma present>/
- #795. Basal sterile florets <persistence - if spikelet breaks up>/
 - 1. persisting on inflorescence/
 - 2. separately deciduous/
 - 3. attached to and deciduous with the fertile/
- #796. Lemma of lower sterile floret <presence>/
 - 1. present <implicit>/
 - 2. absent <the floret represented by a palea>/
- #797. Lemma of lower sterile floret <comparison with other scales>/
 - 1. unlike other scales <implicit>/
 - 2. similar to upper glume/
 - 3. similar to fertile lemma/
- #798. Lemma of lower sterile floret <outline> <ordered>/
 - 1. subulate <apical characters inapplicable>/
 - 2. linear/
 - 3. lanceolate/
 - 4. elliptic/
 - 5. oblong/
 - 6. ovate/
 - 7. orbicular/
 - 8. oblate/
 - 9. trullate/
 - 10. obovate/
- #799. Lemma of lower sterile floret <presence of basal auricles>/
 - 1. without auricles <implicit>/
 - 2. auriculate at base/
- #800. Lemma of lower sterile floret <gibbosity>/
 - 1. not gibbous <implicit>/
 - 2. gibbous/
- #801. Lemma of lower sterile floret <length>/
mm long/
- #802. Lemma of lower sterile floret <length as fraction of fertile lemma>/
% of length of fertile lemma/
- #803. Lemma of lower sterile floret <length as fraction of spikelet>/
% of length of spikelet/
- #804. Lemma of lower sterile floret <consistency>/

1. hyaline/
 2. membranous/
 3. chartaceous/
 4. herbaceous/
 5. scarious/
 6. cartilaginous/
 7. coriaceous/
 8. indurate/
 9. fleshy/
- #805. Lemma of lower sterile floret <apical consistency>/
1. of similar consistency above <implicit>/
 2. much thinner above/
 3. firmer above/
- #806. Lemma of lower sterile floret <marginal consistency>/
1. of similar consistency on margins <implicit>/
 2. much thinner on margins/
 3. thicker on margins/
- #807. Lemma of lower sterile floret <fenestration>/
1. not thinner in the body <implicit>/
 2. thinner along midline/
 3. hyaline between nerves/
 4. fenestrate <with hyaline patches>/
- #808. Lemma of lower sterile floret <colour>/
1. pallid/
 2. yellow/
 3. light green/
 4. mid-green/
 5. dark green/
 6. glaucous/
 7. grey/
 8. light brown/
 9. dark brown/
 10. red/
 11. purple/
 12. black/
- #809. Lemma of lower sterile floret <presence of sessile glands>/
1. eglandular <implicit>/
 2. glandular/
- #810. Lemma of lower sterile floret <presence of keels>/
1. without keels <implicit>/
 2. 1-keeled/
 3. 2-keeled/
- #811. Lemma of lower sterile floret <presence of wings>/
1. wingless <implicit>/
 2. winged on keel/
 3. winged on margins/
- #812. Lemma of lower sterile floret <number of nerves>/
- nerved/
- #813. Lemma of lower sterile floret <clarity of midnerve>/
1. without midnerve/
 2. with obscure midnerve/
 3. with evident midnerve/
 4. with conspicuous midnerve/
- #814. Lemma of lower sterile floret <clarity of lateral nerves>/
1. without lateral nerves/
 2. obscurely nerved/
 3. distinctly nerved <implicit>/
 4. prominently nerved/
 5. with thickened nerves/
- #815. Lemma of lower sterile floret <presence of ribs>/

1. without ribs <implicit>/
2. ribbed/
- #816. Lemma of lower sterile floret <nerve spacing>/
 1. with equidistant nerves/
 2. with unevenly spaced nerves/
- #817. Lemma of lower sterile floret <presence of cross-nerves>/
 1. without cross-nerves <implicit>/
 2. with nerves transversely connected at apex <only>/
 3. with cross-nerves/
- #818. Lemma of lower sterile floret <apical union of nerves>/
 1. with nerves free at apex/
 2. with nerves meeting and uniting at apex/
- #819. Lemma of lower sterile floret <transverse curvature>/
 1. convex across back/
 2. flat across back/
 3. concave across back/
- #820. Lemma of lower sterile floret <presence of median groove or split>/
 1. without grooves <implicit>/
 2. sulcate/
 3. with 2 longitudinal grooves/
 4. readily splitting into two halves/
- #821. Lemma of lower sterile floret <roughness> <ordered>/
 1. smooth <implicit>/
 2. scaberulous/
 3. scabrous/
 4. spinulose/
 5. papillose/
 6. tuberculate/
 7. wrinkled/
 8. rugose/
- #822. Lemma of lower sterile floret rough <where>/
 1. throughout <implicit>/
 2. at apex/
 3. above/
 4. in the middle/
 5. below/
 6. on midnerve/
 7. on <lateral> nerves/
 8. on flanks/
- #823. Lemma of lower sterile floret <general indumentum> <ordered>/
 1. glabrous <except for midnerve, margins & special indumentum> <implicit>/
 2. indumented/
- #824. Lemma of lower sterile floret <indumentum type>/
 1. puberulous/
 2. pubescent/
 3. pilose/
 4. hirsute/
 5. villous/
 6. hispidulous/
 7. hispid/
 8. setose/
 9. woolly/
- #825. Lemma of lower sterile floret hairy <extent of general indumentum>/
 1. all along <implicit>/
 2. at apex/
 3. above/
 4. in the middle/
 5. below/
 6. at base/
- #826. Lemma of lower sterile floret hairy <location of general indumentum>/

1. generally <implicit>/
 2. on nerves/
 3. between nerves/
 4. between nerves but central interspaces glabrous/
 5. in lines <unrelated to nerves>/
- #827. Lemma of lower sterile floret with <hair type>/
1. simple hairs <implicit>/
 2. tubercle-based hairs/
 3. reflexed hairs/
 4. hooked hairs/
 5. capitate hairs/
 6. clavate hairs/
 7. turgid hairs/
 8. verruculose hairs/
- #828. Lemma of lower sterile floret <special indumentum - tufts>/
1. without hair tufts <implicit>/
 2. with basal tufts of hair/
 3. with marginal tufts of hair/
 4. with <transverse> dorsal tufts of hair/
 5. with a transverse fringe of hairs or hair tufts/
 6. with conspicuous apical hairs/
- #829. Lemma of lower sterile floret <number of hair tufts>/
hair tufts in all/
- #830. Lemma of lower sterile floret <midnerve hairs>/
1. eciliate on midnerve <not distinct from general indumentum> <implicit>/
 2. ciliolate on midnerve/
 3. ciliate on midnerve/
 4. setose on midnerve/
 5. pubescent on midnerve/
- #831. Lemma of lower sterile floret <marginal roughness>/
1. smooth on margins/
 2. scaberulous on margins/
 3. scabrous on margins/
 4. spinulose on margins/
 5. tuberculate on margins/
- #832. Lemma of lower sterile floret <marginal hairs>/
1. eciliate on margins <implicit>/
 2. ciliolate on margins/
 3. ciliate on margins/
 4. villous on margins/
 5. setose on margins/
 6. pubescent on margins/
- #833. Lemma of lower sterile floret fringed <extent of marginal hairs>/
1. all along/
 2. above/
 3. in the middle/
 4. below/
- #834. Lemma of lower sterile floret bearing <colour of principal hairs>/
1. white hairs/
 2. grey hairs/
 3. yellow hairs/
 4. tawny hairs/
 5. dark brown hairs/
 6. red hairs/
 7. purple hairs/
 8. black hairs/
- #835. Lemma of lower sterile floret bearing hairs <length of principal hairs>/
mm long/
- #836. Lemma of lower sterile floret <incision>/
1. entire <implicit>/

- 2. erose/
- 3. dentate/
- 4. lobed/
- #837. Lemma of lower sterile floret <number of teeth or lobes>/
-fid/
- #838. Lemma of lower sterile floret <shape of apex or lobes> <ordered>/
 - 1. emarginate/
 - 2. truncate/
 - 3. obtuse/
 - 4. acute/
 - 5. acuminate/
 - 6. attenuate/
 - 7. setaceously acuminate/
 - 8. cuspidate/
 - 9. rostrate/
 - 10. caudate/
 - 11. laterally pinched at apex/
 - 12. rounded at apex/
- #839. Lemma of lower sterile floret <presence of awn>/
 - 1. muticous <implicit>/
 - 2. mucronate/
 - 3. awned/
- #840. Awn of lower sterile floret <origin>/
 - 1. terminal <from apex or sinus> <implicit>/
 - 2. subapical/
 - 3. dorsal/
- #841. Awn of lower sterile floret arising <origin of dorsal awn as fraction of lemma length>/
% way up back of lemma/
- #842. Awn of lower sterile floret <curvature>/
 - 1. straight <implicit>/
 - 2. curved/
 - 3. flexuous/
 - 4. geniculate/
- #843. Awn of lower sterile floret <length>/
mm long/
- #844. Palea of lower sterile floret <consistency>/
 - 1. hyaline <implicit>/
 - 2. membranous/
 - 3. becoming indurate on keels at maturity/
 - 4. becoming indurate on flanks at maturity/
 - 5. woody/
 - 6. coriaceous/
- #845. Palea of lower sterile floret <length>/
mm long/
- #846. Palea of lower sterile floret <length as fraction of its lemma>/
% of length of lemma/
- #847. Palea of lower sterile floret <presence of wings>/
 - 1. wingless <implicit>/
 - 2. winged on keels/
 - 3. winged on margins/
- #848. Palea of lower sterile floret <vesture>/
 - 1. smooth/
 - 2. scabrous/
 - 3. pubescent/
 - 4. pilose/
 - 5. hirsute/
 - 6. villous/
 - 7. woolly/
- #849. Palea of lower sterile floret adorned <where>/
 - 1. on keels/

- 2. on back/
- 3. on flanks/
- #850. Lemma of upper sterile floret <outline>/
 - 1. subulate <apical characters inapplicable>/
 - 2. linear/
 - 3. lanceolate/
 - 4. elliptic/
 - 5. oblong/
 - 6. ovate/
 - 7. orbicular/
 - 8. oblate/
 - 9. obovate/
- #851. Lemma of upper sterile floret basally <presence of constriction or appendage>/
 - 1. simple <implicit>/
 - 2. constricted/
 - 3. auriculate/
- #852. Lemma of upper sterile floret <length>/
 - mm long/
- #853. Lemma of upper sterile floret <length as fraction of lower>/
 - % of length of lower sterile floret/
- #854. Lemma of upper sterile floret <consistency> <ordered>/
 - 1. hyaline/
 - 2. membranous/
 - 3. chartaceous/
 - 4. herbaceous/
 - 5. scarious/
 - 6. cartilaginous/
 - 7. coriaceous/
 - 8. indurate/
 - 9. fleshy/
- #855. Lemma of upper sterile floret <roughness>/
 - 1. smooth <implicit>/
 - 2. scabrous/
 - 3. tuberculate/
 - 4. ribbed/
 - 5. rugose throughout/
 - 6. rugose above/
 - 7. rugose below/
- #856. Lemma of upper sterile floret <surface indumentum>/
 - 1. glabrous <implicit>/
 - 2. pubescent/
 - 3. pilose/
 - 4. villous/
- #857. Lemma of upper sterile floret <midnerve hairs>/
 - 1. eciliate on midnerve <not distinct from general indumentum> <implicit>/
 - 2. pubescent on midnerve/
 - 3. ciliolate on midnerve/
 - 4. ciliate on midnerve/
 - 5. setose on midnerve/
- #858. Lemma of upper sterile floret <marginal hairs>/
 - 1. eciliate on margins <implicit>/
 - 2. ciliolate on margins/
 - 3. ciliate on margins/
 - 4. villous on margins/
 - 5. tufted on margins/
- #859. Lemma of upper sterile floret fringed <extent of marginal hairs>/
 - 1. all along/
 - 2. above/
 - 3. in the middle/
 - 4. below/

- #860. Lemma of upper sterile floret <incision>/
1. entire <implicit>/
 2. erose/
 3. dentate/
 4. lobed/
- #861. Lemma of upper sterile floret <number of teeth or lobes>/
- fid/
- #862. Lemma of upper sterile floret <shape of apex> <ordered>/
1. emarginate/
 2. truncate/
 3. obtuse/
 4. acute/
 5. acuminate/
 6. attenuate/
 7. setaceously acuminate/
 8. caudate/
- #863. Lemma of upper sterile floret <presence of awn>/
1. muticous <implicit>/
 2. mucronate/
 3. awned/
- #864. Awn of upper sterile floret <position>/
1. terminal <from apex or sinus> <implicit>/
 2. subapical/
 3. dorsal/
- #865. Awn of upper sterile floret arising <origin of dorsal awn as fraction of lemma length>/
- % way up back of lemma/
- #866. Awn of upper sterile floret <curvature>/
1. straight/
 2. curved/
 3. flexuous/
 4. geniculate/
- #867. Awn of upper sterile floret <length>/
- mm long/
- #868. Fertile florets <divergence if more than 1>/
1. appressed to rachilla/
 2. divergent/
- #869. Fertile florets overlapping <fraction overlapping in same row>/
- their length/
- #870. Fertile florets <freedom of tip - if more than 1>/
1. incurved at tip/
 2. imbricate to tip/
 3. free at tip/
 4. recurved at tip/
- #871. Fertile florets <size gradation - if more than 1>/
1. decreasing in size upwards <implicit>/
 2. all similar in size/
 3. increasing in size upwards/
- #872. Fertile florets <sex>/
1. bisexual <implicit>/
 2. female/
- #873. Fertile florets <similarity if more than 1>/
1. alike <implicit>/
 2. alike but female above/
 3. with the lowest dissimilar/
 4. with the uppermost dissimilar <if more than 2 florets - comment on difference>/
- #874. Lowest fertile lemma <sex - if dissimilar>/
1. bisexual/
 2. female/
- #875. Lowest <fertile> lemma <outline> <ordered>/
1. linear/

2. lanceolate/
 3. elliptic/
 4. oblong/
 5. ovate/
 6. orbicular/
 7. oblate/
 8. obovate/
 9. flabellate/
 10. cuneate/
- #876. Lowest <fertile> lemma <length>/
mm long/
- #877. Lowest <fertile> lemma <length as fraction of adjacent lemma>/
% of length of adjacent lemma/
- #878. Lowest <fertile> lemma <relative consistency>/
1. of similar consistency to adjacent lemma <implicit>/
 2. thinner than adjacent lemma/
 3. firmer than adjacent lemma/
- #879. Lowest <fertile> lemma <indumentum>/
1. glabrous/
 2. hairy/
- #880. Lowest <fertile> lemma <incision>/
1. entire/
 2. lobed/
- #881. Lowest <fertile> lemma <presence of awn>/
1. muticous/
 2. mucronate/
 3. awned/
- #882. Fertile lemma <flattened outline. If lemma absent go to palea> <ordered>/
1. linear/
 2. lanceolate/
 3. elliptic/
 4. oblong/
 5. ovate/
 6. orbicular/
 7. oblate/
 8. trullate <margins angled rather than smoothly curved>/
 9. obovate/
 10. oblanceolate/
 11. flabellate/
 12. cuneate/
- #883. Fertile lemma <comparative width of outline>/
1. narrowly proportioned/
 2. moderately proportioned <implicit>/
 3. broadly proportioned/
- #884. Fertile lemma widest at <position of widest point as fraction of length>/
of its length from base/
- #885. Fertile lemma <symmetry>/
1. symmetrical/
 2. asymmetrical/
- #886. Fertile lemma <presence of basal auricles or thickening>/
1. without auricles <implicit>/
 2. auriculate at base/
 3. thickened on margins at base/
- #887. Fertile lemma <compression>/
1. laterally compressed/
 2. subterete/
 3. dorsally compressed/
- #888. Fertile lemma dorsally <straightness of back in profile>/
1. convex along back/
 2. straight along back/

3. concave along back/
- #889. Fertile lemma <gibbosity>/
 1. not gibbous <implicit>/
 2. gibbous/
 3. lunate in profile/
- #890. Fertile lemma <unflattened shape>/
 1. linear in profile/
 2. lanceolate in profile/
 3. elliptic in profile/
 4. oblong in profile/
 5. ovate in profile/
 6. oblanceolate in profile/
 7. triangular in profile/
 8. trapezoidal in profile/
 9. hemispherical/
 10. globose/
- #891. Fertile lemma <length>/
 - mm long/
- #892. Fertile lemma <width>/
 - mm wide/
- #893. Fertile lemma <consistency>/
 1. hyaline/
 2. membranous/
 3. chartaceous/
 4. herbaceous/
 5. scarios/
 6. cartilaginous/
 7. coriaceous/
 8. indurate <crustaceous, bony or woody>/
- #894. Fertile lemma <apical consistency>/
 1. of similar consistency above <implicit>/
 2. much thinner above/
 3. firmer above/
- #895. Fertile lemma <marginal consistency>/
 1. of similar consistency on margins <implicit>/
 2. much thinner on margins/
 3. firmer on margins/
- #896. Fertile lemma <colour>/
 1. pallid/
 2. yellow/
 3. light green/
 4. mid-green/
 5. dark green/
 6. glaucous/
 7. grey/
 8. light brown/
 9. dark brown/
 10. red/
 11. purple/
 12. black/
- #897. Fertile lemma <distribution of colour>/
 1. concolorous/
 2. suffused with last colour/
 3. mottled with last colour/
 4. streaked with last colour/
 5. bordered with last colour/
 6. tipped with last colour/
- #898. Fertile lemma <sheen>/
 1. dull <implicit>/
 2. glossy/

- #899. Fertile lemma <presence of sessile glands>/
1. eglandular <implicit>/
 2. glandular on surface/
 3. glandular on nerves/
- #900. Fertile lemma <exudate>/
1. without exudate <implicit>/
 2. pruinose/
 3. viscid/
 4. resinous/
- #901. Fertile lemma <presence of keel>/
1. without keel/
 2. keeled/
- #902. Fertile lemma rounded <extent>/
1. throughout/
 2. except near apex/
- #903. Fertile lemma <clarity of keel>/
1. lightly keeled/
 2. distinctly keeled <implicit>/
 3. the keel enlarged into a pocket around grain/
- #904. Fertile lemma keeled <extent>/
1. all along <implicit>/
 2. above/
 3. below/
- #905. Fertile lemma <presence of wings>/
1. wingless <implicit>/
 2. winged on keel/
 3. winged on margins/
- #906. Fertile lemma <nerve number>/
- nerved/
- #907. Fertile lemma <key couplet for chloridoid nerves>/
1. 0-3 -nerved/
 2. more than 3-nerved/
- #908. Fertile lemma <presence of nerves - controlling character for dependencies>/
1. without nerves/
 2. one-nerved/
 3. several-nerved <implicit>/
- #909. Lemma midnerve <prominence>/
1. simple/
 2. thickened <conspicuously>/
 3. with contiguous subsidiary nerves/
- #910. Lemma midnerve <extension to apex>/
1. extending to apex/
 2. falling short of apex/
- #911. Lemma midnerve <roughness, especially when keeled> <ordered>/
1. smooth <implicit>/
 2. scaberulous/
 3. scabrous/
 4. spinulose/
- #912. Lemma midnerve <hairiness - except tufts> <ordered>/
1. eciliate <not distinct from general indumentum> <implicit>/
 2. ciliolate/
 3. ciliate/
 4. pectinately ciliate <stiff and evenly spaced>/
 5. hispid/
 6. setose/
 7. pubescent/
- #913. Lemma midnerve hairy <where>/
1. all along <implicit>/
 2. above/
 3. in the middle/

- 4. below/
- 5. at base/
- #914. Lemma lateral nerves <clarity>/
 - 1. obscure/
 - 2. with distinct primaries but obscure intermediates/
 - 3. distinct/
 - 4. prominent/
 - 5. thickened/
- #915. Lemma lateral nerves <presence of ribs>/
 - 1. without ribs <implicit>/
 - 2. ribbed/
- #916. Lemma lateral nerves <clarity in lower part>/
 - 1. absent or obscure below/
 - 2. evident below/
- #917. Lemma lateral nerves <spacing if 3-nerved>/
 - 1. midway between midnerve and margin/
 - 2. close to midnerve/
 - 3. close to margins/
- #918. Lemma lateral nerves <spacing if 5 or more nerved>/
 - 1. evenly spaced/
 - 2. unevenly spaced/
 - 3. in close groups/
- #919. Lemma lateral nerves <presence of dichotomous branching>/
 - 1. unbranched <implicit>/
 - 2. branched/
 - 3. augmented by subsidiaries in lobes/
- #920. Lemma lateral nerves <presence of cross-nerves>/
 - 1. without cross-nerves/
 - 2. transversely connected at apex <only>/
 - 3. with cross-nerves/
- #921. Lemma lateral nerves <convergence>/
 - 1. meeting <and uniting> above/
 - 2. convergent above/
 - 3. more or less parallel/
 - 4. divergent above/
- #922. Lemma lateral nerves <apical extent - mainly Poeae>/
 - 1. excurrent/
 - 2. extending close to apex/
 - 3. stopping well short of apex <but present in upper third of lemma>/
 - 4. less than two thirds length of lemma/
- #923. Lemma surface <roughness> <ordered>/
 - 1. smooth <implicit>/
 - 2. granulose/
 - 3. asperulous/
 - 4. scaberulous/
 - 5. scabrous/
 - 6. papillose/
 - 7. tuberculate/
 - 8. striate/
 - 9. reticulate/
 - 10. punctate/
 - 11. pitted/
 - 12. muricate/
- #924. Lemma surface rough <where>/
 - 1. generally <implicit>/
 - 2. above/
 - 3. in the middle/
 - 4. below/
 - 5. on nerves/
 - 6. between nerves/

- 7. in lines <unrelated to nerves>/
- #925. Lemma surface <relief>/
 - 1. unwrinkled <implicit>/
 - 2. rugulose/
 - 3. rugose/
 - 4. corrugate/
- #926. Lemma surface <presence of longitudinal grooves (other than ribs) or splits>/
 - 1. without grooves <implicit>/
 - 2. with a median groove/
 - 3. with 2 longitudinal grooves/
 - 4. with longitudinal folds/
 - 5. eventually splitting into fibres/
- #927. Lemma surface <presence of germination flap>/
 - 1. without germination flap/
 - 2. with distinct germination flap/
- #928. Lemma surface <general indumentum>/
 - 1. glabrous <except for midnerve, marginal, special & apical indumentum> <implicit>/
 - 2. indumented/
- #929. Lemma surface <indumentum type> <ordered>/
 - 1. puberulous/
 - 2. pubescent/
 - 3. pilose/
 - 4. hirsute/
 - 5. villous/
 - 6. plumose/
 - 7. hispidulous/
 - 8. hispid/
 - 9. setose/
 - 10. woolly/
 - 11. sericeous/
 - 12. arachnose/
- #930. Lemma surface hairy <extent of general indumentum>/
 - 1. all along <implicit>/
 - 2. above <excluding apical tuft of long hairs or apical ornament of short hairs>/
 - 3. in the middle/
 - 4. below/
 - 5. at base/
- #931. Lemma surface hairy <where>/
 - 1. on back <implicit>/
 - 2. on nerves <record under margins if nerves marginal>/
 - 3. between nerves/
 - 4. between nerves but central interspaces glabrous/
 - 5. in lines <unrelated to nerves>/
- #932. Lemma surface with <hair type>/
 - 1. simple hairs <implicit>/
 - 2. tubercle-based hairs/
 - 3. reflexed hairs/
 - 4. semicircular hairs/
 - 5. hooked hairs/
 - 6. capitate hairs/
 - 7. clavate hairs/
 - 8. turgid hairs/
- #933. Lemma surface <special indumentum - tufts>/
 - 1. without hair tufts <implicit>/
 - 2. with basal hair tufts near margin/
 - 3. with marginal hair tufts <above base>/
 - 4. with tufts of hair on midnerve/
 - 5. with a transverse row of hair tufts/
 - 6. with 2 transverse rows of hair tufts/
 - 7. with a transverse fringe of hair/

8. with conspicuous apical hairs <but if a ring see corona appendage>/
- #934. Lemma surface bearing <number of hair tufts>/
hair tufts in all/
- #935. Lemma inner surface <indumentum>/
1. glabrous/
 2. scabrous/
 3. pubescent/
 4. pilose/
 5. transversely fringed/
- #936. Lemma margins <fusion>/
1. free <implicit>/
 2. connate below/
 3. closed except for an apical pore/
 4. fused below to those of opposing floret forming an urn/
- #937. Lemma margins with <extent connate below>/
of their length connate/
- #938. Lemma margins <vernation - if free>/
1. flat <implicit>/
 2. interlocking with palea margins/
 3. involute/
 4. convolute/
- #939. Lemma margins <coverage of palea>/
1. exposing palea <implicit>/
 2. covering most of palea/
 3. interlocking with palea keels/
- #940. Lemma margins <roughness> <ordered>/
1. without distinctive roughness <implicit>/
 2. scaberulous/
 3. scabrous/
 4. spinulose/
 5. tuberculate/
- #941. Lemma margins <hairiness> <ordered>/
1. eciliate <not distinct from general indumentum> <implicit>/
 2. ciliolate/
 3. ciliate/
 4. setose/
 5. pubescent/
 6. pilose/
 7. villous/
 8. woolly/
 9. sericeous/
- #942. Lemma margins hairy <extent of hairiness>/
1. all along <implicit>/
 2. above/
 3. in the middle/
 4. below/
 5. at base/
- #943. Lemma hairs <colour of principal hairs>/
1. white/
 2. grey/
 3. yellow/
 4. tawny/
 5. dark brown/
 6. red/
 7. purple/
 8. black/
- #944. Lemma hairs <length of principal hairs>/
mm long/
- #945. Lemma apex <incision>/
1. entire <implicit>/

- 2. erose/
 - 3. dentate/
 - 4. lobed/
 - 5. round at apex/
 - 6. truncate/
- #946. Lemma apex <number of primary teeth or lobes>/
-fid/
- #947. Lemma apex <equality of lobes>/
- 1. with simple equal lobes <implicit>/
 - 2. with outer lobes longer/
 - 3. with outer lobes shorter/
 - 4. with central lobe bidentate/
 - 5. with lateral lobes bidentate/
 - 6. with irregular lobes/
- #948. Lemma apex with <shape of lobes>/
- 1. filiform lobes/
 - 2. linear lobes/
 - 3. lanceolate lobes/
 - 4. oblong lobes/
 - 5. ovate lobes/
 - 6. triangular lobes/
 - 7. heterogeneous lobes/
 - 8. outer lobes winged/
 - 9. margins splitting into evanescent supplementary lobes/
- #949. Lemma with lobes <length>/
mm long/
- #950. Lemma apex <shape of apex or tip of lobes> <ordered>/
- 1. emarginate/
 - 2. truncate/
 - 3. obtuse/
 - 4. acute/
 - 5. acuminate/
 - 6. attenuate/
 - 7. setaceously acuminate/
 - 8. cuspidate/
 - 9. apiculate/
 - 10. rostrate/
 - 11. caudate/
- #951. Lemma incised <fraction of lemma length>/
% of lemma length/
- #952. Lemma apex <ornamentation - for long hairs see surface tufts or apical appendage>/
- 1. without ornament <implicit>/
 - 2. cucullate/
 - 3. laterally pinched/
 - 4. with a little green crest/
 - 5. with a green spot/
 - 6. with a shallow excavation/
 - 7. papillose/
 - 8. tuberculate/
 - 9. scabrous/
 - 10. pubescent/
 - 11. woolly/
- #953. Lemma apex <presence of appendage>/
- 1. without appendage <implicit>/
 - 2. with an annular corona <but no membranous extension>/
 - 3. with a membranous corona/
 - 4. surmounted by a distinct coma of hairs/
 - 5. with a short cylindrical neck <supporting awn though not part of its column - Stipa>/
 - 6. with a conical beak/
 - 7. with a trilobate appendage/

- 8. with outer margin prolonged as a hyaline appendage/
- 9. surmounted by an obscure coma of hairs, sometimes barely discernable from the general lemma indumentum/
- #954. Lemma apex with corona <width>/
mm wide/
- #955. Lemma apex with this appendage <length of corona, neck or lateral extension>/
mm long/
- #956. Lemma apex <presence of awn>/
 - 1. mucicous <implicit>/
 - 2. pungent/
 - 3. mucronate <may be further described using awn characters>/
 - 4. awned/
 - 5. awned only on distal spikelets/
 - 6. not mucronate or awned/
- #957. Lemma apex <number of awns>/
-awned/
- #958. Median (principal) awn <eccentricity>/
 - 1. median <implicit>/
 - 2. eccentric/
- #959. Median (principal) awn <position>/
 - 1. apical <implicit>/
 - 2. subapical/
 - 3. from a sinus/
 - 4. dorsal/
- #960. Median (principal) awn arising <origin of dorsal awn as fraction of lemma length>/
% way up back of lemma/
- #961. Median (principal) awn <overall shape>/
 - 1. straight <implicit>/
 - 2. curved/
 - 3. flexuous/
 - 4. coiled <open coils, not a twisted column>/
 - 5. hooked <at tip>/
 - 6. geniculate/
 - 7. bigeniculate/
 - 8. 3-branched <laterals inserted above lemma tip>/
- #962. Median (principal) awn <flexion relative to lemma or column>/
 - 1. ascending <implicit>/
 - 2. spreading/
 - 3. reflexed <through an angle>/
 - 4. recurved <with a semicircular bend> at base of limb/
 - 5. briefly coiled <or twisted> at base of limb <not a column, Aristida>/
 - 6. twisted together <with others in panicle>/
- #963. Median (principal) awn <presence of basal constriction, expansion or fusion>/
 - 1. simple at base <implicit>/
 - 2. pseudo-articulate at base <persistent but with apparent abscission line>/
 - 3. pseudo-articulate across body of lemma/
 - 4. constricted at base/
 - 5. conically expanded at base/
 - 6. adnate to lemma lobes at base/
- #964. Median (principal) awn <basal cross-section>/
 - 1. subterete below/
 - 2. triquetrous below/
 - 3. flat below/
- #965. Median (principal) awn <stiffness>/
 - 1. stiff/
 - 2. flexible/
 - 3. filiform/
- #966. Median (principal) awn <nature of tip>/
 - 1. attenuate <implicit>/
 - 2. pungent/

- 3. with scarcely tapering limb/
- 4. with clavate limb/
- 5. with thread-like crinkled tip/
- #967. Median (principal) awn <length including column>/
mm long overall/
- #968. Median (principal) awn <fraction of lemma>/
% of length of lemma/
- #969. Median (principal) awn <length of limb above column or distal bend>/
mm long/
- #970. Median (principal) awn <exsertion>/
 - 1. clearly exserted from spikelet <implicit>/
 - 2. not or scarcely exserted from spikelet/
- #971. Median (principal) awn <column>/
 - 1. without a column <implicit>/
 - 2. with a straight or slightly twisted column/
 - 3. with a twisted column/
- #972. Median (principal) awn <persistence>/
 - 1. persistent <implicit>/
 - 2. deciduous/
- #973. Median (principal) awn abscissing/
 - 1. across body of lemma/
 - 2. from top of lemma/
 - 3. from top of column/
- #974. Median (principal) awn limb <roughness> <ordered>/
 - 1. smooth/
 - 2. scaberulous/
 - 3. scabrous/
 - 4. retrorsely scabrous/
- #975. Median (principal) awn limb <indumentum> <ordered>/
 - 1. glabrous <implicit>/
 - 2. puberulous/
 - 3. pubescent/
 - 4. ciliate/
 - 5. hirsute/
 - 6. plumose/
- #976. Median (principal) awn with <length of limb hairs>/
mm long hairs/
- #977. Median awn (principal) <extent of limb hairs>/
 - 1. hairy throughout limb <implicit>/
 - 2. glabrescent towards tip/
 - 3. glabrescent towards base of limb/
 - 4. glabrescent towards tip and base of limb/
- #978. Middle segment of lemma awn <length - if bigeniculate>/
mm long/
- #979. Middle segment of lemma awn <indumentum> <ordered>/
 - 1. glabrous <implicit>/
 - 2. hispidulous/
 - 3. puberulous/
 - 4. pubescent/
 - 5. ciliate/
 - 6. hirtellous/
 - 7. hirsute/
 - 8. plumose/
- #980. Column <of lemma awn> <length>/
mm long/
- #981. Column <of lemma awn> <length as fraction of limb>/
length of limb/
- #982. Column <of lemma awn> <roughness>/
 - 1. smooth/
 - 2. scabrous/

- #983. Column <of lemma awn> <general indumentum> <ordered>/
1. glabrous <except for top> <implicit>/
 2. hispidulous/
 3. puberulous/
 4. pubescent/
 5. ciliate/
 6. hirtellous/
 7. hirsute/
 8. plumose/
- #984. Column <of lemma awn> hairy <where>/
1. generally <implicit>/
 2. on upper part/
 3. on lower part/
 4. on the spiral/
- #985. Column <of lemma awn> <presence of apical hairs at junction with limb>/
1. without distinct apical hairs <implicit>/
 2. with pubescent apex/
 3. with bearded apex/
- #986. Column <of lemma awn> with <length of hairs>/
- mm long hairs/
- #987. Lateral lemma awns <presence>/
1. absent <implicit>/
 2. present/
- #988. Lateral lemma awns arising <origin - if principal unbranched>/
1. on <unlobed> apex <implicit>/
 2. on apex of lobes/
 3. on inner edge of lobes/
 4. on outer edge of lobes/
 5. between lobes/
 6. on margin of lemma <as an awn-like lobe>/
 7. dorsally/
- #989. Lateral lemma awns <flexure relative to principal>/
1. ascending <principal not spreading>/
 2. spreading less than principal/
 3. spreading as much as principal/
 4. spreading more than principal/
 5. wrapped around principal/
 6. gyrate <twisted together at base>/
- #990. Lateral lemma awns <persistence - if principal unbranched>/
1. persistent <implicit>/
 2. deciduous with the principal/
- #991. Lateral lemma awns <length>/
- mm long/
- #992. Lateral lemma awns <exsertion>/
1. exserted/
 2. equalling glumes/
 3. enclosed by glumes/
- #993. Lateral lemma awns <equality>/
1. longer than principal/
 2. subequal to principal/
 3. shorter than principal/
 4. of irregular length/
- #994. Lateral lemma awns <length as fraction of principal>/
- % of length of principal/
- #995. Lateral lemma awns of <equality of width>/
1. equal width <implicit>/
 2. unequal width/
- #996. Lateral lemma awns <indumentum>/
1. glabrous <implicit>/
 2. ciliolate/

- 3. ciliate/
- 4. plumose/
- #997. Palea <presence>/
 - 1. present <implicit>/
 - 2. absent/
 - 3. /
- #998. Palea <fusion>/
 - 1. free <implicit>/
 - 2. fused below to rhachilla internode/
 - 3. fused below to lemma margins/
- #999. Palea <gape>/
 - 1. embraced by lemma <tip may protrude apically> <implicit>/
 - 2. inturred at apex/
 - 3. reflexed at apex/
 - 4. separating from lemma above/
 - 5. gaping/
 - 6. readily splitting down midline/
- #1000. Palea <outline> <ordered>/
 - 1. linear/
 - 2. lanceolate/
 - 3. elliptic/
 - 4. oblong/
 - 5. ovate/
 - 6. orbicular/
 - 7. obovate/
 - 8. oblanceolate/
- #1001. Palea with flaps <width relative to space between keels>/
 - 1. narrower than body/
 - 2. as wide as body/
 - 3. wider than body/
- #1002. Palea with <presence of flap auricles>/
 - 1. entire flaps <implicit>/
 - 2. auriculate flaps/
- #1003. Palea <vernation>/
 - 1. not rolled <implicit>/
 - 2. involute/
 - 3. tightly convolute around flower/
- #1004. Palea <straightness>/
 - 1. straight/
 - 2. with a basal protruberance/
 - 3. bowed outwards/
 - 4. falcate/
- #1005. Palea <length>/
 - mm long/
- #1006. Palea <fraction of lemma length>/
 - % of length of lemma/
- #1007. Palea <consistency>/
 - 1. hyaline/
 - 2. membranous <implicit>/
 - 3. chartaceous/
 - 4. scarious/
 - 5. cartilaginous/
 - 6. coriaceous/
 - 7. indurate/
 - 8. spongy/
- #1008. Palea <variation in consistency>/
 - 1. of uniform consistency/
 - 2. thinner above/
 - 3. thinner on margins/
- #1009. Palea <number of nerves, including keels>/

- nerved/
- #1010. Palea <presence of keels>/
 - 1. without keels/
 - 2. 1-keeled/
 - 3. /
- #1011. Palea keels <whether extending to apex>/
 - 1. extending to apex/
 - 2. falling well short of apex/
- #1012. Palea keels <spacing>/
 - 1. separated <implicit>/
 - 2. approximate/
 - 3. contiguous above a sulcus/
 - 4. distant but flanking a median depression/
- #1013. Palea keels <width>/
 - mm apart/
- #1014. Palea keels <thickening>/
 - 1. unthickened <implicit>/
 - 2. thickened/
- #1015. Palea keels <presence of wings>/
 - 1. wingless <implicit>/
 - 2. winged/
- #1016. Palea keels <how much>/
 - 1. narrowly winged/
 - 2. conspicuously winged/
- #1017. Palea keels with <wing type>/
 - 1. entire wings <implicit>/
 - 2. erose wings/
 - 3. toothed wings/
 - 4. clavate appendages on wings/
 - 5. each wing 1-awned/
 - 6. each wing 2-awned/
- #1018. Palea keels <roughness> <ordered>/
 - 1. smooth <implicit>/
 - 2. scaberulous/
 - 3. scabrous/
 - 4. spinulose/
 - 5. tuberculate/
- #1019. Palea keels <indumentum> <ordered>/
 - 1. eciliate <implicit>/
 - 2. puberulous/
 - 3. pubescent/
 - 4. ciliolate/
 - 5. ciliate/
 - 6. pectinate/
 - 7. villous/
 - 8. woolly/
 - 9. with a crest of hairs/
 - 10. sericeous/
 - 11. arachnose/
- #1020. Palea keels adorned <where; refers to longer enations when more than 1 kind, but clarify in comment>/
 - 1. all along/
 - 2. above/
 - 3. in the middle/
 - 4. below/
- #1021. Palea keels with <extent of enations as fraction of palea length>/
 - % of their length adorned/
- #1022. Palea keels adorned <density>/
 - 1. densely/
 - 2. sparsely/
- #1023. Palea keels with <number of prickles or hairs>/

- enations per keel/
#1024. Palea keels with hairs <length of hairs>/
mm long/
#1025. Palea surface <roughness> <ordered>/
1. smooth/
2. granular/
3. asperulous/
4. scaberulous/
5. scabrous/
6. papillose/
7. tuberculate/
8. rugose/
9. pitted/
#1026. Palea surface <indumentum - excluding keels and apex>/
1. glabrous <implicit>/
2. puberulous/
3. pubescent/
4. pilose/
5. hirsute/
6. villous/
7. woolly/
#1027. Palea surface hairy <where>/
1. on back/
2. on flanks/
3. on margins/
4. in a transverse fringe/
#1028. Palea surface hairy <extent>/
1. all along/
2. above/
3. in the middle/
4. below/
5. at base/
#1029. Palea surface with <hair type>/
1. simple hairs <implicit>/
2. hooked hairs/
3. turgid hairs/
#1030. Palea apex <incision>/
1. entire/
2. erose/
3. dentate/
4. lobed/
5. divided to base/
#1031. Palea apex <number of teeth>/
-fid/
#1032. Palea apex <shape of apex or teeth> <ordered>/
1. emarginate/
2. truncate/
3. obtuse/
4. acute/
5. acuminate/
6. cuspidate/
7. caudate/
#1033. Palea apex <ornamentation>/
1. undifferentiated <implicit>/
2. glabrous/
3. pubescent/
4. ciliate/
5. papillose/
6. tuberculate/
7. scaberulous/

- 8. excavated/
- 9. with green spots/
- #1034. Palea apex <presence of awn>/
 - 1. muticous <implicit>/
 - 2. with excurrent keel nerves/
 - 3. awned/
- #1035. Palea awns <length of apical awns>/
 - mm long/
- #1036. Palea awns <indumentum>/
 - 1. glabrous <implicit>/
 - 2. hairy/
- #1037. Rhachilla extension <length beyond distal fertile floret, either barren or supporting modified sterile florets>/
 - mm long/
- #1038. Rhachilla extension <length as fraction of fertile floret>/
 - % length of fertile floret/
- #1039. Rhachilla extension <curvature>/
 - 1. straight/
 - 2. bent/
- #1040. Rhachilla extension <indumentum>/
 - 1. glabrous <implicit>/
 - 2. sparsely hairy/
 - 3. pubescent/
 - 4. pilose/
 - 5. villous/
- #1041. Rhachilla extension hairy <where>/
 - 1. throughout/
 - 2. throughout but longer above/
 - 3. at tip <only>/
 - 4. above/
 - 5. in the middle/
 - 6. below/
- #1042. Rhachilla extension with <hair length>/
 - mm long hairs/
- #1043. Apical sterile florets <resemblance to fertile>/
 - 1. resembling fertile though underdeveloped <rest of section inapplicable>/
 - 2. distinct from fertile <and variously modified> <implicit>/
- #1044. Apical sterile florets <number, if distinguishable>/
 - in number/
- #1045. Apical sterile florets <abscission - if spikelet breaks up>/
 - 1. deciduous with fertile floret <implicit>/
 - 2. abscissing from fertile floret/
- #1046. Apical sterile florets <similarity>/
 - 1. similar <but diminishing in size, or single> <implicit>/
 - 2. dissimilar <the first (lowest) different and separate>/
- #1047. First apical floret <sex>/
 - 1. male/
 - 2. barren/
- #1048. First apical floret <outline>/
 - 1. linear/
 - 2. lanceolate/
 - 3. elliptic/
 - 4. oblong/
 - 5. ovate/
 - 6. orbicular/
 - 7. flabellate/
 - 8. cuneate/
- #1049. First apical floret <length>/
 - mm long/
- #1050. First apical floret <indumentum>/

- 1. glabrous/
- 2. pubescent/
- 3. pilose/
- 4. hirsute/
- 5. villous/
- #1051. First apical floret <presence of awns>/
 - 1. mucicous/
 - 2. mucronate/
 - 3. awned/
- #1052. Apical sterile florets <remainder when first different - sex>/
 - 1. male/
 - 2. barren/
- #1053. Apical sterile florets <clumping>/
 - 1. separate <or single> <implicit>/
 - 2. in a clump/
- #1054. Apical sterile florets with internodes <length - when 2 or more florets>/
 - mm long between them/
- #1055. Apical sterile florets <outline of lemma or clump>/
 - 1. rudimentary <the body small or indefinitely distinguished from the awn it bears>/
 - 2. linear/
 - 3. lanceolate/
 - 4. elliptic/
 - 5. oblong/
 - 6. ovate/
 - 7. orbicular/
 - 8. flabellate/
 - 9. cuneate/
- #1056. Apical sterile florets <length of body>/
 - mm long/
- #1057. Apical sterile lemmas <presence of wings>/
 - 1. wingless <implicit>/
 - 2. winged on keel/
 - 3. winged on margins/
- #1058. Apical sterile lemmas <indumentum of body>/
 - 1. glabrous <implicit>/
 - 2. scabrous/
 - 3. pubescent/
 - 4. pilose <ciliate>/
- #1059. Apical sterile lemmas adorned <extent of hairs>/
 - 1. all over <implicit>/
 - 2. on keel/
 - 3. on margins/
- #1060. Apical sterile lemmas <incision>/
 - 1. entire <implicit>/
 - 2. dentate/
 - 3. lobed/
- #1061. Apical sterile lemmas <number of teeth or lobes>/
 - fid/
- #1062. Apical sterile lemmas <shape of apex> <ordered>/
 - 1. emarginate/
 - 2. truncate/
 - 3. obtuse/
 - 4. acute/
 - 5. acuminate/
 - 6. attenuate/
 - 7. cuspidate/
- #1063. Apical sterile lemmas <presence of awns, at least on distal floret>/
 - 1. mucicous <implicit>/
 - 2. mucronate/
 - 3. awned/

- #1064. Apical sterile lemmas <number of awns on each>/
-awned/
- #1065. Apical sterile lemma awns <position>/
1. terminal <from apex or sinus> <implicit>/
2. subapical/
3. dorsal/
- #1066. Apical sterile lemma awns <straightness>/
1. straight <implicit>/
2. geniculate/
3. hooked/
- #1067. Apical sterile lemma awns <equality if more than 1>/
1. equal/
2. unequal/
- #1068. Apical sterile lemma awns <length of longest>/
mm long/
- #1069. Apical sterile lemma awns <indumentum>/
1. glabrous <implicit>/
2. retrorsely scabrous/
3. ciliate/
- #1070. Apical sterile lemma awns <total sterile awns(incl first), if distinguishable>/
per spikelet in number/
- #1071. Lodicules <presence>/
1. absent or vestigial/
2. present/
- #1072. Lodicules <number>/
1. 1/
2. 2/
3. 3/
4. many/
5. represented by a ring of hairs/
- #1073. Lodicules <union>/
1. free <implicit>/
2. united/
3. adnate to palea/
- #1074. Lodicules <outline>/
1. linear/
2. lanceolate/
3. elliptic/
4. oblong/
5. orbicular/
6. ovate/
7. obovate/
8. oblanceolate/
9. cuneate/
- #1075. Lodicules <length>/
mm long/
- #1076. Lodicules <consistency>/
1. membranous <above>/
2. scarious/
3. coriaceous/
4. fleshy <throughout>/
- #1077. Lodicules <presence of nerves>/
1. nerveless/
2. nerved/
- #1078. Lodicules <hairiness>/
1. smooth <implicit>/
2. ciliate/
- #1079. Lodicules hairy <where>/
1. across the apex/
2. on the corners/

- #1080. Lodicules <incision>/
1. entire/
 2. with a small lateral lobe/
 3. 2-toothed/
 4. irregularly toothed/
- #1081. Lodicules <shape of apex or lobes>/
1. emarginate/
 2. truncate/
 3. obtuse/
 4. acute/
- #1082. Anthers <number. Diclinous male spikelets entered here, but need rearranging in description. Comment if sterile florets different>/
- /
- #1083. Anthers <shape>/
1. linear/
 2. oblong/
 3. subglobose/
- #1084. Anthers <length>/
- mm long/
- #1085. Anthers <attachment to filament>/
1. basifixed/
 2. medifixed/
- #1086. Anthers <aerial cleistogamy; see also cleistogenes>/
1. retained within floret/
 2. eventually exerted/
- #1087. Anthers <dehiscence>/
1. dehiscent by a longitudinal slit/
 2. dehiscent by a subapical slit/
 3. indehiscent <with deformed pollen>/
- #1088. Anthers <colour>/
1. pallid/
 2. yellow/
 3. green/
 4. brown/
 5. orange/
 6. red/
 7. purple/
- #1089. Anther tip <ornamentation>/
1. smooth/
 2. apiculate/
 3. penicillate/
 4. pubescent/
 5. with extended connective <between anthers>/
- #1090. Filaments <union>/
1. free <implicit>/
 2. united in groups/
 3. united in a tube/
- #1091. Filaments united for <extent of union>/
- of their length/
- #1092. Filaments <length>/
- mm long/
- #1093. Staminodes <presence - refers to female florets if diclinous>/
1. absent <implicit>/
 2. present/
- #1094. Staminodes <length>/
- mm long/
- #1095. Stigmas <number>/
- /
- #1096. Stigmas <whether protogynous>/
1. protandrous/

- 2. protogynous/
- #1097. Stigmas <exsertion>/
 - 1. retained within floret/
 - 2. laterally exserted/
 - 3. terminally exserted/
 - 4. terminally exserted and tangled/
- #1098. Stigmas <colour>/
 - 1. white/
 - 2. yellow/
 - 3. brown/
 - 4. red/
 - 5. purple/
- #1099. Stigmas <indumentum>/
 - 1. plumose <implicit>/
 - 2. sparsely hairy/
 - 3. pubescent/
 - 4. papillose/
 - 5. retrorsely barbellate/
- #1100. Styles <union>/
 - 1. free to the base/
 - 2. connate below/
- #1101. Styles <length>/
 - mm long/
- #1102. Styles <fraction of length connate>/
 - % of their length connate/
- #1103. Ovary <presence of apical appendage>/
 - 1. unappendaged <implicit>/
 - 2. with a fleshy appendage below style insertion/
 - 3. with a fleshy appendage above style insertion/
 - 4. umbonate <best seen in bamboos at the semi-mature stage>/
 - 5. beaked/
 - 6. with a steeple-like appendage/
- #1104. Ovary <indumentum>/
 - 1. glabrous/
 - 2. with a few apical hairs/
 - 3. pubescent on apex/
 - 4. pubescent all over/
- #1105. Grain with <type of pericarp>/
 - 1. adherent pericarp/
 - 2. tardily free pericarp <cistoid>/
 - 3. free soft pericarp <follicoid>/
 - 4. free brittle pericarp <nuroid>/
 - 5. fleshy pericarp <baccoid>/
- #1106. Grain <outline>/
 - 1. linear/
 - 2. lanceolate/
 - 3. fusiform/
 - 4. ellipsoid/
 - 5. oblong/
 - 6. ovoid/
 - 7. orbicular/
 - 8. reniform/
 - 9. obovoid/
 - 10. oblanceolate/
 - 11. square/
- #1107. Grain <compression, viewed from embryo>/
 - 1. terete <in section>/
 - 2. laterally compressed/
 - 3. dorsally compressed <slightly>/
 - 4. <dorsally> flattened/

- #1108. Grain <transverse section>/
 - 1. biconvex/
 - 2. plano-convex/
 - 3. concavo-convex/
 - 4. trigonous/
 - 5. quadrangular/
- #1109. Grain <presence of basal stipe>/
 - 1. estipitate/
 - 2. stipitate/
- #1110. Grain <presence of hilar groove>/
 - 1. not grooved/
 - 2. grooved/
- #1111. Grain <exposure>/
 - 1. concealed by floret/
 - 2. exposed between gaping lemma and palea at maturity/
- #1112. Grain <length>/
 - mm long/
- #1113. Grain <colour>/
 - 1. pallid/
 - 2. grey/
 - 3. yellow/
 - 4. green/
 - 5. light brown/
 - 6. dark brown/
 - 7. red/
 - 8. purple/
 - 9. black/
- #1114. Grain <roughness>/
 - 1. smooth/
 - 2. granular/
 - 3. striate/
 - 4. reticulate/
 - 5. rugose/
 - 6. pitted/
- #1115. Grain <indumentum>/
 - 1. glabrous/
 - 2. hairy at apex/
 - 3. hairy all over/
- #1116. Grain <shape of apex>/
 - 1. emarginate/
 - 2. truncate/
 - 3. obtuse/
 - 4. acute/
 - 5. acuminate/
 - 6. cuspidate/
 - 7. apiculate/
- #1117. Grain apex <presence of apical appendage>/
 - 1. unappendaged/
 - 2. fleshy/
 - 3. umbonate/
 - 4. rostrate/
 - 5. bicornate/
- #1118. Embryo <length as fraction of grain>/
 - % of length of grain/
- #1119. Embryo <basal projection>/
 - 1. not projecting/
 - 2. projecting below grain/
- #1120. Embryo with <position of plumule>/
 - 1. apical plumule/
 - 2. lateral plumule/

- 3. basal plumule/
- #1121. Hilum <shape>/
 - 1. punctiform/
 - 2. elliptic/
 - 3. linear <and straight>/
 - 4. curved <and elongated>/
- #1122. Hilum <length as fraction of caryopsis CHECK%>/
 - % of length of caryopsis/
- #1123. Endosperm <consistency>/
 - 1. flinty <translucent>/
 - 2. farinose/
 - 3. soft/
 - 4. liquid/
 - 5. evanescent/
- #1124. Disseminule comprising a/
 - 1. seed/
 - 2. caryopsis/
 - 3. caryopsis and palea/
 - 4. floret/
 - 5. floret with sterile lemmas/
 - 6. group of fertile florets/
 - 7. spikelet/
 - 8. rachis internode <one internode bearing 1 or more spikelets>/
 - 9. branch <including racemelet, cluster and multiple internodes>/
 - 10. inflorescence/
 - 11. synflorescence <one or more inflorescences with subtending leaves>/
- #1125. Secondary disseminule/
 - 1. none <implicit>/
 - 2. a floret/
 - 3. a spikelet/
 - 4. a branch/
 - 5. an inflorescence/
- #1126. Male inflorescence <location>/
 - 1. terminal/
 - 2. axillary/
- #1127. Male inflorescence <similarity to female; add comment after character if gynodioeciously bisexual>/
 - 1. similar to female/
 - 2. unlike female/
- #1128. Male inflorescence <facies>/
 - 1. a spathate compound head/
 - 2. a panicle/
 - 3. a single raceme/
 - 4. of subdigitate racemes/
 - 5. of racemes along a central axis/
 - 6. of few spikelets/
- #1129. Male inflorescence with <whether racemes pectinate>/
 - 1. non-pectinate racemes <implicit>/
 - 2. pectinate racemes/
- #1130. Male spikelets <similarity to female>/
 - 1. resembling female/
 - 2. similar to female but less developed/
 - 3. distinct from female/
- #1131. Male spikelets with <pedicel fusion - if monoecious with male segregated (mostly Andropogoneae); else see principal pedicel>/
 - 1. free pedicels/
 - 2. pedicels fused to rachis/
- #1132. Male spikelets <number of male florets>/
 - flowered/
- #1133. Male spikelets <presence of rachilla extension>/
 - 1. without rachilla extension <underdeveloped florets may be present> <implicit>/

- 2. with barren rhachilla extension/
- 3. with rudimentary <modified> apical florets/
- #1134. Male spikelets <persistence>/
 - 1. persistent/
 - 2. separately deciduous/
 - 3. all deciduous together <but separate from female, when more than 1>/
 - 4. deciduous with the fertile/
- #1135. Male spikelets <outline> <ordered>/
 - 1. linear/
 - 2. lanceolate/
 - 3. elliptic/
 - 4. oblong/
 - 5. ovate/
 - 6. obovate/
 - 7. oblanceolate/
 - 8. cuneate/
- #1136. Male spikelets <length>/
 - mm long/
- #1137. Male spikelets <indumentum>/
 - 1. glabrous/
 - 2. hairy/
- #1138. Male spikelets <shape of apex>/
 - 1. obtuse/
 - 2. acute/
 - 3. dentate/
- #1139. Male spikelet glumes <presence>/
 - 1. absent/
 - 2. 1/
 - 3. 2/
- #1140. Male spikelet glumes <outline> <ordered>/
 - 1. subulate/
 - 2. linear/
 - 3. lanceolate/
 - 4. elliptic/
 - 5. oblong/
 - 6. triangular/
 - 7. ovate/
 - 8. orbicular/
 - 9. oblate/
 - 10. obovate/
 - 11. cuneate/
- #1141. Male spikelet glumes <length>/
 - mm long/
- #1142. Male spikelet glumes/
 - 1. membranous/
 - 2. coriaceous/
- #1143. Male spikelet glumes <presence of wing>/
 - 1. wingless/
 - 2. winged/
- #1144. Male spikelet glumes <nerve number>/
 - nerved/
- #1145. Male spikelet glumes <presence of awn>/
 - 1. muticous/
 - 2. awned/
- #1146. Male spikelet glumes with <awn length>/
 - mm long awn/
- #1147. Male spikelet lemma <length>/
 - mm long/
- #1148. Male spikelet lemma <number of nerves>/
 - nerved/

- #1149. Male spikelet lemma <presence of cross-nerves>/
 - 1. without cross-nerves/
 - 2. with cross-nerves/
- #1150. Male spikelet lemma <presence of awn>/
 - 1. muticous/
 - 2. awned/
- #1151. Male spikelet lemma with <length of awn>/
 - mm long awn/
- #1152. Cleistogenes <presence of concealed spikelets of different appearance>/
 - 1. absent <but aerial cleistogamy may occur> <implicit>/
 - 2. present/
- #1153. Cleistogenes <location>/
 - 1. in upper sheaths/
 - 2. in lower sheaths/
 - 3. underground <rhizanthogenes>/
- #1154. Cleistogenes <number of florets>/
 - flowered/
- #1155. Cleistogenes <length>/
 - mm long/
- #1156. Vegetative proliferation <of spikelet>/
 - 1. absent <implicit>/
 - 2. occurs/
- #1157. Vivipary <germination on culm>/
 - 1. absent <implicit>/
 - 2. occurs/
- #1158. Europe: <regional distribution - TDWG scheme>/
 - 1. Northern/
 - 2. Central/
 - 3. Southwestern/
 - 4. Southeastern/
 - 5. Eastern/
- #1159. Africa: <regional distribution>/
 - 1. North/
 - 2. Macaronesia/
 - 3. West tropical/
 - 4. West-central tropical/
 - 5. Northeast tropical/
 - 6. East tropical/
 - 7. Southern tropical/
 - 8. South/
 - 9. Middle Atlantic ocean/
 - 10. Western Indian ocean/
- #1160. Asia-temperate: <regional distribution>/
 - 1. Siberia/
 - 2. Soviet far east/
 - 3. Soviet Middle Asia/
 - 4. Caucasus/
 - 5. Western Asia/
 - 6. Arabia/
 - 7. China/
 - 8. Mongolia/
 - 9. Eastern Asia/
- #1161. Asia-tropical: <regional distribution>/
 - 1. India/
 - 2. Indo-China/
 - 3. Malesia/
 - 4. North Indian ocean/
- #1162. Australasia: <regional distribution>/
 - 1. Australia/
 - 2. New Zealand/

- #1163. Pacific: <regional distribution>/
 - 1. Southwestern/
 - 2. South-central/
 - 3. Northwestern/
 - 4. North-central/
- #1164. North America: <regional distribution>/
 - 1. Subarctic/
 - 2. Western Canada/
 - 3. Eastern Canada/
 - 4. Northwest USA/
 - 5. North-central USA/
 - 6. Northeast USA/
 - 7. Southwest USA/
 - 8. South-central USA/
 - 9. Southeast USA/
 - 10. Northern Mexico/
- #1165. South America: <regional distribution>/
 - 1. Mesoamericana/
 - 2. Caribbean/
 - 3. Northern South America/
 - 4. Western South America/
 - 5. Brazil/
 - 6. Southern South America/
- #1166. Antarctic: <regional distribution>/
 - 1. Subantarctic islands/
 - 2. Antarctic continent/
- #1167. <Presence in selected countries; TDWG 3-letter code>/
- #1168. <Tribe; first 3 letters except; Arundinelleae arl, Brachypodieae brp, Phaenospermateae phn, Phareae phr, Streptochaeteae stc, Streptogyneae stg>/
- #1169. <References; notes clarifying taxonomic scope of species>/
- #1170. <Source and year of coding or revision. Intended as a rough guide to reliability; no list of sources is currently maintained>/
- #1171. Entry changed by <flag to denote changes made since last update. Remember to alter source-of-coding character.>/
 - 1. adding new item/
 - 2. replacing description/
 - 3. adding illustration/
 - 4. changing name <from what?>/
 - 5. deleting synonymous item <this one, or its incorrect synonym?>/
- #1172. <Comment on diagnostic characters - level 1>/
- #1173. <Comment on diagnostic characters - level 2>/
- #1174. <Comment on diagnostic characters - level 3>/
- #1175. <Geographic distribution, indicate endemic range>/
- #1176. <CAP> <Distribution Code>/
- #1177. Supertribe/
 - 1. Panicodae/
 - 2. Andropogonodae/
- #1178. Economic Attributes (Lazarides ms)/
- #1179. <Regions: Victoria>/
 - 1. Western <Victoria>/
 - 2. Eastern <Victoria>/
- #1180. <Regions: Western Victoria>/
 - 1. A <72>/
 - 2. B <73>/
 - 3. C <74>/
 - 4. D <75>/
 - 5. E <76>/
 - 6. F <77>/
 - 7. G <78>/
 - 8. H <79>/

- 9. J <80>/
- 10. K <81>/
- #1181. <Regions: Eastern Victoria>/
 - 1. L <82>/
 - 2. M <83>/
 - 3. N <84>/
 - 4. P <85>/
 - 5. Q <86>/
 - 6. R <87>/
 - 7. S <88>/
 - 8. T <89>/
 - 9. U <90>/
 - 10. V <91>/
 - 11. W <92>/
 - 12. X <93>/
 - 13. Z <94>/
- #1182. Synflorescence/
 - 1. a single inflorescence/
 - 2. an aggregatae of inflorescence (each rising from a leaf or bract)/
- #1183. Inflorescence <whether braching>/
 - 1. simple <a single branch>/
 - 2. branching <paniculate or branching>/
- #1184. Inforescence <length>/
- #1185. Inflorescence <width>/
- #1186. Inflorescence branching/
 - 1. paniculate/
 - 2. digitate/
 - 3. racemose/
- #1187. Inflorescence terminal branch/
 - 1. a spike <with spikelets all sessile>/
 - 2. a rame <with paired sessile and pedicelled spikelets>/
 - 3. a raceme <with spiklets all pedicelled>/
 - 4. with only one or a few spikelets/
- #1188. Inflorescence terminal branch length/
- #1189. Sessile spikelets/
 - 1. fertile/
 - 2. male/
 - 3. sterile/
- #1190. Pedicelled spikelets/
 - 1. fertile/
 - 2. male/
 - 3. sterile/
- #1191. Fertile spikelets/
 - 1. bisexual/
 - 2. female/
- #1192. <Native or natularised>/
 - 1. Endemic/
 - 2. Native/
 - 3. Naturalised/
- #1193. <Continental distribution>/
 - 1. Europe/
 - 2. Africa/
 - 3. Temperate Asia/
 - 4. Tropical Asia/
 - 5. Australasia/
 - 6. Pacific/
 - 7. North America/
 - 8. South America/
 - 9. Antarctica/
- #1194. <Australian distribution: by state or region>/

1. Western Australia/
 2. Northern Territory/
 3. South Australia/
 4. Queensland/
 5. New South Wales/
 6. Victoria/
 7. Tasmania/
 8. A.C.T./
 9. Norfolk I/
 10. Lord Howe/
 11. Christmas Is/
 12. Cocos Keeling Is, Ashmore Reef, Coral Sea Is/
 13. Macquarie, Heard/
- #1195. <Regions:> <Western Australia by> Province :/
1. Kimberley Province <(1, 2, 3, 4)>/
 2. Eremaean Province <(5,6,7,8,9,10,12,13,14,15)>/
 3. South-Western Province <(11, 16,17,18,19,20,21,22,23,24)>/
- #1196. <Regions: Western Australia, Kimberley Province>/
1. Gardner/
 2. Fitzgerald/
 3. Hall/
 4. Dampier/
- #1197. <Regions: Western Australia Eremaean Province>/
1. Mueller <5>/
 2. Canning <6>/
 3. Keartland <7>/
 4. Carnegie <8>/
 5. Giles <9>/
 6. Helms <10>/
 7. Fortescue <12>/
 8. Ashburton <13>/
 9. Carnarvon <14>/
 10. Austin <15>/
- #1198. <Regions: Western Australia, South-Western Province>/
1. Eucla <11>/
 2. Irwin <16>/
 3. Drummond <17>/
 4. Dale <18>/
 5. Menzies <19>/
 6. Warren <20>/
 7. Eyre <21>/
 8. Roe <22>/
 9. Avon <23>/
 10. Coolgardie <24>/
- #1199. <CAP Regions: Northern Territory>/
1. Darwin & Gulf <25>/
 2. Victoria River <26>/
 3. Barkly Tableland <27>/
 4. Central Australia North <28>/
 5. Central Australia South <29>/
- #1200. <CAP Regions: South Australia>/
1. North-western <30>/
 2. Lake Eyre <31>/
 3. Nullabor <32>/
 4. Gairdner-Torrens Basin <33>/
 5. Flinders Ranges <34>/
 6. Eastern <35>/
 7. Eyre Peninsula <36>/
 8. Northern Lofty <37>/
 9. Murray <38>/

10. Yorke Peninsula <39>/
 11. Southern Lofty <40>/
 12. Kangaroo Island <41>/
 13. South-eastern <42>/
- #1201. <CAP Regions: Queensland>/
1. Cook/
 2. Burke/
 3. North Kennedy/
 4. South Kennedy/
 5. Port Curtis/
 6. Leichhardt/
 7. Burnett/
 8. Wide Bay/
 9. Darling Downs/
 10. Moreton/
 11. Gregory North/
 12. Gregory South/
 13. Mitchell/
 14. Warrego/
 15. Maranoa/
- #1202. <CAP Regions: New South Wales>/
1. North Coast <59>/
 2. Central Coast <60>/
 3. South Coast <61>/
 4. Northern Tablelands <62>/
 5. Central Tablelands <63>/
 6. Southern Tablelands <64>/
 7. North-Western Slopes <65>/
 8. Central-Western Slopes <66>/
 9. South-Western Slopes <67>/
 10. North-Western Plains <68>/
 11. South-Western Plains <69>/
 12. North Far Western Plains <70>/
 13. South Far Western Plains <71>/
- #1203. <Flora of Victoria Regions> <Walshe & Entwistle>/
1. Murray Mallee/
 2. Lowan Mallee/
 3. Wimmera/
 4. Wannon/
 5. Grampians/
 6. Riverina/
 7. Midlands/
 8. Volcanic Plain/
 9. Otway Plain/
 10. Otway Range/
 11. Snowfields/
 12. Eastern Highlands/
 13. Gippsland Plain/
 14. Gippsland Highlands/
 15. Wilsons Promontory/
 16. East Gippsland/
- #1204. <Tasmania> <Curtis & Morris>/
1. King Island/
 2. Furneaux Group/
 3. North West/
 4. North East/
 5. West Coast/
 6. Central Highlands/
 7. Midlands/
 8. Ben Lomond/

- 9. East Coast/
- 10. South West/
- 11. Mt Field/
- 12. Mt Wellington/
- 13. No region given/
- #1205. No. of CAP Regions/
 - 1. 1 CAP Region/
 - 2. 2 CAP Regions/
 - 3. 3 CAP Regions/
 - 4. Widespread - all states/
 - 5. Widespread - 6 states/
- #1206. <Map - FoA>/
- #1207. Cultivars/
- #1208. <FOA>/
 - 1. FOA 43 (2002)/
 - 2. FOA 44A (2009)/
 - 3. FOA 44B (2005)/
 - 4. FOA 49 (1994)/
 - 5. FOA 50 (1993)/
- #1209. <FOA species notes>/
- #1210. <FOA distribution notes>/
- #1211. <FOA specimens>/
- #1212. AusGrass 1/
 - 1. W&D/
 - 2. Photo <initials>/
 - 3. Scanned image/
 - 4. Line drawing <initials>/
 - 5. None/
- #1213. AusGrass 2/
 - 1. FoA 43/
 - 2. Maiden/
- #1214. **Infra -specific taxa:/**
- #1215. <Key to infra-specific taxa>/
- #1216. Genera A-An/
 - 1. Achnatherum/
 - 2. Acrachne/
 - 3. Acroceras/
 - 4. Agropogon/
 - 5. Agrostis/
 - 6. Aira/
 - 7. Alexfloydia/
 - 8. Alloteropsis/
 - 9. Alopecurus/
 - 10. Ameliochloa/
 - 11. Ammophila/
 - 12. Amphibromus/
 - 13. Amphipogon/
 - 14. Ancistrachne/
 - 15. Andropogon/
 - 16. Anisopogon/
 - 17. Anthoxanthum/
- #1217. Genera Ap-Av/
 - 1. Apluda/
 - 2. Aristida/
 - 3. Arrhenatherum/
 - 4. Arthragrostis/
 - 5. Arthraxon/
 - 6. Arundinella/
 - 7. Arundo/
 - 8. Astrebla/

9. Australopyrum/
 10. Austrochloris/
 11. Austrodanthonia/
 12. Austrofestuca/
 13. Austrostipa/
 14. Avellinia/
 15. Avena/
- #1218. Genera Ax-Ce/
1. Axonopus/
 2. Bambusa/
 3. Bothriochloa/
 4. Brachyachne/
 5. Brachypodium/
 6. Briza/
 7. Bromus/
 8. Calamagrostis/
 9. Calyptochloa/
 10. Capillipedium/
 11. Catapodium/
 12. Cenchrus/
 13. Centotheca/
- #1219. Genera Ch-Cr/
1. Chamaeraphis/
 2. Chionachne/
 3. Chionochloa/
 4. Chloris/
 5. Chrysopogon/
 6. Clausospicula/
 7. Cleistochloa/
 8. Coelachne/
 9. Coix/
 10. Cortaderia/
 11. Crypsis/
- #1220. Genera Cy-De/
1. Cymbopogon/
 2. Cynochloris/
 3. Cynodon/
 4. Cynosurus/
 5. Cyperochloa/
 6. Cyrtococcum/
 7. Dactylis/
 8. Dactyloctenium/
 9. Dallwatsonia/
 10. Danthonia/
 11. Deschampsia/
 12. Deyeuxia/
- #1221. Genera Di-Eh/
1. Dichanthium/
 2. Dichelachne/
 3. Digitaria/
 4. Dimeria/
 5. Dinebra/
 6. Distichlis/
 7. Dryopoa/
 8. Echinochloa/
 9. Echinopogon/
 10. Ectrosia/
 11. Ehrharta/
- #1222. Genera El-Er/
1. Eleusine/

2. Elionurus/
3. Elymus/
4. Elytrigia/
5. Elytrophorus/
6. Enneapogon/
7. Enteropogon/
8. Entolasia/
9. Eragrostiella/
10. Eragrostis/
11. Eremochloa/
12. Eremopyrum/
13. Eriachne/
14. Eriochloa/

#1223. Genera Eu-Hi/

1. Eulalia/
2. Eustachys/
3. Festuca/
4. Garnotia/
5. Gastridium/
6. Gaudinia/
7. Germainia/
8. Glyceria/
9. Hainardia/
10. Hemarthria/
11. Heterachne/
12. Heteropogon/
13. Hierochloe/
14. Holcolemma/
15. Holcus/

#1224. Genera Ho-K/

1. Homopholis/
2. Hordeum/
3. Hygrochloa/
4. Hymenachne/
5. Hyparrhenia/
6. Ichnanthus/
7. Imperata/
8. Isachne/
9. Ischaemum/
10. Iseilema/
11. Jarava/
12. Joycea/
13. Koeleria/

#1225. Genera L-Mib/

1. Lachnagrostis/
2. Lagurus/
3. Lamarckia/
4. Leersia/
5. Leptaspis/
6. Leptochloa/
7. Lepturus/
8. Leymus/
9. Lolium/
10. Lophatherum/
11. Mibora/
12. Megathyrsus/
13. Melica/
14. Melinis/

#1226. Genera Mic-N/

1. Micraira/

2. *Microchloa*/
3. *Microlaena*/
4. *Microstegium*/
5. *Miscanthus*/
6. *Mnesithea*/
7. *Monachather*/
8. *Monodia*/
9. *Moorochloa*/
10. *Mullerochloa*/
11. *Nardus*/
12. *Nasella*/
13. *Neoleleba*/
14. *Neurachne*/
15. *Notochloe*/
16. *Notodanthonia*/

#1227. Genera O/

1. *Ophiuros*/
2. *Oplismenus*/
3. *Oryza*/
4. *Ottochloa*/
5. *Oxychloris*/

#1228. Genera P-Pho/

1. *Panicum*/
2. *Paractaenum*/
3. *Paraneurachne*/
4. *Parapholis*/
5. *Paspalidium*/
6. *Paspalum*/
7. *Pennisetum*/
8. *Pentapogon*/
9. *Pentaschistis*/
10. *Periballia*/
11. *Perotis*/
12. *Phalaris*/
13. *Pheidochloa*/
14. *Phleum*/
15. *Pholiurus*/

#1229. Genera Phr-Pse/

1. *Phragmites*/
2. *Phyllostachys*/
3. *Piptatherum*/
4. *Piptochaetium*/
5. *Plinthanthesis*/
6. *Poa*/
7. *Pogonatherum*/
8. *Polypogon*/
9. *Polytrias*/
10. *Potamophila*/
11. *Psammagrostis*/
12. *Pseudochaetochloa*/
13. *Pseudopogonatherum*/
14. *Pseudoraphis*/

#1230. Genera Psi-Se/

1. *Psilurus*/
2. *Puccinellia*/
3. *Rostraria*/
4. *Rottboellia*/
5. *Rytidosperma*/
6. *Saccharum*/
7. *Sacciolepis*/

8. Sarga/
 9. Schismus/
 10. Schizachyrium/
 11. Sclerochloa/
 12. Scrotochloa/
 13. Secale/
 14. Sehima/
 15. Setaria/
- #1231. Genera So-Te/
1. Sorghastrum/
 2. Sorghum/
 3. Spartina/
 4. Spartochloa/
 5. Spathia/
 6. Sphenopus/
 7. Spinifex/
 8. Sporobolus/
 9. Steinchisma/
 10. Stenotaphrum/
 11. Symplectrodia/
 12. Taeniatherum/
 13. Tetrarrhena/
- #1232. Genera Th-Tr/
1. Thaumastochloa/
 2. Thedachloa/
 3. Thelepogon/
 4. Thellungia/
 5. Themeda/
 6. Thinopyrum/
 7. Thuarea/
 8. Thyridolepis/
 9. Tragus/
 10. Tribolium/
 11. Triodia/
 12. Tripogon/
 13. Triraphis/
 14. Trisetum/
 15. Triticum/
- #1233. Genera U-Z/
1. Uranthoecium/
 2. Urochloa/
 3. Vacoparis/
 4. Vulpia/
 5. Walwhalleya/
 6. Whiteochloa/
 7. Xerochloa/
 8. Yakirra/
 9. Zea/
 10. Zoysia/
 11. Zygochloa/
- #1234. <Abbreviated taxon name:>/
- #1235. <Whether character illustrated in AusGrass>/
1. character illustrated in AusGrass/
 2. character not illustrated in AusGrass/