The Tribe Sporoboleae (Gramineae) in Japan

By

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Gen. 1. **Garnotia** BRONGN. in Duperr. Voy. Bot. Coq. (1829) 132.

Sp. 1. **Garnotia acutigluma** (STEUD.) OHWI, comb. nov.

Urachne acutigluma STEUD. Synops. 1 (1854) 121; MIQ. Prol. Fl. Japon. (1867) 164.

Garnota stricta (non BRONGN.) OHWI in Act. Phytotax. et Geobot. 6 (1937) 149.

Nom. Jap. Ao-shiba.

Hab. Riukiu. Distrib. Java (?), New Guinea.

Gen. 2. **Sporobolus** R. BR. Prodr. (1812) 169.

1. Annua 20 cm vel minus alta, folia radicalia inconspicua, foliorum laminae lanceolatae, margine ciliis basi callosis longe ciliatae, 2–5 cm longae, antherae $\frac{1}{8}$ – $\frac{1}{2}$ mm longae.

.....*S. japonicus*

1. Perennis, 15–80 cm alta, folia radicalia conspicua, laminae foliorum lineares, sine ciliis basi callosis.

2. Gluma 2^{da} quam lemma aequilonga, laminae foliorum 3–15 cm longae.

3. Estolonifera, culmus 1–3-nodis, foliorum laminae 5–10 mm longae, spiculae paullo purpurascens, 1.7–2 mm longae, antherae $\frac{1}{2}$ – $\frac{2}{3}$ mm longae.

.....*S. Hancei*

3. Stolonifera, culmus 5–10-nodis, foliorum laminae involutae, spiculae 2.5–3 mm longae, antherae 1–1.5 mm longae.*S. virginicus*

2. Gluma 2^{da} $\frac{1}{2}$ – $\frac{2}{3}$ lemmatis aequans, foliorum laminae 20–50 cm longae.

3. Ramuli pedicellique crassiusculi breves, rami dense spiculosi, 0.5–5 cm longi, spiculae 2–2.5 mm longae, antherae $\frac{1}{2}$ – $\frac{2}{3}$ mm longae.*S. elongatus*

3. Ramuli pedicellique tenues, rami subdense spiculosi 1–7 cm longi, spiculae 1.5–2 mm longae, antherae $\frac{1}{2}$ mm longae.*S. diander*

Sp. 2. **Sporobolus japonicus** (STEUD.) MAXIM. ex RENDLE in Journ. Linn. Soc. 36 (1904) 388; NAKAI, Flor. Korean. 2 (1911) 355.

Agrostis japonicus STEUD. Synops. 1 (1854) 171.

Sporobolus ciliatus (non PRESL) MATSUM. in Bot. Mag. Tokyo 11 (1897) 444.

Sporobolus piliferus (non KUNTH) HONDA in Bot. Mag. Tokyo 49 (1926) 321 et Monogr. Poac. Japon. (1930) 201.

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Sporobolus ciliatus var. *japonicus* (STEUD.) HACK. in Bull. Herb. Boiss. 7 (1899) 648.

Nom. Jap. Hige-shiba.

Hab. Hondo, Shikoku, Kiushiu, Korea. Distr. China med.

Sp. 3. ***Sporobolus Hancei*** RENDLE in Journ. Linn. Soc. 36 (1904) 387; OHWI in Act. Phytotax. et Geobot. 3 (1934) 81.

Nom. Jap. Hime-nezuminoo.

Hab. Formosa, Riukiu (ins. Okinawa). Distr. China austr.

Sp. 4. ***Sporobolus virginicus*** (LINN.) KUNTH, Rév. Gram. 1 (1829) 678 et Enum. Pl. 1 (1833) 210; MAKINO in Bot. Mag. Tokyo 10 (1896) 64; HACK. in Bull. Herb. Boiss. 7 (1899) 721; RENDLE, l. c. (1904) 389; HONDA, Monogr. (1930) 201; HITCHC. Man. Grass. U.S. (1935) 394 et 962 et Man. Grass. West Ind. (1936) 87.

Agrostis virginicus LINN. Sp. Pl. (1753) 63.

Nom. Jap. Sonare-shiba.

Hab. Formosa, Riukiu (ins. Miyako, Okinawa, Amami-oshima, Tokunoshima, Tanegashima), Bonins, praesertim in arenis littoris occurit. Distr. Pantrop.

Sp. 5. ***Sporobolus diander*** (RETZ.) BEAUV. Ess. Agrost. (1812) 26; KUNTH, Enum. Pl. 1 (1833) 213; HOOK. f. Fl. Brit. Ind. 7 (1897) 247; RENDLE in Journ. Linn. Soc. 36 (1904) 387; HONDA, l. c. (1930) 200.

Agrostis diandra RETZ. Obs. 5 (1789) 19.

Vilfa Retzii STEUD. Synops. 1 (1854) 162.

Nom. Jap. Futashibe-nezuminoo.

Hab. Formosa, Riukiu (ins. Miyako, Okinawa, Tokunoshima) Distr. Malaya, India, China austr., Ins. maris pacific.

Sp. 6. ***Sporobolus elongatus*** R. BR. Prodr. (1810) 170; KUNTH, Enum. Pl. 1 (1833) 212 et Suppl. (1835) 168; MIQ. Prol. Fl. Japon. (1867) 166; HACK. in Bull. Herb. Boiss. 7 (1899) 648; HONDA, Monogr. Poac. Japon. (1930) 200.

Cinna japonica STEUD. Synops. 1 (1854) 182.

Agrostis fertilis STEUD. l. c. 170.

Sporobolus indicus (vix R. BR.) Auct. fl. Jap.

Nom. Jap. Nezumino-o.

Hab. Hondo, Shikoku, Kiushiu, Riukiu, Formosa, Korea. Distr. Malaya, India, Australia.

var. **purpureo-suffusus** OHWI, var. nov.

Spica elongata, lemmate partim purpureo-suffuso differt.—Typus: Hondo: Mukoshima, urbe Kyoto (leg. K. TAKEUCHI, 1929).

Nom. Jap. Murasaki-nezuminoo.

Hab. Cresc. cum forma typica.

Gen. 3. **Sphaerocaryum** NEES ex STEUD. Nom. Bot. ed. 2, 2 (1841) 620; HOOK. f. Fl. Brit. Ind. 7 (1897) 246.

Steudelella HONDA, Monogr. Poac. Japon. (1930) 258.

Sp. 7. **Sphaerocaryum malaccense** (TRIN.) PILGER in Fedde Repert. 45 (1938) 2.

Panicum malaccense TRIN. De Gram. Panic. (1826) 204.

Steudelella pulchella HONDA, Monogr. (1930) 259, excl. syn.

Sphaerocaryum elegans NEES ex STEUD. Nom. Bot. ed. 2, 2 (1841) 620; HOOK. f. Fl. Brit. Ind. 7 (1897) 246; RENDLE in Journ. Linn. Soc. 36 (1904) 387.

Panicum barbivaginale HAYATA, Mater. Fl. Formos. (1911) 400.

Nom. Jap. O-ushikusa.

Hab. Formosa. Distr. India, Malaya, China austr., Philipp.

Gen. 4. **Aristida** LINN. Sp. Pl. (1753) 82 et Gen. ed. 5 (1754) 35.

1. Arista crassa patens contorta, basi in columnam tortam connata, gluma 1^{ma} trinervis 6–10 mm longa, gluma 2^{da} 1-nervis 10–13 mm longa, plantae perennes.

2. Foliorum laminae plicatae, 0.3–0.6 mm diam. fere teretes, antherae 1 mm longae.

.....*A. Takeoi*

2. Foliorum laminae plicatae, explie. 1.5 mm latae, striatae.*A. boninensis*

1. Arista tenuis erecta vel media tantum patens, non contorta, basi non connata, gluma 1^{ma} 1-nervis.

2. Perennis, panicula effusa laxa, rami elongati patentes, spiculae ascendentes vel adpressae pallidae, gluma 1^{ma} 10–11 mm longa, gluma 2^{da} 6–8 mm longa, antherae 1–1.2 mm longae.*A. chinensis*

2. Annua, panicula contracta angusta, rami appressi breves, spiculae saepe purpureascentes, gluma 1^{ma} 4–6 mm longa, 2^{da} paullo longior, arista media basi abrupte geniculata, patens, lateralis brevis erecta.*A. longespica*

Sp. 8. **Aristida Takeoi** OHWI in Bot. Mag. Tokyo 45 (1931) 182; HENRARD, Rev. Aristid. suppl. (1933) 741.

Nom. Jap. O-matsubashiba.

Hab. Riukiu (Ins. Okinawa, et ? Amami-oshima).

Sp. 9. **Aristida boninensis** OHWI et TUYAMA in Bot. Mag. Tokyo 51 (1937) 126.

Aristida Cumingiana (non TRIN. et RUPR.) NAKAI in Bot. Mag. Tokyo 25 (1911) 223.

Nom. Jap. Matsuba-shiba.

Hab. Bonins.

Sp. 10. **Aristida chinensis** MUNRO in Proc. Amer. Acad. 4 (1860)

363; BENTH. Fl. Hongk. (1861) 427; RENDLE in Journ. Linn. Soc. 36 (1904) 381; Henrard, l. c.

Aristida formosana HONDA in Bot. Mag. Tokyo 41 (1927) 379 et Monogr. Poac. Japan. (1930) 211.

Nom. Jap. Taiwan-matsubashiba.

Hab. Formosa (Shinchiku, leg. Y. SHIMADA!). Distr. China austr.

Sp. 11. ***Aristida longespica*** POIR. in LAM. Encycl. suppl. 1 (1810) 452; HITCHC. Man. Grass. U.S. (1935) 446 et 799.

Nom. Jap. Hime-matsubashiba.

Hab. Hondo, introducta in urbe Morioka. Distr. Amer. bor.

Gen. 5. ***Muhlenbergia*** SCHREB. Gen. Pl. (1789) 44, sine nom. specif. et in GMEL. Syst. Nat. 2 (1791) 87 et 171.

1. Culmi basi decumbentes ramosi estoloniferi, glumae $\frac{1}{3}$ – $\frac{2}{3}$ lemmatis aequilongae, antherae 0.5–1 mm longae.
2. Glumae late ovatae obtusulae ca. $\frac{1}{3}$ lemmatis aequantes, arista longa, antherae 0.5–0.7 mm longae, culmi basi serius ramosi. *M. arisanensis*
2. Glumae anguste ovatae acutae $\frac{1}{2}$ – $\frac{2}{3}$ lemmatis aequilongae, antherae 0.7–1 mm longae, arista longiuscula, culmi basi pauci-ramosi. *M. japonica*
1. Culmi basi erecti, stolones longos squamis aphyllis dense tectos emittentes, glumae $\frac{1}{4}$ – $\frac{4}{5}$ lemmatis aequantes.
2. Glumae ovatae obtusae vel subotusae, saepe margine supernè denticulatae, $\frac{1}{4}$ – $\frac{1}{3}$ lemmatis aequantes, culmi elati, panicula saepe effusa, arista elongata, antherae 0.7–0.9 mm longae. *M. Huegelii*
2. Glumae lanceolatae acuminatae vel acutissimae, integrae, $\frac{3}{5}$ – $\frac{4}{5}$ lemmatis aequantes, culmi 40–120 cm alti, panicula saepe angusta.
3. Spiculae 2.5–3 mm longae, glumae $\frac{2}{3}$ – $\frac{3}{4}$ lemmatis aequantes, culmi superne erecti vel nutantes, serius ramosi, basi stolones longos squamis molliusculis adpressis dorso vix inflatis obtectos emittentes, antherae 0.5–0.7 mm longae.
4. Culmi etiam superne erecti, sursum serius ramosi. *M. ramosa*
4. Culmi superne nutantes vel incumbentes, ad nodos ramosi... *M. incumbens*
3. Spiculae 3–4 mm longae, glumae $\frac{2}{3}$ – $\frac{4}{5}$ lemmatis aequilongae, culmi erecti vix superne ramosi, basi stolones longos squamis coriaceis dorso valde inflatis convexis obtectos emittente, antherae 0.8–2 mm longae.
4. Spiculae 3–3.5 mm longae, paniculae rami ascendentes, antherae 0.8–1.2 mm longae, culmi subtenues, foliorum laminae 3–7 mm latae, stolonibus crassis 3–4 mm diam. *M. curviaristata*
4. Spiculae 4–4.5 mm longae, paniculae rami adpressi, antherae 1.5–2 mm longae (rarissime 1.3 mm), culmi tenues, foliorum laminae 2–4 mm latae, stolonibus tenuibus ca. 2 mm diam. *M. hakonensis*

Sp. 12. ***Muhlenbergia arisanensis*** HAYATA, Icon. Pl. Formos. 7 (1918) 87.

Muhlenbergia Huegelii (non TRIN.) HONDA, Monogr. (1930) 215, partim.

Nom. Jap. Arisan-nezumino-o.

Hab. Formosa, in montibus. Distr. Philipp., Nova Guinea.

Sp. 13. **Muhlenbergia japonica** STEUD. Synops. 1 (1854) 422, errore *japonica*; RENDLE in Journ. Linn. Soc. 36 (1904) 385; HONDA, Monogr. Poac. Japon. (1930) 217; MIYABE et KUDO, Fl. Hokk. a. Saghal. 2 (1931) 129; ROSHEV. in KOMAR. Fl. URSS. 2 (1934) 121; KITAG. Lineam. Fl. Manshuriae (1939) 84.

Nom. Jap. Nezumi-gaya.

Hab. Yezo austr.-occid., Hondo, Shikoku, Kiushiu, Korea. Distr. Reg. temp. Asiae orient.

Sp. 14. **Muhlenbergia Huegelii** TRIN. in Mém. Acad. St. Pétersb. 6:6:2 (1841) 47 et 293; STEUD. Synops. 1 (1854) 178; RENDLE in Journ. Linn. Soc. 36 (1904) 385; HONDA, Monogr. Poac. Japon. (1930) 215, excl. pl. e Formos.; MIYABE et KUDO, Fl. Hokk. a. Saghal. 2 (1931) 129; ROSHEV. in KOMAR. Fl. URSS. 2 (1934) 121.

Muhlenbergia viridissima NEES ex STEUD. Synops. 1 (1854) 178; KOMAR. Fl. Manshur. 1 (1901) 269.

Nom. Jap. O-nezumigaya.

Hab. Yezo, Hondo, Shikoku, Kiushiu, Korea. Distr. India, China, Manchuria, Amur.

Sp. 15. **Muhlenbergia ramosa** (HACK.) MAKINO in Journ. Jap. Bot. 1 (1917) 13; HONDA, Monogr. Poac. Japon. (1930) 217.

Muhlenbergia japonica var. *ramosa* HACK. in Bull. Herb. Boiss. 7 (1899) 647.

Nom. Jap. Kidachino-nezumigaya.

Hab. Hondo media et occid.

Sp. 16. **Muhlenbergia incumbens** HONDA in Bot. Mag. Tokyo 40 (1926) 320 et Monogr. Poac. Japon. (1930) 216.

Nom. Jap. Yabu-nezumigaya.

Hab. Kiushiu, ?Hondo(m. Ogasayama in Totomi, leg. D. SHIMIDZU!).

Sp. 17. **Muhlenbergia curviaristata** (OHWI) OHWI, comb. nov.

Muhlenbergia ramosa var. *curviaristata* OHWI in Act. Phytotax. et Geobot. 6 (1937) 292.

A *M. ramosa* differt, culmo simplici vel vix ramoso, spiculis majoribus 3–3.5 mm longis, glumis sterilibus $\frac{1}{4}$ – $\frac{1}{3}$ brevioribus, squamis stolonum valde inflato-convexis rigidulis, antheris ca. 1 mm longis.

Nom. Jap. Koshino-nezumigaya.

Hab. Hondo media.

var. **nipponica** OHWI, var. nov.

Muhlenbergia hakonensis (vix MAKINO) HONDA, Monogr. Poac. Japon. (1930) 214, partim.

Differt a typo, arista recta quam spicula 2-3-plo longiore.—Typus: Hondo: Sobudake in Tajima (Y. ARAKI n. 1094).

Nom. Jap. Miyama-nezumigaya.

Hab. Yezo, Kuriles austr., Hondo.

Sp. 18. **Muhlenbergia hakonensis** (HACK.) MAKINO in Journ. Jap. Bot. 1 (1917) 13; HONDA, l. c. (1930) 214, ex pte.

Muhlenbergia japonica var. *hakonensis* HACK. in Bull. Herb. Boiss. 7 (1899) 647.

Nom. Jap. Tachi-nezumigaya.

Hab. Hondo, Shikoku, Kiushiu, Korea (Ins. Quelpaert).

本邦産ねづみのを族 (和文摘要)

大井次三郎

STAFF ヤ C. E. HUBBARD ハ此族トシテハ *Sporobolus* (及ビ米國産ノ *Blepharoneuron*) ダケヲ認メテ居ル。筆者ハ ROSHEVITZ = 從ツテ *Sphaerocaryum*, *Muhlenbergia* ヲ含メタ外, 更ニ後者ニ似タ *Aristida* 及ビ多少離レテハ居ルガ *Garnotia* ヲモ本族ニ加ヘタガ, *Brachyelytrum* ハムシロ *Bromus* ニ近イト考ヘルノデ除外シタ。熱帶及南溫帶ヲ郷土トシ, *Eragrosteae* ニ相當スル一小花ノ族デ本邦ニハ五屬十八種ガ認メラレル。