NAME CHANGES IN AGROSTIS, ARUNDINELLA, DEYEUXIA, HELICTOTRICHON, TRIPOGON (GRAMINEAE)

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SUMMARY

Buse's (1854) treatment of Junghuhn's Gramineae appeared before more parts of Steudel's Synopsis (1853–1855) than was previously thought. Agrostis rigidula Steud. becomes A. infirma Buse with 8 new varietal combinations. Arundinella fuscata Nees ex Buse previously regarded as a later homonym is invalid, and must be called A. goeringii Steud. Helictotrichon junghuhnii (Buse) Henrard supersedes H. virescens Nees ex Steud., and Tripogon exiguus Buse replaces T. semitruncatus Nees ex Steud.

INTRODUCTION

Quite a few species of grasses occurring in Malesia were first described or named in two works that appeared more or less simultaneously: Steudel, Synopsis plantarum graminearum (in 6 installments between 1853 and 1855: cf. Stafleu & Cowan, 1985) and Buse, Gramineae in Miquel's Plantae junghuhnianae 3 (1854) 341–394.

Steudel corresponded with many contemporary botanists and also seems to have had a manuscript by Nees, who received and named many species that were sent to him by his many correspondents. Steudel also visited many herbaria, and was even allowed to study the holdings in L (which with Blume then being Director must have been quite an achievement!), but not those of U, as far as can be told from his references and identification labels. Buse saw mainly the collections in U, where at that time the Junghuhn specimens were located (most of them are now in L). He also cited Nees manuscript names obtained from sheets identified by Nees in U. Whether Buse and Steudel were aware of each other's work is not clear; no cross references seem to have been published by either. Perhaps the manuscripts were finished almost simultaneously. On the other hand, Buse (1857) wrote that Steudel apparently had not noticed the Plantae junghuhnianae, thus implying that his work must have appeared before at least part of Steudel's.

Except for a few Malesian botanists Buse's work was much neglected, while that of Steudel had a much greater impact. Also, it was thought that this part of the Plantae junghuhnianae had appeared in August 1854 (Stafleu & Cowan, 1981), whereby many of the names were antedated by those of Steudel.

The heading of Buse's treatment has the note "[Febr. 1854]", which perhaps induced Henrard to accept that date on several occasions (1930, 1940, 1950). Whether Henrard was correct or not in his assumptions could not be reconstructed by me; it is also not made clear from the two very rare re-paged but otherwise identical reprints of Buse's paper in L, which have the same date in the heading (L Library: Brochure no. 311). One is interleaved and Buse's own copy, but with only a few annotations, and gives no further clue.

Recently, Stafleu & Mennega (1995) have regarded this reprint as a preprint dating from February, which gives the work priority over a larger part of Steudel's Synopsis than before. Thereforeuse's names should be cited from this, with the page of the later publication minus 340.

Fortunately very few changes are necessitated by this as far as I can see. These are enumerated below.

It must be noted that Buse is often misquoted as 'Büse' because for some reason that is the orthography employed in this paper and in Miquel (1857). He himself wrote his name without an Umlaut.

1. Agrostis infirma Buse

Agrostis infirma Buse in Miq., Pl. Jungh. (Feb. 1854) preprint: 2; (Aug. 1854): 342. — Type: Junghuhn s. n. (holo L, no. 903.342-37).

Agrostis rigidula Steud., Syn. 1 (Apr. 1854) 171. - Type: Zollinger 2589 (holo P).

Note – For further information on the species and its varieties, see Veldkamp (1982).

2. Agrostis infirma Buse var. arisan-montana (Ohwi) Veldkamp, comb. nov.

Agrostis arisan-montana Ohwi, Acta Phyt, Botax. Geobot. 2 (1933) 161. — Type: Ohwi 3463 (holo KYO, iso K).

3. Agrostis infirma Buse var. borneensis (Stapf) Veldkamp, comb. nov.

Agrostis canina L. var. borneensis Stapf, Trans. Linn. Soc., London 4 (1894) 246. — Type: Haviland 1399 (holo K).

4. Agrostis infirma Buse var. diffusissima (Ohwi) Veldkamp, comb. nov.

Agrostis reinwardtii Buse var. diffusissima Ohwi, Bull. Tokyo Sc. Mus. 18 (1947) 8. — Type: Clemens 33228 = 32327 (holo BO, iso BM, G, K, L, NSW, NY, US).

5. Agrostis infirma Buse var. formosana (Hack.) Veldkamp, comb. nov.

Agrostis canina L. var. formosana Hack., Bull. Hb. Boiss. II, 4 (1904) 528. — Type: Faurie 724 (holo W, iso KYO).

6. Agrostis infirma Buse var. fukuyamae (Ohwi) Veldkamp, comb. nov.

Agrostis fukuyamae Ohwi in Fedde, Repert. 36 (1934) 39. - Type: Ohwi 4147 (holo KYO, iso K).

7. Agrostis infirma Buse var. infirma, *comb. nov.* (The autonym automatically generated by the other varietal combinations.)

8. Agrostis infirma Buse var. kinabaluensis (Ohwi) Veldkamp, comb. nov.

Agrostis kinabaluensis Ohwi, Bull. Tokyo Sc. Mus. 18 (1947) 8. — Type: Clemens 30273, p.p. (holo BO, iso B, K, L, M?).

9. Agrostis infirma Buse var. remota (Buse) Veldkamp, comb. nov.

Agrostis stricta Buse (non Gmel., 1791) var. remota Buse in Miq., Pl. Jungh. (1854) preprint: 2; (Aug. 1854): 342, comb. incorr. — Type: Junghuhn s. n. (holo L, no. 908.76-441).

Note — The correct epithet to use is 'remota' and not 'stricta', because in this case the autonym was not automatically established. Autonyms are only automatically generated when the name of the species is legitimate (Art. 26.1). Agrostis stricta Buse being a later homonym of A. stricta Gmel. (1791) is illegitimate.

10. Arundinella fuscata Nees ex Buse

Arundinella fuscata Nees ex Buse in Miq., Pl. Jungh. (Feb. 1854) preprint: 19; (Aug. 1854): 359.

One pair of competing names of Buse and Steudel is Arundinella fuscata. At first sight the situation seems clear: Buse described a species from Java with an unnamed variety β 'angustior' (the whole diagnosis, so not a name) and Steudel's combination for a species from the Nilgiris, India, is a later homonym. Their descriptions are to-tally different. Only when I tried to appoint a lectotype for the Buse combination did I notice that the specimens cited by Buse had been labelled by him with notes like "Arundinella fuscata Nees ab Es. β angustior Nees. specim. auth. Pl. J. p. 359." A closer observation showed that also from the typography and format of the publication not a species, but an unnamed variety was described, making A. fuscata Nees ex Buse invalidly published. Hooker f. (1896) attributed the combination to Buse and placed A. fuscata Steud. and A. purpurea Hochst. ex Steud. in the synonymy, but as A. fuscata Buse was invalidly published, this was erroneous. It was apparently validated by Koorders (1911).

Steudel's A. fuscata is not a later homonym, but as A. purpurea is equally old, the latter is the correct name, because Bor (1960: 424) selected that one.

The correct name for 'A. *fuscata* Buse' is A. *goeringii* Steud. The type of the latter is *Goering sect. II, no. 139*, with 'Japonia?' as the possible provenance. Goering collected both in Japan and Java and the origin of his material is not always clear. The name was not taken up by Honda's (1930) enumeration of the grasses of Japan.

Arundinella goeringii Steud.

Arundinella goeringii Steud., Syn. 1 (Mar. 1854) 116. - Type: Goering II, 139 (holo P).

Arundinella fuscata Nees ex Buse var. β Nees ex Buse in Miq., Pl. Jungh. 3 (Feb. 1854) preprint: 19; (Aug. 1854): 359, nom. spec. inval. — Arundinella fuscata Nees ex Koord., Exk. Fl. Java 1 (1911) 119, non Steud. (1854). — Lectotype: Junghuhn s.n. (L, no. 908.83-1332).

Distribution - Sumatra, Java, Celebes.

Note — A form with tuberculate-hairy glumes has been distinguished as var. *celebica* by Jansen (1953) and was accepted as a distinct taxon by Phipps (1967), but I doubt its distinctiveness.

Arundinella purpurea Hochst. ex Steud.

Arundinella purpurea Hochst. ex Steud., Syn. 1 (Mar. 1854) 115. — Type: Hohenacker 928 (holo P, iso K, L, U).

Arundinella fuscata Nees ex [Wight, Cat. (1834) 97, nomen] Steud., Syn. 1 (Mar. 1854) 114. — Type: Wight, Cat. 1667 (holo P, iso K, U) (≡ B as Hb. prop. 183?, lost).

Arundinella fuscata auct. non Nees ex Buse: Hook. f., Fl. Br. India 7 (1896) 74.

Distribution — Madras State, Nilgiris. Hooker f. (1896) cited material from Burma, the identity of which is presently unknown.

11. Deveuxia srilankensis (Davidse) Veldkamp, comb. nov.

Calamagrostis srilankensis Davidse, Fl. Ceylon 8 (1994) 107 (Amerind edition). — Type: Davidse 7618 (holo US, iso CAL, CANB, K, KLU, L, MO, PDA, TAES).

Note – Davidse (1994) noted that this Sri Lanka endemic is related to the S Indian *Calamagrostis zenkeri* (Trin.) Davidse. As was pointed out by Korthof & Veldkamp (1985) the latter is a species of *Deyeuxia* Clarion ex Beauv., and the Sri Lanka species belongs to this genus as well.

The Revised handbook to the Flora of Ceylon 8 (1994) appeared in two identical editions (except for quality of paper, cover, and logo), one by Amerind, the other by Balkema. They were printed simultaneously, but the Amerind one was distributed first (see also Veldkamp, 1995).

12. Helictotrichon junghuhnii (Buse) Henrard

- Helictotrichon junghuhnii (Buse) Henrard, Blumea 3 (1940) 425. Avena junghuhnii Buse in Miq., Pl. Jungh. (Feb. 1854) preprint: 15; (Aug. 1854): 345. Type: Junghuhn s. n. (holo L, no. 903.342-86).
- Trisetum virescens Nees ex Steud., Syn. 1 (Apr. 1854) 226. Helictotrichon virescens Henrard, Blumea 3 (1940) 425. — Lectotype: Royle 137 [LIV, K neg. 18361, holo?; K (? no numbered collections)].

Note — For an account of the genus and a revision of the Malesian species, see Sevenster & Veldkamp (1983).

13. Tripogon exiguus Buse

Tripogon exiguus Buse in Miq., Pl. Jungh. 3 (Feb. 1854) preprint: 13; (Aug. 1854): 353. — Type: Junghuhn s. n. (holo L, no. 904.84-64).

Tripogon semitruncatus Nees ex Steud., Syn. 1 (Apr. 1854) 301. — Type: 'In monte Laeou Javae' (holo ?P, but not found).

Distribution - Java, Lesser Sunda Islands (Bali, Lombok, Alor).

Note — Bor (1960: 521) has equated the Javanese T. semitruncatus with the continental T. filiformis Nees ex Steud., but I have the impression that in this concept a number of closely related taxa are present. If Bor turns out to have been correct, T. semitruncatus is the oldest name for the whole as well. The result is then an interesting disjunct distribution: Kashmir to SW China, 'jumping' to Java, Bali, Lombok, and Alor. Ohwi (1947) distinguished *T. javanicus* Ohwi for material twice collected on the Arjuno by Van Steenis (7029, p.p., BO, L; 11881, BO). This differs by having a lax inflorescence and first lemmas apically hardly bilobed with a single awn. Because van Steenis 7029 was mixed with the typical form, I doubt that this is a distinct taxon.

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