

MISCELLANEOUS NOTES ON SOUTHEAST ASIAN GRAMINEAE. VII¹

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SUMMARY

In the family Gramineae a new species is described in *Aristida* (*A. papuana*), while two species are reduced, *A. diminuta* to *A. cumingiana* and *A. tenuisetulosa* to *A. holathera*; in *Deyeuxia* a new species is described (*D. echidnae*) and a new combination made (*D. pyramidalis*); new combinations are made in *Lachnagrostis* (*L. avenacea*), *Neyraudia* (*N. mezii*), *Oryza* (*O. minuta* var. *silvatica*), *Phragmites* (*P. vallatoria*), and *Saccharum* (*S. elegans*). The identity and application of *Poa amboinica* L. is discussed.

ARISTIDA L.

Aristida diminuta (Mez) C.E. Hubb. occurs in tropical Africa from West to East. Because of its simple awn it is quite exceptional in the section *Aristida* and it was therefore originally described as a *Stipa*. Otherwise it is very similar to the three-awned *A. cumingiana* Trin. & Rupr. and is said to differ from this mainly by the somewhat longer spikelets. Various authors have therefore regarded it as a variety of *A. cumingiana*.

After having gone through a fair number of specimens of *A. cumingiana*, it became clear that the dimensions of the spikelets and their parts have a wider range than usually reported and include those given for *A. diminuta* (see also Napper, 1965). Moreover, two collections with one-awned spikelets have been made in Luzon: *BS 26092* (*Fénix*) from Tanculan, Bukidnon, Mindanao, and *Co s.n.* without provenance (both in L). The presence of a single awn may be regarded as an occasional sport to be expected in the whole area of *A. cumingiana* and a distinction as a species based on merely this feature is too optimistic.

Aristida cumingiana Trin. & Rupr.

Aristida cumingiana Trin. & Rupr., Mém. Acad. St. Pétersb. VI, 7 (1842, preprint!) 141. — *Chaetaria trichodes* Nees in Hook. f., J. Bot. & Kew Misc. 2 (1850) 101, nom. superfl. — *Aristida trichodes* Walp., Ann. Bot. Syst. 3 (1852) 753, nom. superfl. — Lectotype: *Cuming 671* (LE, holo; K).

Aristida delicatula A. Rich., Tent. Fl. Abyss. 2 (1850) 393, non Kunth, 1829. — Syntypes: *Schimper 1830* (K, L, P), *Quartin Dillon s.n.* (P).

Stipa diminuta Mez in Feddes Repert. 17 (1921) 208. — *Aristida diminuta* C.E. Hubb., Kew Bull. 4 (1949) 480. — *Aristida cumingiana* Trin. & Rupr. var. *diminuta* J. Félix, J. Agric. Trop. Bot. Appl. 13 (1966) 51, nom. superfl. — Type: *Buchanan 561* (B, holo, extant?; K).

1) Continued from *Blumea* 36 (1991) 181.

Aristida cumingiana Trin. & Rupr. var. *reducta* Pilger, Notizbl. Bot. Gart. Berlin-Dahlem 11 (March 1933) 805. — Type: *Schlieben 2468* (B, holo, extant?; K).

Aristida cumingiana Trin. & Rupr. var. *uniseta* Stent & Rattray, Proc. Rhodesia Sc. Assoc. 32 (May 1933) 48. — Syntypes: *Holmes in Eyles 4931* (K), *Fitt 165* (K).

Aristida capillacea auct., non Lam.: Cav., Icon. 5 (1799) 43, t. 468, f. 1, quoad *Née s.n.* (B, MA).

Aristida holathera Domin

Aristida holathera Domin, Bibl. Bot. 85 (1915) 340. — Type: *Domin s.n.*, 2/1910 (L, holo, no. 926.361-524, Kew neg. 9404; BRI).

Aristida tenuisetulosa (Pilger) Mez in Feddes Repert. 17 (1921) 147. — *Aristida stipoides* R. Br. var. *tenuisetulosa* Pilger in Perkins, Fragm. Fl. Philipp. (1904) 146. — Lectotype: *Merrill 329* (B, holo, PNH, extant?).

Aristida tenuisetulosa (Pilger) Mez var. *arenarioides* Henrard, Meded. Rijksherb. 58 (1929) 108, 114. — Type: *BS 2334 (Mearns)* [see Henrard, Meded. Rijksherb. 54B (1928) 627] (PR, holo; B, PNH, not extant).

Aristida arenaria auct., non R. Br.

See Simon (1992) for further synonymy.

Distribution — Australia (widely spread from W Australia to Queensland), Malesia: Philippines (Luzon: Bataan, Ilocos Norte & Sur, La Union, Pampanga, Zambales).

Habitat — Coastal sand dunes, resistant to spray and long drought.

Uses — Recommended as a sandbinder.

Notes — The type material of the Australian *Aristida holathera* has columns without a trace of an articulation. Lazarides (1980) said that the articulation was indistinct, and that the awns were not or tardily disarticulating. According to Simon (1992) the awn may be weakly to distinctly articulated. In the resulting polymorphic species I can find no differences with *A. tenuisetulosa* from the Philippines.

In exposed and dry areas in dunes dwarfed forms will occur. Such were distinguished by Henrard as *A. tenuisetulosa* var. *arenarioides*.

Note the curious disjunct distribution; it may therefore be expected to turn up in New Guinea and the Moluccas as well.

Aristida papuana Veldk., *spec. nov.*

Aristidae holathera Domin similis, in partibus spiculae c. 0,5–0,7-plo brevioribus, columna non articulata, ab *A. macroclada* Henrard in glumis aristisque longioribus differt. — Type: *NGF 49315 (Henty & Foreman)* (L, holo; A, BRI, CANB, E, K, LAE, M).

Perennial. Culms 0.25–0.45 m long, lower internodes glabrous. Blades 7–12.5 cm by 0.5–1.7 mm. Panicle erect, lax, few-spikeled, 10–13 by c. 4 cm. Glumes reverse, acuminate, mucronate; lower glumes 6–7 mm long, 1(–3)-nerved, mucro 0.5–1 mm long; upper glumes 10–12 mm long, 1-nerved, mucro 0.8–2 mm long. Lemma 6–7 mm long (incl. 1–1.5 mm long callus), margins overlapping. Column contorted, not articulated at base, 5.5–8 mm long. Awns subequal, more or less straight, divergent, central awn c. 30 mm long; lateral awns 28–30 mm long. Anthers c. 1.25 mm long.

Distribution — Papua New Guinea, Western Prov., Morehead.

Habitat — Seasonally inundated woodland, c. 15 m altitude.

Note — Very similar to *A. holathera*, but differing in the much smaller spikelets, while the column is not articulated, a rare condition in *A. holathera*.

DEYEUXIA Clarion ex Beauv.**Deyeuxia echidnae** Veldk., *spec. nov.*

Conspicue propter laminas setiformes rigidas, ligulas 6–9 mm longas, paniculam satis laxam purpurascenscentem, glumas 4,5–5 mm longas spiculam aequantes lemmate longiores, lemma 3–3,2 mm longum apice truncato erose 4-dentato callo pilis relative longis c. 2,25 mm longis, aristam erectam parvam (c. 1 mm longam) in 0,67–0,7 superiore parte lemmatis insertam intra glumas inclusam. — Type: NGF 8971 (*Womersley*) (L, holotype; LAE, US).

Perennials. Culms c. 0.3 m long. Ligules 6–9 mm long. Blades involute, stiff, 7–9 cm by 1.5–1.8 mm diam. Panicles laxly contracted, c. 11 cm by 30 mm diam., axis smooth, lowermost branches 2 together, longest ones c. 3.5 cm long, c. 8-spikeled. Spikelets 4.5–5 mm long (excl. awns), purple-brown, cleistogamous. Glumes as long as the spikelet, apex acuminate. Rachilla-process c. 1.25 mm long, with c. 1.25 mm long hairs. Lemma 3–3.2 mm long, smooth, apex truncate, erose 4-dentate, callus with c. 2.25 mm long hairs, awn straight, inserted in the upper 0.67–0.7th, c. 1 mm long, enclosed in the spikelet. Anthers c. 1 mm long.

Distribution – Papua New Guinea, Chimbu Prov. (Wilhelm).

Habitat – Bare rock screes without other vegetation, 4450 m.

Note – Conspicuous for its quill-like, stiff leaves (the tuft vaguely reminiscent of the spines of the spiny ant-eater or echidna), long ligules, rather open, purplish panicle, and the truncate, erose 4-dentate lemmas with relatively long callus hairs and straight, weak, enclosed awns.

Calamagrostis arundinacea Roth — When Schrader (1806) proposed the combination *Arundo silvatica* he excluded several previous applications of *Agrostis arundinacea*, but accepted that of Willdenow (1797). He did not specifically exclude the latter's reference to *Agrostis arundinacea* L. (1753). As there was no previous *Arundo arundinacea*, the use of another epithet was not permitted, and so *Arundo silvatica* is a superfluous name and homotypic with Linnaeus' replaced epithet.

Beauvois (1812) published a heterotypic *Deyeuxia arundinacea*, which is valid, as it was accompanied by an illustration with analysis (Art. 44.1). This precludes any later *Deyeuxia arundinacea* based on Linnaeus' combination, e.g. *Deyeuxia arundinacea* Jansen (1952).

Kunth (1829) cited both *Agrostis arundinacea* L. and *Arundo silvatica* Schrader, and perhaps intending to make a nomen novum (Art. 72.1.c) and slightly changing the spelling created *Deyeuxia sylvatica*. Under normal circumstances the combination would be valid, legitimate, and typified by the Linnean type, whatever that may turn out to be (Art. 7.11, Art. 33, Note 1).

However, Kunth also cited two other heterotypic synonyms, *Agrostis villosa* Vill. (1786) and *Calamagrostis pyramidalis* Host (1809). According to the rules of priority (Art. 11.3) he should have adopted 'villosa', that being the "final epithet of the earliest legitimate name of the taxon in the same rank." The combination *Deyeuxia sylvatica* is therefore superfluous, as *D. villosa* has never been made. According to Art. 7.13 *Deyeuxia sylvatica* "is automatically typified by the type of the name which ought to have been adopted," but it may be argued that by the use of the orthographic vari-

ant of Schrader's epithet "the author of the superfluous name has definitely indicated a different type," i. e. that of Schrader's *Arundo silvatica*. In the latter case the type of *Agrostis arundinacea* L. is the prescribed type. It is clear from most of the synonymy given that Kunth had the Linnean species in mind when he coined the combination.

If it is argued that Kunth did not "definitely indicate a different type," because he could not have done that, the type concept being unknown in his time, the type of *Deyeuxia sylvatica* is that of *Agrostis villosa* (Art. 7.13), while the material generally called *Deyeuxia sylvatica* but auct., non Kunth, applies to *Agrostis arundinacea* L. *Agrostis villosa* is now considered to be the basionym of a different species of a different genus, *Calamagrostis villosa* (Vill.) J. Gmelin (1791), e. g. by Kerguélen (1975).

Whatever the argumentation, *Deyeuxia sylvatica* was and is superfluous and cannot be maintained. If Kerguélen is to be followed, *Agrostis villosa* is removed from the synonymy and cannot provide the required epithet when *Agrostis arundinacea* L. is considered to belong in *Deyeuxia*.

Calamagrostis pyramidalis Host is then the remaining heterotypic synonym causing the next combination:

***Deyeuxia pyramidalis* (Host) Veldk., comb. nov.**

Calamagrostis pyramidalis Host, Icon. Descr. Gram. Austr. 4 (1809) 28, t. 49. — Type: "In sylvis Pannoniae ... Bruck an der Leitha ... Junio, Julio" (W, holo?).

Agrostis arundinacea L., Sp. Pl. 1 (1753) 61. — *Arundo agrostis* Scop., Fl. Carn., ed. 2 (1771) 88, nom. superfl. — *Calamagrostis arundinacea* Roth, Tent. Fl. Germ. 2, 1 (1789) 89. — *Arundo silvatica* Schrader, Fl. Germ. 1 (1806) 218, t. 4, f. 7, nom. superfl. — *Calamagrostis sylvatica* Besser, Prim. Fl. Galic. 1 (1809) 70, nom. superfl., nec Host (1809) (prius postve?). — *Cinna agrostoides* Beauv., Agrost. (1812) 147, nom. superfl. — *Deyeuxia arundinacea* Jansen, Acta Bot. Neerl. 1 (1952) 470, non Beauv. (1812, 160, t. 15, f. 11a–d). — Lectotype: not resolved, presumably in Hb. Linn. (LINN).

Deyeuxia sylvatica auct., non Kunth.

LACHNAGROSTIS Trin.

Lachnagrostis Trin., Fund. Agrost. (1820) 128, t. 10. — *Agrostis* L. sect. *Lachnagrostis* Desv. in Gay, Fl. Chil. 6 (1853) 320. — Lectotype: *L. filiformis* (Forst.) Sprengel ex Trin. [= *L. avenacea* (Gmelin) Veldk.].

The differences between *Agrostis* L., *Calamagrostis* Adans., *Deyeuxia* Beauv., and *Lachnagrostis* are only slight (see Veldkamp, 1982). Recently the genus has been regarded as distinct by Rúgolo de Agrasar & Molina (1990) and Edgar & Forde (1991). As the type generally *L. filiformis* Sprengel ex Trin. (1820) is cited, but this is a homotypic synonym of *Agrostis avenacea* Gmelin and a new combination is required.

***Lachnagrostis avenacea* (Gmelin) Veldk., comb. nov.**

Agrostis avenacea Gmelin, Syst. Nat. 2, 1 (1791) 171. — *Avena filiformis* Forst., Fl. Ins. Austr. (1786) 9, non *Agrostis filiformis* Vill. (1787). — *Lachnagrostis filiformis* Sprengel ex Trin., Fund. Agrost. (1820) 128, t. 10, nom. superfl. — Type: *Forster s.n.* (ex Sprengel in Hb. Willdenow 2208, B, cf. microfiche IDC 7440; Hb. Thunberg 2597, UPS, cf. microfiche IDC 1036), Nova Zeelandia et Insula Paschatis.

For further synonymy, see Veldkamp (1982).

NEYRAUDIA Hook. f.

Conert (1959) based the new combination *Neyraudia acarifera* (Arn. & Nees) on *Thysanolaena acarifera* Arn. & Nees ex Nees, 'excl. syn.'

The combination *Thysanolaena acarifera* Arn. & Nees ex Nees was based on *Panicum acariferum* Trin., a nomen novum for *Melica latifolia* Roxb. (1820), non Hornem. (1819), which is a synonym of *Thysanolaena latifolia* (Hornem.) Honda.

Nees' specimen, however, for which he gave a Latin description, belongs to a species of *Neyraudia* Hook. f. Conert applied his new combination exclusively to this and so he might have been considered to have given it a new name under Art. 72. However, an epithet to be used was available, as he cited *Thysanolaena mezii* Janowski, which is also typified by Nees' specimen, as a synonym. Therefore the combination *Neyraudia mezii* (Janowski) Veldk. is the correct one.

Neyraudia mezii (Janowski) Veldk., *comb. nov.*

Thysanolaena mezii Janowski in Mez, Feddes Repert. 17 (1921) 86. — *Thysanolaena acarifera* auct., non Nees: Nees, Nov. Act. Acad. Caes. Leop.-Carol. Nat. Cur. 19, Suppl. 1 (1843) 181, quoad specim. e 'Promontorio Syng-Moon'. — *Neyraudia acarifera* Conert, Bot. Jahrb. 78 (1959) 240, nom. superfl. — Type: *Meyen s.n.*, July 1831 (B, holo), China, promontorio Syng-Moon.

ORYZA L.**Oryza minuta** Presl

Tateoka (1962, 1963) and Tateoka & Pancho (1963) have maintained that *O. minuta* and *O. officinalis* are two distinct species. Duistermaat in the herbarium could not distinguish between the two, but in the field apparently they can be recognized [Dr. Vaughan (IRRI, Manila) oral comm.]. They have different chromosome numbers, *O. officinalis* with $2n = 24$, *O. minuta* with $2n = 48$. Otherwise the differences are slight and at most a varietal status seems warranted:

— Panicles with the lowermost branches with an ascending upper part, naked in the lower third or less. Spikelets oblong, 1.6–2.15 mm wide, 1.9–2.95 times as long as wide. $2n = 48$. — Ligules 1–4 mm long, glabrous. Spikelets 3.6–6.4 mm long. Awns up to 2 cm long. Philippines (Luzon, Samar, Leyte, Bohol)

a. O. minuta var. **minuta**

— Panicles with the lowermost branches with a descending upper part, naked in the lower half. Spikelets elliptic, 2.15–2.85 mm wide, 1.45–2.05 times as long as wide. $2n = 24$. — Ligules 1–8 mm long, glabrous or hairy. Spikelets 3.6–4.6 mm long. Awns sometimes absent, up to 2.5 cm long. Sikkim, India, Sri Lanka to S Vietnam; Malesia: Sumatra, Malaya, Java, Borneo, Philippines (Bohol, Leyte, Mindanao, Mindoro, Negros), Celebes, Lesser Sunda Islands (Flores), Moluccas (Halmaheira, Buru); New Guinea (Merauke, Western Prov.), Australia (Queensland: Moa Island) (*O. officinalis*) **b. O. minuta** var. **silvatica**

a. var. *minuta*

Oryza minuta Presl, Rel. Haenk. 1 (1830) 208. — Type: *Haenke s.n.* (PR, holo).

Oryza manilensis | Philipp. J. Sc., Bot. 3 (1908) 219. — Type: *BS 2194 (Ramos)* (PNH, holo, lost; BO, K, US, W).

Oryza latifolia auct., non Desv.

b. var. *silvatica* (Camus) Veldk., *comb. nov.*

Oryza latifolia Desv. var. *silvatica* Camus, Bull. Mus. Nat. Hist. Nat. 27 (1921) 456, f. 41, t. 18. — Type: *Poilane 839* (P, holo).

Oryza officinalis Wall. ex Watt, Dict. Econ. Prod. 5 (1891) 501. — *Oryza officinalis* Watt subsp. *officinalis* Tateoka, Bot. Mag. Tokyo 75 (1962) 422. — Type: *Wallich 8635* (CAL, holo; K, W).

Oryza latifolia auct., non Desv.

Note — The collection of Moa Island has very reduced awns, only c. 0.8 mm long, but the pubescence of the fertile lemma is that of *O. minuta* and not that of *O. meyeriana*, with which it could be easily confused.

PHRAGMITES Adans.

Linnaeus (1754, 1759) made the combination *Arundo vallatoria* Pluk. for *Canna palustris* Rumph. (1743). The *Arundo vallatoria* used by De l'Obel (Lobelius, 1581) for *Phragmites australis* from Europe was not mentioned, but he did cite Plukenet (1700) who used the combination for a plant from Malabar, there called '*Peacaramboovu*', a name not in Rheedee (see Nicolson et al., 1988). In his Introduction Plukenet said that he had had plants from India orientalis from Alexander Brown. He said it was similar to a European reed, presumably either *Arundo donax* L. or *Phragmites australis* (Cav.) Steudel ('nostrati similis'). There is apparently no specimen in the Plukenet Herbarium (BM), according to Dr. C.E. Jarvis (in litt.).

This leaves us with Rumphius' plate as the type of the combination. It is a crude drawing of a tall grass, 12 to 16 foot, with a hollow culm, and a large plume-like inflorescence. It grows along water. Only a few possibilities remain as to its identity.

Neyraudia arundinacea (L.) Henrard is not known East of Flores and grows on sunny, rocky places, avoiding seasonal regions.

Saccharum spontaneum has a solid culm. Rumphius knew this as '*tubu sala*' (l.c.: 21, t. 6), a name curiously not mentioned by Merrill (1917). Hasskarl (1866) thought '*tubu sala*' referred to *Anthistiria cymbaria* (L.) Roxb., with which he possibly meant a *Themeda*, but this does not even resemble Rumphius' plate.

Thysanolaena latifolia (Hornem.) Honda has a solid culm. Rumphius seems not to have known this.

This leaves us with what is generally known as *Phragmites karka* (Retz.) Steudel.

Linnaeus' combination has been neglected since its publication, even by himself. Hasskarl thought Rumphius' plant was identical with *Eulalia japonica* Trin. [with which he presumably meant *Miscanthus floridulus* (Labill.) Warb.], but I agree with Merrill (1917) and Fosberg (1981) that it must refer to a *Phragmites*. As there is only a single species in Malesia this must be what is known as *Phragmites karka* (Retz.) Steudel, based on *Arundo karka* Retz. (1786). A new combination is therefore required:

Phragmites vallatoria (Pluk. ex L.) Veldk., *comb. nov.*

Arundo vallatoria Pluk. ex [Stickman] L., Herb. Amb. (1754) 15; Amoen. Acad. 4 (1759) 115. — Type: Rumph., Herb. Amb. 4 (1743) 20, t. 5.

Arundo karka Retz., Obs. Bot. 4 (1786) 21. — *Phragmites karka* (Retz.) Steudel, Nomencl. ed. 2, 1 (1840) 144; Trin. ex Steudel, l.c. (1841) 324. — *Trichoon karka* Roth, Arch. 1, 3 (1798) 37. — Type: *Koenig s.n.* in Hb. Retz. (LD, holo).

SACCHARUM L.**Saccharum elegans** (Jeswiet) Veldk., *comb. nov.*

Erianthus ciliaris (Anderss.) Jeswiet var. *elegans* Jeswiet ex Backer, Handb. Fl. Java 2 (1928) 42. — *Erianthus elegans* Rümke, Arch. Suikerind. Ned. Ind. (1934) 229. — *Erianthus procerus* (Roxb.) Raizada var. *elegans* Mukherjee, Lloydia 21 (1958) 178 (ref. to *Saccharum benghalense* to be removed: Art. 63.3). — Type: Not indicated (BO, holo).

POA AMBOINICA L.

Poa amboinica L., Mant. 2 (1771) 557.

This was originally published as follows:

“amboinica *Poa panicula secunda coarctata, culmo tereti.*
Phoenix amboinica montana. Rumph. amb. 6. p. 19. t. 7. f. 3.
 Habitat in India.
 Similima *Poae compressae*, sed *Culmus teres.*
Flores paniculati, verticillati. Flores quinqueflori.
Antherae rubrae. Pistilla alba.”

Several papers and notes have been published over the years discussing the application of *Poa amboinica*, which are summarized below.

All agree that Linnaeus had a specimen available and so was able to note that it was very similar to *Poa compressa* but with terete culms, that the spikelets were 5-flowered, the anthers red, and the stigmas ('pistilla') white. Unfortunately it does not seem to exist anymore. It also has been generally agreed that it was probably sent to him by König, either as a specimen (Fischer, 1934; Furtado, 1937), or as seed from which he grew the plant. He cited this collector for many new species from India in the Mantissa. That he may have had a living plant is suggested by the remarks on the colour of anthers and stigmas.

Nearly all noticed that the reference to Rumphius' plate is erroneous, that is, a quite different plant is described and depicted there, *Sorghum nitidum* (Vahl) Pers., a species of the Andropogoneae, where the spikelets are strictly 2-flowered, usually reduced to one fertile floret. In *S. nitidum*, moreover, the panicle is effuse, while the resemblance to *Poa compressa* is nil. If Linnaeus had had this, he would certainly have noticed the shiny black sessile spikelets.

Thus there are two elements: the actual plant from which the description was taken, and the reference to Rumphius. Two camps have evolved for the interpretation of the name, each based on one of these elements.

Retzius (1786) received a specimen from König from India under the name *Poa amboinica*. Fischer (1934) has suggested that Linnaeus had communicated the binomial to König, who thereafter sent specimens either of the same collection or, at least, of plants he deemed to be identical with the one so named by Linnaeus, to Retzius and to Rottboell under that name and seeds to Banks. Retzius noted that the culm was "evidenter compressum" and compared it to *Poa ciliaris* L. (1759), now *Eragrostis ciliaris* (L.) R. Br.

From this remark probably stems the plausible idea that Linnaeus had an *Eragrostis* species before him and caused Trinius and Steudel (1840) to make the combination *Eragrostis amboinica* (L.) Trin. ex Steudel ('amboinensis') and Druce (1917) to do so again ('amboinicea', an orthographic variant to be corrected).

Retzius also noted the discrepancy between the description (and his specimen) and the Rumphius reference: "Errore factum est ... haec enim figura ut et descriptio ab hac maxime aliena est." It may be argued, as was done by Furtado (1937), that this constitutes a lectotypification by the removal of the Rumphian element.

Hackel (1889) mentioned an *Andropogon serratus* subvar. *major* for Amboina, but he did not refer to Linnaeus' or Rumphius' names.

Merrill (1917) said "*Poa amboinica* Linn. ... is reduced ... to *Eragrostis amboinensis* Trin., this being merely a transfer of the specific name by Steudel," and then categorically stated (bold-face mine) "*Poa amboinica* Linn. is based wholly on Rumphius' description and figure from which the species must be interpreted," and made the combination *Andropogon amboinicus*.

From the above it will be clear that these remarks are untrue. Merrill continued to say that this is the same as *Andropogon serratus* Thunb. s.l., or what Hackel called *Andropogon serratus* var. *genuinus* subvar. *major* Hackel (l.c.: 521), and thought two species were involved: *A. serratus* s.s. and his *A. amboinicus*. Hubbard (1938) followed Hackel and regarded them as two forms of one species, *Sorghum nitidum*.

Effectively Merrill and many later authors have lectotypified the Linnean name by the Rumphius reference in the same way as Retzius previously lectotypified it with Linnaeus' description, but according to the Code, such a differing lectotypification is not allowed, as was pointed out by Furtado (1937).

Fischer (1934) gave a discussion in which he pointed out that, since the epithet was adopted from Rumphius' phrase name, it should, presumably, be retained for the Rumphius' plant from Amboina. Pilger, at his request, compared a specimen that matched Retz's specimen with the type of *Eragrostis riparia* (Willd.) Beauv., and found that the two agreed but for some trifling difference in the form of the panicle. Fischer concluded that the correct name for *Poa amboinica* Retz., non L., should be *Eragrostis riparia*.

Fischer remarked that Salisbury also had obtained seeds from König and grew a plant identical to that of Retzius. A specimen is conserved in the J.E. Smith herbarium (LINN; sheet 127.104) misidentified apparently by Smith as *Poa cynosuroides*, a synonym of *Desmostachya bipinnata* (L.) Stapf. It was inscribed in 1785 as "Hort. D. Salisbury, e seminibus ex India Or. a Konigio ad D. Banks missis."

Another cultivated plant agreeing with the Lund sheet is in the BM possibly inscribed by R. Brown, "Mr. Schumacher states that this was sent by Koenig to Rottboell under the name *Poa amboinica* ... Retz. fascic. 4." It is identified in another hand as "*Poa pulchella* Salisbury," a name published by Salisbury in 1796.

Furtado (1937) summarized previous literature and said that Merrill's and Fischer's interpretation should not be allowed. The first author to select a lectotype should be followed. The unsuitability of the trivial name cannot be successfully adduced against an already published choice.

Hubbard (1938) apparently followed Merrill by citing *Andropogon amboinicus* under *Sorghum nitidum*. The use of the latter, younger synonym is then erroneous.

He cited *Andropogon amboinicus* (L.) Merr., but not *Poa amboinica* in the synonymy and so should have coined the combination *Sorghum amboinicum*, and the two forms he distinguished have either an invalid (the typical form) or incorrect (the atypical form) name. He also cited *Andropogon serratus* Thunb. (1784), actually published slightly earlier by Murray, but *Sorghum serratum* (Thunb. ex Murray) O. Kuntze is precluded by *S. serratum* (Thunb.) R. & S., based on *Holcus serratus* Thunb., now considered a species of *Brachiaria*.

Airy Shaw (1947) followed Fischer and, citing a contemporary Recommendation (not a Rule!), argued that geographical names used as the basis of names should be regarded as analogous to name-bringing synonyms in new combinations: they should 'indicate the type' (quotation marks by Hubbard). Since *Eragrostis riparia* would be an Indian species not occurring in Amboina and since Linnaeus adopted the geographical epithet '*amboinica*', the species should be typified by the Rumphian reference.

This was already refuted by Furtado, as said above, and is still an invalid argument under the Code (see Art. 32.2: "The epithet in the name of a species may be taken from any source whatever," 62.1: "an epithet may not be rejected merely because it is inappropriate or disagreeable," and its Example 3: "The name *Scilla peruviana* L. is not to be rejected merely because the species does not grow in Peru.")

In a recent revision of indigenous Australian sorghums Lazarides et al. (1991) used *Sorghum nitidum* and referred for the synonymy to Hubbard.

To conclude there are three options:

- 1) Application of the Linnean epithet to an *Eragrostis*, *E. amboinica* (L.) Trin. ex Steudel, a species usually known as *Eragrostis riparia*.
- 2) Application of the Linnean epithet to a *Sorghum*, *S. amboinicum* (L.), a combination not yet made, to replace the well-known *Sorghum nitidum* (Vahl) Pers.

- 3) Rejection of the epithet altogether, as Linnaeus' own specimen is absent, and the presence of specimens (Retzius, Salisbury, Schumacher) grown from seeds obtained from König bearing the Linnaean name is mere conjecture that Linnaeus had had the same species. In fact, from his diagnosis it is at most an inspired guess that he had an *Eragrostis* at all.

As stability is best served by the last option, I at present intend to cite *Eragrostis amboinica* as a nomen incertae sedis under *Eragrostis* and *Sorghum* in the forthcoming treatment for the Flora Malesiana.

For those who are not convinced and insist to use it in the sense of Retzius for *Eragrostis riparia*, the Retzius specimen seems an appropriate neotype (Furtado, 1937).

Those who feel that application should be to the Rumphian element now have an easy opportunity to some fame and use the arguments given above as an LPU (Least Publishable Unit) to create *Sorghum amboinicum*.

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