

Contributions to the Flora of Southeast Asia

V. Gramineae and Cyperaceae of Thailand

by

Jisaburo OHWI*

This is an account of the families Gramineae and Cyperaceae of Thailand based on the collections made by Drs. M. Tagawa, T. Shimizu, K. Iwatsuki, H. Koyama, N. Fukuoka, and M. Hutoh of the Kyoto University Biological Expedition to Thailand, 1965-66 and 1967. It includes a few species hitherto not recorded from this area. The grasses collected during the Thai-Danish Botanical Expedition in Thailand are listed by N. L. Bor in *Dansk Botanisk Arkiv* 20: 141-178. 1962; 23: 143-168. 1965, and 23: 467-471. 1968. The Cyperaceae (excluding *Carex*) are treated by J. H. Kern in *Reinwardtia* 6: 25-83. 1955 based on the material located in various herbaria. Later, M. Raymond published an enumeration of the whole family of the area based primarily on the Danish collection in *Dansk Botanisk Arkiv* 23: 245-262. 1965 and 311-374. 1966.

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Gramineae

1. ***Acroceras tonkinense*** (BALANSA) C. E. HUBB. ex BOR in Indian For. Rec. (Bot.) 1: 78. 1938; BOR in Dansk Bot. Arkiv 20: 154. 1962—*Panicum tonkinense* BALANSA in MOROT, Jour. de Bot. 4: 140. 1890.

Chiang Rai: along Nam Mae Kok about 15 km west of Chiang Rai, ca. 400 m alt., at the edge of an evergreen forest, *T* 10876. Loei: Phu Kradung, on the plain at its summit, ca. 1200 m alt., at the edge of an evergreen forest, *T* 8893. Nakhon Si Thammarat: Thung Song, in tropical rain forest near a waterfall, Nam Tok Yong, at the edge of an evergreen forest, 100-140 m alt., *T* 8190.

2. ***Alloteropsis semialata*** (R. BR.) HITCHC. in Contr. U. S. Nat. Herb. 12: 210. 1909; BOR in Dansk Bot. Arkiv 20: 154. 1962—*Panicum semialatum* R. BR. Prodr. Fl.

* 大井次三郎, National Science Museum, Ueno Park, Tokyo

Nov. Holl. 192. 1810.

Loei: Phu Kradung, on the plain at its summit, ca. 1200 m alt., in a sunny place by a path, *T* 769.

3. **Andropogon brevifolius** Sw., Prodr. Veg. Ind. Occ. 26. 1788—*Schizachyrium brevifolium* (Sw.) NEES ex BUSE in MIQ., Pl. Jungh. 359. 1854; BOR in Dansk Bot. Arkiv 20: 176. 1962.

Chiang Mai: en route from Mae Klang waterfall to Ban Yang, along Nam Mae Klang, on the approach to Doi Inthanon, on sandy soil in a river bed, *T* 2324.

4. **Andropogon sanguineus** (RETZ.) MERR. in Philip. Jour. Sci. Bot. 12: 101, 1917 and Enum. Philip. Fl. Pl. 1: 47, 1923—*Schizachyrium sanguineum* (RETZ.) ALSTON, Suppl. Fl. Ceylon 334. 1931; BOR in Dansk Bot. Arkiv 20: 176. 1962—*Rottboellia sanguinea* RETZ., Obs. Bot. 3: 25. 1783.

Andropogon semiberbis (NEES) KUNTH, Enum. Pl. 1: 489. 1833.

Loei: Phu Kradung, on the plain at its summit, 1100–1200 m alt., in a sunny place, *T* 559; ibid. ca. 1200 m alt., in an open place, *T* 780.

5. **Apluda mutica** LINN., Sp. Pl. 82. 1753; BOR in Dansk Bot. Arkiv 20: 166. 1962.

Loei: Phu Luang, from Ban Na Luang to North ridge, ca. 500 m alt., on a pampas in light shade, *T* 1040; Phu Kradung, ca. 700 m alt., on a dry slope by a sunny path, *T* 368.

6. **Arundinella bengalensis** (SPRENG.) DRUCE in Rep. Exch. Club, Brit. Isl. 605. 1916; BOR in Dansk Bot. Arkiv 20: 142. 1962—*Panicum bengalense* SPRENG., Syst. Veget. 1: 311. 1825.

Chiang Rai: at the higher elevation of Doi Tung, 1200–1450 m alt., in a grassy field in an open place, *T* 11141. Chiang Mai: en route from Ban Yang to Mae Klang waterfall, along Nam Mae Klang, ca. 1000 m alt., on dried up rice field, *T* 3150.

7. **Arundinella setosa** TRIN. Gram. Panic. 63. 1826; BOR in Dansk Bot. Arkiv 20: 143. 1962.

Lamphun: at the higher elevation on Doi Khun Tan, 1200–1374 m alt., on a grassy slope in light forest, *T* 9264. Lampang: Doi Palad, north of Lampang, ca. 600 m alt., in a deciduous forest, *T* 10836. Loei: Phu Kradung, ca. 1200 m alt., on open grassland, *T* 9030.

8. **Arthraxon castratus** (GRIFF.) NARAYANASWAMI ex BOR, Fl. Assam, V: 376. 1940 and in Dansk Bot. Arkiv 20: 167. 1962—*Andropogon castratus* GRIFF., Notul. 3: 89. 1851.

Loei: Phu Kradung, on the plain at its summit, 1100–1200 m alt., on dry ground in an open place, *T* 548.

9. **Bothriochloa assimilis** (STEUD.) OHWI in Act. Phytotax. Geobot. 11: 165, in adnota, 1942—*Capillipedium assimile* (STEUD.) A. CAMUS in LECOMTE, Fl. Gén. Indo-Chine 7: 314. 1922; BOR in Dansk Bot. Arkiv 20: 168. 1962—*Andropogon assimilis*

STEUD. in ZOLLINGER, Syst. Verz. Ind. Arch. 58. 1854 and Synops. 1: 397. 1854.

Chiang Rai: at the higher elevation of Doi Tung, 1200-1450 m alt., in an open grassy field, *T 11146*. Chiang Mai: Doi Chiangdao, 600 m alt., on a dry slope in mixed forest in limestone region, *T 4068*; at the lower elevation of Doi Suthep, 350-700 m alt., in a grassy place in sunshine, *T 9434*; at the middle elevation of Doi Suthep, 500-900 m alt., on sunny clayey ground on a roadside, *T 10471*. Loei: Phu Luang, from Ban Na Luang to north ridge, ca. 500 m alt., on pampas in light shade, *T 1034*.

10. **Bothriochloa glabra** (ROXB.) A. CAMUS in Ann. Soc. Linn. Lyon n. sér. 76: 164. 1931; BOR in Dansk Bot. Arkiv 23: 156. 1965—*Andropogon glaber* ROXB., Fl. Ind. 1: 271. 1820.

Loei: en route from Nam Thop to Ban Na Luang, eastern foot of Phu Luang, 300-400 m alt., by a foot-path in rice fields, *T 1979*.

11. **Brachiaria kurzii** (HOOK. f.) A. CAMUS in LECOMTE, Fl. Gén. Indo-Chine 7: 438. 1922; BOR in Dansk Bot. Arkiv 20: 154. 1962—*Panicum kurzii* HOOK. f., Fl. Brit. Ind. 7: 38. 1869.

Chiang Mai: at the foot of Doi Chiangdao, 500-600 m alt., on swampy grassland, at the foot of mountain in limestone region, *T 9739*. Lampang: Doi Pang La, Huay Tak, ca. 400 m alt., in a bamboo thicket, *T 10772*. Loei: Pha Nuk Khao, 150-400 m alt., in glade in a light deciduous forest, *T 8709*.

12. **Brachiaria mutica** (FORSSK.) STAPF in PRAIN, Fl. Trop. Afr. 9: 526. 1919; BOR in Dansk Bot. Arkiv 20: 155. 1962—*Panicum muticum* FORSSK. Fl. Aegypt.-Arab. 30. 1775.

Samut Prakan: Samut Prakan to Bang Pakong (in Chachoengsao), in an open grassy place, at sea level, *T 118 & 121*. Phra Nakhon: Soi Somprasong, Petchuburi Road, Bangkok, at the edge of a marsh in a sunny place, *T 7081*.

13. **Brachiaria reptans** (LINN.) GARDN. & HUBB. in HOOK., Icon. Pl. sub pl. 3363. 1938; BOR in Dansk Bot. Arkiv 20: 155. 1962—*Panicum reptans* LINN., Syst. Nat. ed. 10, 870. 1759.

Prachuap Khiri Khan: stone-pit on Khao Chrongwan, 0-30 m alt., on a limestone hill with red clay earth, in an open grassy place, *T 7631*.

14. **Brachiaria villosa** (LAM.) A. CAMUS in LECOMTE, Fl. Gén. Indo-Chine, 7: 433. 1922; BOR in Dansk Bot. Arkiv 20: 156. 1962—*Panicum villosum* LAMARCK, Tabl. Encycl. Méth. Bot. 1: 173. 1791, pro parte.

Chiang Mai: at the higher elevation of Doi Suthep (Doi Pui), 1100-1685 m alt., on a grassy roadside bank, *T 9481*.

15. **Cenchrus brownii** R. & S. Syst. Veg. 2: 258. 1817; BOR in Dansk Bot. Arkiv 20: 156. 1962.

Prachuap Khiri Khan: in stone-pit on Khao Chrongwan, 0-30 m alt., on a limestone hill with red clay earth, in an open grassy place, *T 7644*.

16. **Centotheca lappacea** (LINN.) DESV. in Nouv. Bull. Soc. Philom. **2**: 189. 1810; BOR in Dansk Bot. Arkiv **20**: 143. 1962—*Cenchrus lappaceus* LINN. Sp. Pl. ed. 2, 1488. 1763.

Phitsanulok : Phu Rom Rot, one of the peaks of Phu Miang, 1200–1600 m alt., in a banana thicket, *T* 11535, ibidem, in a bamboo thicket, *T* 11525. Phetchabun : Phu Miang, along the way between the hill-tribe villages, 1200–1300 m alt., in bamboo thicket, *T* 11408. Loei : Pha Nuk Khao, ca. 300 m alt., on dry ground in deep shade, *T* 324. Trang : Khao Chong National Park, ca. 100 m alt., on dry ground in deep forest, *T* 5505.

17. **Centotheca longilamina** OHWI in Bull. Tokyo Sci. Mus. No. **18**: 10. 1947; Mon. d. FROIDEVILLE in BACKER & Bakh. v. d. BR., Fl. of Java **3**: 520. 1968.

Centotheca lappacea var. *longilamina* (OHWI) BOR, Grass. Burma, India and Pakistan, 459. 1960.

Chiang Rai : Doi Tung, ca. 600 m alt., on wooded slope, *T* 11169.

18. **Chloris dolichostachya** LAGASCA, Gen. & Spec. Pl. 5. 1816; BOR in Dansk Bot. Arkiv **23**: 144. 1965.

Chloris incompleta ROTH, Nov. Pl. Sp. 60. 1821.

Loei : Pha Nuk Khao, ca. 300 m alt., on dry ground in forest, *T* 326.

19. **Chrysopogon aciculatus** (RETZ.) TRIN., Fund. Agrost. 188. 1830; BOR in Dansk Bot. Arkiv **20**: 168. 1962—*Andropogon aciculatus* RETZ. Obs. Bot. **5**: 22. 1789.

Chiang Mai : along the highway between Chom Thong and Ban Luang Forest Station, 700–1200 m alt., in a rather dry field on a mountain slope in deciduous forest, *T* 10282. Pathum Thani : Rangsit, north of Bangkok, on a dry bank along a path in a rice field, *T* 287. Phra Nakhon : Bang Khen, north of Bangkok, on a path-way in a sunny wet rice field, *T* 263.

20. **Coelorhachis glandulosa** (TRIN.) STAPF ex RIDLEY, Fl. Malay Penin. **5**: 204. 1925; BOR in Dansk Bot. Arkiv **20**: 168. 1962—*Rottboellia glandulosa* TRIN. in Mém. Acad. Sci. Pétersb. sér. VI. **2**: 250. 1832.

Nakhon Si Thammarat : Thung Song, near a waterfall, in tropical rain forest, Nam Tok Yong, 100–140 m alt., in an open marshy place, *T* 8197.

21. **Coelorhachis striata** (NEES) A. CAMUS in Ann. Soc. Linn. Lyon, n. ser. **68**: 197. 1921; BOR in Dansk Bot. Arkiv **20**: 169. 1962.—*Rottboellia striata* NEES ex STEUD., Syn. Pl. **1**: 361. 1854.

Chiang Rai : Doi Tung, en route from Ban Huai Khrai to Wat Doi Tung, ca. 800 m alt., in a sunny place, *T* 10929. Chiang Mai : Doi Chiangdao, 500–1600 m alt., *T* 4416.

21-a. **Coelorhachis striata** (NEES) A. CAMUS. var. **pubescens** (HACK.) BOR, Grass. Burma, India and Pakistan, 121. 1960—*Rottboellia striata* subsp. *genuina* var. *pubescens* HACK. in DC., Monogr. Phan. **6**: 302. 1889.

Chiang Mai: at the middle elevation of Doi Suthep, 500–900 m alt., on sunny clayey ground, *T 10473*, along the highway between Mae Sariang and Chom Thong, 900–1200 m alt., *T 10393*. Lamphun: en route from Ban Khun Tan, Doi Khun Tan, ca. 700 m alt., on dry ground in a light deciduous forest, *T 9205*.

22. **Coix lacryma-jobi** LINN., Sp. Pl. 2: 972. 1753; BOR in Dansk Bot. Arkiv 20: 177. 1962.

Chiang Mai: Ban Yang, at the middle elevation of Doi Inthanon, 600–1350 m alt., at the edge of a sunny rice field, *T 2448*. Chantaburi: at the foot of Khao Soidao, ca. 200 m alt., in an open pebbly place along a river, *T 7324*.

23. ? **Cymbopogon flexuosus** (NEES) WATS. in ATKINS., Gaz. N. W. Prov. India, 392. 1882; BOR in Dansk Bot. Arkiv 23: 158. 1965—*Andropogon flexuosus* NEES ex STEUD., Syn. Pl. 1: 388. 1854.

Chiang Rai: at the higher elevation of Doi Tung, 1200–1450 m alt., in a grass field on a mountain ridge, *T 11144*, Doi Pa Hom Pok, NW of Phan, ca. 600 m alt., at the edge of a secondary forest, *T 9738*.

23-a. ? **Cymbopogon flexuosus** (NEES) WATS. var. **microstachys** (HOOK. f.) BOR in Journ. Bombay Nat. Hist. Soc. 52: 162. 1954, and Grass. Burma, India and Pakistan, 127. 1960 and in Dansk Bot. Arkiv 23: 158. 1965—*Andropogon nardus* L. var. *microstachys* HOOK. f., Flor. Brit. Ind. 7: 207. 1896.

Chiang Mai: below the summit of Doi Chiangdao, 1900–2175 m alt., on grass slope at the ridge, *T 10087*.

24. ? **Cymbopogon nardus** (LINN.) RENDLE in Cat. Welw. Afr. Pl. 2: 155, 1899—*Andropogon nardus* LINN., Sp. Pl. 2: 1046. 1753.

Lamphun: at the higher elevation of Doi Khun Tan, 1200–1374 m alt., on a grass slope in light forest, *T 9267*.

25. **Cynodon arcuatus** Presl, Rel. Haenk. 1: 290. 1830; BOR, Grass. Burma, India and Pakistan, 469, 1960 and in Dansk Bot. Arkiv 20: 144. 1962.

Lampang: campus of Huay Tak Forest Station, ca. 320 m alt., on open grassland, *T 10594-b*.

26. **Cynodon dactylon** (LINN.) PERS., Syn. Pl. 1: 85. 1805; BOR in Dansk Bot. Arkiv 20: 144. 1962—*Panicum dactylon* LINN., Sp. Pl. 1: 58. 1753.

Phra Nakhon: Bang Khen, north of Bangkok, on a rather dry pathway in open rice fields, *T 256*.

27. **Cynodon parviglumis** OHWI in Bot. Mag. Tokyo 55: 538. 1941; GILLILAND in Gardens' Bull. 21: 209. 1965.

Lampang: Tham Pha Thai in Huay Tak, ca. 350 m alt., *T 10674*.

28. **Cyrtococcum accrescens** (TRIN.) STAPF in HOOK. Icon. Pl. sub pl. 3096. 1922; BOR in Dansk Bot. Arkiv 20: 156. 1962—*Panicum accrescens* TRIN., Sp. Gram. Icon. 1: pl. 88. 1828.

Cyrtococcum patens var. *latifolium* (HONDA) OHWI in Act. Phytotax. Geobot. **11**: 47. 1942.

Chiang Rai : Doi Tung, en route from Ban Huai Khrai to Wat Doi Tung, ca. 800 m alt., along path in moist woods, *T* 10932. Chiang Mai : at the middle elevation of Doi Suthep, 500–900 m alt., on sunny clayey roadside, *T* 10472. Lampang : campus of Huay Tak Forest Station, ca. 320 m alt., on open grassland, *T* 10593. Phitsanulok : Phu Rom Rot, one of the peaks of Phu Miang, 1200–1600 m alt., in a banana thicket, *T* 11539. Loei : Pha Nuk Khao, ca. 300 m alt., on dry ground in forest, *T* 323 ; Phu Kradung, 930–1200 m alt., in dense evergreen forest, *T* 8832. Nakhon Si Thammarat : at the lower elevation of Khao Luang, 200–650 m alt., along a hillside path, *T* 8536.

29. ***Cyrtococcum oxyphyllum*** (STEUD.) STAPP in HOOK. Icon. Pl. sub pl. 3096. 1922 ; BOR in Dansk Bot. Arkiv **20** : 156. 1962—*Panicum oxyphyllum* STEUD. Synops. **1** : 65. 1854.

Loei : Phu Kradung, *T* 953, 250–930 m alt., in deciduous forest mixed with bamboo, *T* 9063 ; north ridge of Phu Luang, 1100–1500 m alt., *T* 1204. Prachuap Khiri Khan : Bang Saphan, 0–150 m alt., in grassy glade in the dense evergreen forest, *T* 7776.

30. ***Dactyloctenium aegyptium*** (LINN.) BEAUV. Ess. Agrost. Expl. Pl. 15. 1812 ; BOR in Dansk Bot. Arkiv **20** : 145. 1962—*Cynosurus aegyptius* LINN. Sp. Pl. **1** : 72. 1753.

Chiang Mai : near Mae Klang waterfall, interior of Chom Thong, ca. 350 m alt., on wet, sandy soil in open place, *T* 2204. Mae Hong Son : along the road between Mae Sariang and Mae La Noi, 300–450 m alt., on dry ground in an open place, *T* 10381. Phra Nakhon : Bang Khen, north of Bangkok, along a sunny pathway, *T* 268.

31. ***Dichanthium polyptichum*** (STEUD.) A. CAMUS in Bull. Mus. Hist. Nat. Paris **27** : 549. 1921 ; BOR, Grass. Burma, India and Pakistan, 135. 1960—*Andropogon polyptichus* STEUD. Synops. **1** : 380. 1854.

Loei : Phu Luang, from Ban Na Luang to north ridge, ca. 500 m alt., on dry ground in mixed forest, *T* 1039.

32. ***Digitaria granularis*** (TRIN.) HENR., Monogr. Gen. Digitaria 302. 1950 ; BOR in Dansk Bot. Arkiv **20** : 157. 1962—*Paspalum granulare* TRIN. ex SPRENG., Neue Entdeck. **2** : 47. 1821.

Lampang : campus of Huay Tak Forest Station, ca. 320 m alt., on open grassland, *T* 10598. Loei : Phu Kradung, 250–930 m alt., in grassy glade in light deciduous forest, *T* 8771.

33. ***Digitaria microbachne*** (PRESL) HENR. in Med. Rijks Herb. Leiden **61** : 13. 1930 ; BOR in Dansk Bot. Arkiv **20** : 158. 1962—*Panicum microbachne* PRESL, Rel. Haenk. **1** : 298. 1830.

Lampang : en route from Pang La to Huay Tak, ca. 350 m alt., on limestone in a light forest, *T* 10720, campus of Huay Tak Forest Station, ca. 320 m alt., on open grassland, *T* 10594. Prachuap Khiri Khan : in stone pit at Khao Chrongwan, 0–30 m

alt., on limestone hill with red clay earth, in an open grassy place on laterite, *T 7630*. Nakhon Si Thammarat: at the lower elevation of Khao Luang, ca. 400 m alt., in an open grassy field, *T 8534-b*.

34. ***Digitaria microstachya*** HENR., Monogr. *Digitaria* 454. 1950; BOR in Dansk Bot. Arkiv 23: 151. 1965.

Lampang: Tham Pha Thai in Huay Tak. ca. 350 m alt., *T 10677*. Nakhon Si Thammarat: at the lower elevation of Khao Luang, ca. 400 m alt., on an open grassy field, *T 8534*.

35. ***Digitaria ternata*** (A. RICH.) STAPF in DYER, Fl. Capens. 7: 276. 1898; BOR in Dansk Bot. Arkiv 20: 159. 1962—*Cynodon ternatus* A. RICH., Tent. Fl. Abyss. 2: 405. 1851.

Chiang Rai: Doi Pa Hom Pok, NW of Phan, 1300–2000 m alt., *T 9606*. Chiang Mai: along the highway between Chom Thong and Ban Luang Forest Station, 700–1200 m alt., on a rather dry field in light shade, *T 10279*.

36. ***Dimeria fuscescens*** TRIN. in Mém. Acad. Sci. St. Pétersb. sér. VI, 2: 335. 1832; BOR in Dansk Bot. Arkiv 20: 170. 1962.

Loei: Phu Kradung, on the plain at its summit, ca. 1200 m alt., on grass field by path in open place, *T 765-bis*.

37. ***Diplachne malayana*** C. E. HUBB. in Kew Bull. 1934: 106. 1934; BOR in Dansk Bot. Arkiv 23: 145. 1965.

Lampang: campus of Huay Tak Forest Station, ca. 320 m alt., on open grassland, *T 10591*.

38. ***Echinochloa colonum*** (LINN.) LINK, Hort. Berol. 2: 209. 1833; BOR in Dansk Bot. Arkiv 23: 159. 1965—*Panicum colonum* LINN., Syst. Nat. ed. 10, 2: 870. 1759.

Prachuap Khiri Khan: Bang Saphan, 0–150 m alt., open grassy roadside, *T 7755*.

39. ***Echinochloa crus-galli*** P. BEAUV. var. ***brevisetata*** (DOELL) NEILR., Fl. Nied. Oest. 31. 1859; BOR in Dansk Bot. Arkiv 20: 160. 1962—*Panicum crus-galli* P. BEAUV. var. *brevisetum* DOELL, Fl. Bad. 1: 232. 1857.

Phetchabun: Phu Miang, along the way between the hill tribe villages, 1200–1300 m alt., sloping arable land of rice, *T 11410*.

40. ***Eleusine coracana*** (LINN.) GAERTN., Fruct. & Sem. 1: 8. 1789; BOR, Grass. Burma, India and Pakistan 492. 1960—*Cynosurus coracanus* LINN., Syst. Nat. ed. 10, 2: 875. 1759.

Phetchabun: Phu Miang, along the way between hill tribe villages, 1200–1300 m alt., on clayey arable land on mountain side, *T 11409*.

41. ***Eleusine indica*** (LINN.) GAERTN., Fruct. & Sem. 1: 8. 1789; BOR in Dansk Bot. Arkiv 20: 145. 1962—*Cynosurus indicus* LINN., Sp. Pl. 1: 72. 1753.

Phra Nakhon: Bang Khen, north of Bangkok, on a ridge between the rice fields, *T 279*. Prachuap Khiri Khan: Nam Tok Huay Yang, near Thap Sakae, 30–200 m alt.,

along an open stream on a granite hill, *T* 7693.

42. **Eragrostis gangetica** (ROXB.) STEUD., Syn. Pl. Glum. 1: 266. 1854; BOR, Grass. Burma, India and Pakistan, 508. 1960—*Poa gangetica* ROXB., Fl. Ind. 1: 341. 1820.

Chiang Mai: near Mae Klang waterfall, interior of Chom Thong, ca. 350 m alt. on moist sunny sandy soil in river bed, *T* 2206.

43. **Eragrostis tenella** (LINN.) BEAUV. ex R. & S., Syst. Veget. 2: 576. 1817; BOR in Dansk Bot. Arkiv 20: 147. 1962—*Poa tenella* LINN., Sp. Pl. 1: 69. 1753.

Eragrostis amabilis (LINN.) WIGHT et ARN. ex HOOK. & ARN., Bot. Beechey Voy. 251. 1838.

Prachuap Khiri Khan: Khao Chong Grackok, near Bang Saphan, 0–150 m alt., in a calcareous rocky place, open, grassy ground, *T* 7610.

44. **Eragrostis udawnensis** OHWI in Act. Phytotax. Geobot. 22: 139. 1967.

Loei: Phu Kradung, on the plain at its summit, ca. 1200 m alt., *T* 768.

45. **Eragrostis unioides** (RETZ.) NEES ex STEUD., Syn. Pl. 1: 264. 1854; BOR in Dansk Bot. Arkiv 20: 148. 1962—*Poa unioides* RETZ., Obs. Bot. 5: 19. 1789.

Phetchabun: Phu Miang, along the way between the hill tribe villages, 1200–1300 m alt., a sloping arable land, *T* 11387.

46. **Eriochloa procera** (RETZ.) C. E. HUBB. in Kew Bull. 1930: 256; BOR in Dansk Bot. Arkiv 20: 160. 1962—*Agrostis procera* RETZ., Obs. Bot. 4: 19. 1786.

Phra Nakhon: Bang Khen, north of Bangkok, on open pathway in rice field in sunny place, *T* 260.

47. **Eulalia amaura** (BUSE) OHWI in Bull. Tokyo Sci. Mus. No. 18: 2. 1947—*Polytrias amaura* (BUSE) O. KUNTZE, Rev. Gen. Pl. 2: 788. 1891—*Andropogon amaurus* BUSE in MIQ., Plant. Junghun. 360. 1854.

Eulalia praemorsa (NEES) STAPF ex RIDLEY, Fl. Mal. Penin. 5: 197. 1925.

Phra Nakhon: Soi Somprasong, Petchuburi Road, Bangkok, on open dry ground, *T* 7080, Bang Khen, north of Bangkok, on a rather wet bank in sunny rice field, *T* 243.

48. ? **Eulalia birmanica** (HOOK. f.) A. CAMUS in Ann. Soc. Linn. Lyon n. ser. 68: 204. 1922; BOR, Grass. Burma, India and Pakistan, 155. 1960—*Pollinia birmanica* HOOK. f., Fl. Brit. Ind. 7: 113. 1896.

Loei: Phu Kradung, ca. 1200 m alt., on open grassland, *T* 9040.

49. **Eulalia phaeothrix** (HACK.) O. KUNTZE, Rev. Gen. Pl. 775. 1891; BOR, Grass. Burma, India and Pakistan, 156. 1960 and in Dansk Bot. Arkiv 20: 171. 1962—*Pollinia phaeothrix* HACK. in DC., Monogr. Phan. 6: 168. 1889.

Loei: Phu Kradung, on the plain at its summit, ca. 1100–1200 m alt., in sunny place *T* 556.

50. **Eulalia smithinandiana** BOR in Kew Bull. 1956: 256 and in Dansk Bot. Arkiv 20: 171. 1962.

Loei : Phu Kradung, on the plain at its summit, ca. 1200 m alt., in a grassy open field by path, *T* 765.

51. **Garnotia acutigluma** (STEUD.) OHWI in Bot. Mag. Tokyo **55**: 393. 1941; SANTOS in Nat. & Applied Sci. Bull. **10**: 82. 1950—*Urachne acutigluma* Steud., Syn. Pl. **1**: 121. 1854.

Garnotia stricta sensu auct.; BOR in Dansk Bot. Arkiv **20**: 149. 1962, non BRONGN.

Loei : Phu Kradung, on the plain at its summit, 1100–1200 m alt., *T* 522 & 582.

52. **Garnotia patula** (MUNRO) BENTH., Fl. Hongk. 416. 1861; SANTOS in Nat. & Applied Sci. Bull. **10**: 101. 1950; GILLILAND in Gardens' Bull. **21**: 210. 1965—*Berghousia patula* MUNRO in Proc. Amer. Acad. Art. Sci. **4**: 362. 1860.

Loei : Phu Luang, at its northeastern ridge, 1300–1562 m alt., in marsh in open place, *T* 1575.

53. **Hackelochloa granularis** (LINN.) O. KUNTZE, Rev. Gen. Pl. **2**: 776. 1891; BOR in Dansk Bot. Arkiv **20**: 172. 1962—*Genchrus granularis* LINN. Mant. 2. App. 575. 1771.

Chiang Rai : at the higher elevation of Doi Tung, 1200–1450 m alt., in grassy open field on mountain ridge, *T* 11135. Chiang Mai : at the middle elevation of Doi Suthep, 500–900 m alt., on a clay roadside, *T* 10464, at the lower elevation of Doi Suthep, 350–700 m alt., *T* 9458, along the highway between Mae Sariang and Chom Thong, 1000 m alt., in light deciduous forest, *T* 10392. Lampang : campus of Huay Tak Forest Station, ca. 320 m alt., on open grassland, *T* 10596.

54. **Hemarthria protensa** STEUD., Syn. Pl. Glum. **1**: 359. 1854; BOR in Dansk Bot. Arkiv **20**: 172. 1962.

Chiang Rai : below the summit of Doi Pa Hom Pok, NW of Phan, on mountain ridge, 2100 m alt., *T* 9622.

55. **Heteropogon contortus** (LINN.) BEAUV. ex ROEM. & SCHULT., Syst. Veg. **2**: 836. 1817; BOR in Dansk Bot. Arkiv **20**: 172. 1962—*Andropogon contortus* LINN., Sp. Pl. **2**: 1045. 1753.

Chiang Mai : near Mae Klang waterfall, interior of Chom Thong, ca. 350 m alt., on open sandy ground in river bed, *T* 2203. Loei : Phu Luang, from Ban Na Luang to north ridge, ca. 500 m alt., on pampus field in light shade, *T* 1036.

56. **Hyparrhenia rufa** (NEES) STAPP in PRAIN, Fl. Trop. Afr. **11**: 304. 1919; BOR in Dansk Bot. Arkiv **20**: 173. 1962—*Trachypogon rufus* NEES, Agrost. Bras. 345. 1829.

Chiang Mai : southeastern slope of Doi Inthanon, interior of Ban Yang, on a grass field on a mountain slope, *T* 3035, at the middle elevation of Doi Inthanon, 1350–1900 m alt., in a sunny place on mountain slope, *T* 2573.

57. **Ichnanthus vicinus** (F. M. BAIL.) MERR., Enum. Philip. Fl. Pl. **1**: 70. 1923; BOR, Grass. Burma, India and Pakistan, 315. 1960; GILLILAND in Gardens' Bull. **19**:

163. 1962—*Panicum vicinum* F. M. BAILEY, Syn. Queensl. Fl. Suppl. 3: 82. 1890.

Chiang Rai : along Nam Mae Kok about 15 km west of Chiang Rai, ca. 400 m alt., in deep evergreen forest on mountain slope, *T 10875*.

58. *Imperata cylindrica* (LINN.) BEAUV. var. **major** (NEES) C. E. HUBB. ex HUBB. & VAUGHAN, Grass. Maurit. 96. 1940; BOR, Grass. Burma, India and Pakistan, 170. 1960—*Imperata koenigii* var. *major* NEES, Fl. Afr. Austr. 90. 1840.

Lampang : campus of Huay Tak Forest Station, ca. 320 m alt., on open grassland, *T 10587*. Phitsanulok : Phu Rom Rot, on one of the peaks of Phu Miang, 1200–1600 m alt., by road in open place, *T 11536*.

59. *Ischaemum barbatum* RETZ. var. **lodiculare** (NEES) JANSEN in Reinwardtia 2: 294. 1953; BOR in Dansk Bot. Arkiv 20: 174. 1962—*Meoschium lodiculare* NEES in HOOK. & ARN., Bot. Beech. Voy. 246. 1838.

Loei : Phu Kradung, ca. 1200 m alt., on open grassland, *T 9024*.

60. *Ischaemum rugosum* SALISB., Icon. Stirp. Rar. 1: pl. 1. 1791; BOR, Grass. Burma, India and Pakistan, 184. 1960 and in Dansk Bot. Arkiv 23: 164. 1965.

Phra Nakhon : Bang Khen, north of Bangkok, in marshy place in open place, *T 261*.

61. *Isachne albens* TRIN., Sp. Gram. 1: pl. 85. 1826; BOR, Grass. Burma, India and Pakistan 579. 1960 and in Dansk Bot. Arkiv 20: 150. 1962.

Chiang Rai : below the summit of Doi Pa Hom Pok, NW of Phan, 2000–2350 m alt., *T 9628*. Loei : Phu Luang, at its northeastern ridge, 1300–1562 m alt., in an open marsh, *T 1570*, Phu Kradung, ca. 1200 m alt., on open marshy grassland, *T 9021*.

62. *Isachne confusa* OHWI in Bull. Tokyo Sci. Mus. No. 18: 14. 1947; BOR, Grass. Burma, India and Pakistan 579. 1960 and in Dansk Bot. Arkiv 20: 150. 1962.

Nakhon Si Thammarat : in the suburb of Thung Song, in thicket in marsh in sunny place, *T 8134*.

63. *Isachne kinabaluensis* MERR. in Jour. Str. Br. Roy Asiat. Soc. 76: 77. 1917; BOR, Grass. Burma, India and Pakistan 581. 1960 and in Dansk Bot. Arkiv 20: 150. 1962.

Loei : Phu Kradung, on the plain at its summit, ca. 1200 m alt., at the edge of the evergreen forest, *T 8890*, ibidem, on open grassland, *T 8877 & 9042*. Nakhon Si Thammarat : at the higher elevation of Khao Luang, 1100–1786 m alt., on moist ground in shade at summit, *T 4847*, ibidem, 950–1786 m alt., in half shaded place at ridge, *T 8414*.

64. *Leersia hexandra* Sw., Prodr. Veg. Ind. Occ. 21. 1788; BOR, Grass. Burma, India and Pakistan 599. 1960 and in Dansk Bot. Arkiv 20: 151. 1962.

Phitsanulok : Tung Salaeng Luang National Park, near Guest House, ca. 500 m alt., on margin of a pond, *T 11302*.

65. *Leptaspis urceolata* (ROXB.) R. BR. in BENN., Pl. Jav. Rar. 23. 1838; BOR, Grass. Burma, India and Pakistan 617. 1960 and in Dansk Bot. Arkiv 20: 152. 1962—

Pharus urceolatus ROXB., Fl. Ind. ed. 2, 3: 611. 1832.

Nakhon Si Thammarat: at the lower elevation of Khao Luang, 200–650 m alt., along a path at edge of forest, *T* 8505.

66. **Leptochloa chinensis** (LINN.) NEES, in Syll. Ratisb. 1: 4, 1824; BOR, Grass. Burma, India and Pakistan 516. 1960 and in Dansk Bot. Arkiv 20: 148. 1962—*Poa chinensis* LINN., Sp. Pl. 1: 69. 1753.

Khon Kaen: in the suburbs of Chum Phae, in marshy place at the edge of the rice field, *T* 8686.

67. **Lophatherum gracile** BRONGN. in DUPERR., Voy. Coq. Bot. 50. 1831; BOR, Grass. Burma, India and Pakistan 460. 1960 and in Dansk Bot. Arkiv 20: 144. 1962.

Chiang Rai: at higher elevation of Doi Tung, 1200–1450 m alt., in grassy field in sunshine, *T* 11137. Loei: Phu Kradung, on the plain at its summit, ca. 1200 m alt., at edge of the evergreen forest, *T* 8881 & 951. Chantaburi: at the higher elevation of Khao Soidao, ca. 1300 m alt., on clayey ground in thin forest, *T* 7111. Nakhon Si Thammarat: Thung Song, in tropical rain forest near waterfall, Nam Tok Yong, 100–150 m alt., at the edge of light evergreen forest, *T* 8192.

68. **Microchloa indica** (LINN. f.) P. BEAUV., Ess. Agrost. Explic. Pl. 20. 1812; BOR, Grass. Burma, India and Pakistan 473. 1960 and in Dansk Bot. Arkiv 20: 145. 1962—*Nardus indicus* LINN. f., Suppl. Pl. Syst. Veg. 105. 1781.

Chiang Mai: along the highway between Mae Sariang and Chom Thong, 900–1200 m alt., *T* 10394.

69. **Microstegium ciliatum** (TRIN.) A. CAMUS in Ann. Soc. Linn. Lyon, n. sér. 68: 201. 1921; BOR, Grass. Burma, India and Pakistan 193. 1960 and in Dansk Bot. Arkiv 20: 174. 1962—*Pollinia ciliata* TRIN. in Mém. Acad. Sci. Pétersb. sér. VI, 2: 306. 1832.

Loei: north ridge of Phu Luang, 1100–1500 m alt., *T* 1203.

70. **Microstegium petiolare** (TRIN.) BOR in Indian For. Rec. Bot. 1: 3: 87. 1938 and Grass. Burma, India and Pakistan 194. 1960—*Spodiopogon petiolaris* TRIN. in Mém. Acad. Sci. Pétersb. sér. VI, 2: 301. 1832.

Chiang Mai: southeastern slope of Doi Inthanon, interior of Ban Yang, *T* 3040. Loei: Phu Luang, at its northeastern ridge, 1300–1562 m alt., in marsh in open place at ridge, *T* 1568.

71. **Microstegium vagans** (NEES ex STEUD.) A. CAMUS in Ann. Soc. Linn. Lyon, n. ser. 68: 200. 1921; BOR, Grass. Burma, India and Pakistan 195. 1960 and in Dansk Bot. Arkiv 20: 174. 1962—*Pollinia vagans* NEES ex STEUD., Synops. Glum. 1: 410. 1854.

Chiang Mai: Ban Yang, at the middle elevation of Doi Inthanon, 600–1350 m alt., in sunny place at the edge of rice field, *T* 2441; *ibid.* 1350–1900 m alt., on grassy field on mountain slope, *T* 2577; Doi Suthep, ca. 1000 m alt., on dry ground along the way in thin forest, *T* 2174. Phitsanulok: Tung Salaeng Luang National Park, ca. 300–600

m alt., on a sunny bank along a river, *T* 2122.

72. **Neyraudia reynaudiana** (KUNTH) KENG ex HITCHC. in Amer. Journ. Bot. **21**: 131. 1934; BOR, Grass. Burma, India and Pakistan 519. 1960; GILLILAND in Gardens' Bull. **19**: 169. 1962—*Arundo reynaudiana* KUNTH, Rév. Gram. **1**: 275, pl. 49. 1830.

Chiang Mai: at the middle elevation of Doi Inthanon, 1350–1900 m alt., on a grassy field on a mountain slope, *T* 2578. Phitsanulok: one of the highest peaks of Phu Miang, 1200–1650 m alt., in a thicket along a mountain path, *T* 11655, Phu Rom Rot, one of the peaks of Phu Miang, 1200–1600 m alt., on a bushy mountain ridge, *T* 11554. Nakhon Si Thammarat: Khao Kao, Thung Song, in an open place by a road, *T* 8157.

73. **Oplismenus burmannii** (RETZ.) BEAUV., Ess. Agrost. 54, 168 and 169. 1812; BOR in Dansk Bot. Arkiv **20**: 161. 1962—*Panicum burmannii* RETZ., Obs. Bot. **3**: 10. 1783.

Loei: Pha Nuk Khao, ca. 300 m alt., on dry ground in a forest, *T* 325.

74. **Oplismenus compositus** (LINN.) BEAUV. Ess. Agrost. 54, 168 and 169. 1812; BOR in Dansk Bot. Arkiv **20**: 161. 1962—*Panicum compositum* LINN., Sp. Pl. **1**: 57. 1753.

Chiang Rai: Doi Pa Hom Pok, NW of Phan, 1300–2000 m alt., *T* 9605; at the higher elevation of Doi Tung, 1200–1450 m alt., in a sunny grassy field, *T* 11139; ibid. by a path between grassy fields, *T* 11134. Chiang Mai: at the higher elevation of Doi Chiangdao, 1100–1800 m alt., on a clay slope in a dense forest, *T* 9970; near Mae Klang waterfall, interior of Chom Thong, ca. 350 m alt., on wet ground in deep shade, *T* 2205. Phitsanulok: Phu Rom Rot, one of the peaks of Phu Miang, 1200–1600 m alt., in a banana thicket, *T* 11543. Phetchabun: Phu Miang, between the hill tribe villages, 1200–1300 m alt., in a bamboo thicket, *T* 11404. Loei: Phu Kradung, on the plain at its summit, ca. 1100–1200 m alt., *T* 544.

75. **Oplismenus undulatifolius** (ARD.) BEAUV., Ess. Agrost. 54. 1812; BOR, Grass. Burma, India and Pakistan 318. 1960—*Panicum undulatifolium* ARDUINO, Animadv. Sp. Alt. 14, pl. 4. 1764.

Loei: on eastern slope of Phu Luang, 900–1400 m alt., in thin forest, *T* 1794.

76. **Oryza granulata** NEES & ARN. ex STEUD., Syn. Pl. Glum. **1**: 3, 1854, nomen; Hook. f., Fl. Brit. Ind. **7**: 93. 1896; BOR in Dansk Bot. Arkiv **20**: 151. 1962.

Lampang: Doi Palad, north of Lampang, ca. 600 m alt., in a bamboo thicket, *T* 10835. Tak: Lan Sang National Park, 250–500 m alt., along a river in mixed forest, *T* 8657. Prachuap Khiri Khan: Bang Saphan, 0–150 m alt., in grassy glade in the dense evergreen forest, *T* 7771.

77. **Oryza rufipogon** GRIFF., Notul. **3**: 5, 1851; BOR, Grass. Burma, India and Pakistan 605. 1960 and in Dansk Bot. Arkiv **23**: 149. 1965.

Loei: Phu Kradung, ca. 600 m alt., in a swamp in rather dry deciduous forest, *T* 1288. Phra Nakhon: Bang Khen, north of Bangkok, in a ditch between the rice fields,

T 267.

78. **Ottochloa nodosa** (KUNTH) DANDY in Journ. Bot. (London) **69**: 55. 1931; BOR in Dansk Bot. Arkiv **20**: 162. 1962—*Panicum nodosum* KUNTH, Enum. Pl. **1**: 97. 1833.

Chiang Mai: at the middle elevation of Doi Suthep, 500–900 m alt., on a clayey roadside, *T* 10468. Lampang: campus of Huay Tak Forest Station, ca. 320 m alt., on open grassland, *T* 10579, 10590 & 10595; Doi Pang La, Huay Tak, ca. 400 m alt., in a bamboo thicket, *T* 10773. Tak: Lan Sang National Park, 250–400 m alt., on a rather dry slope in a semishady place, *T* 8569. Loei: Phu Kradung, 930–1200 m alt., in an evergreen forest, *T* 8827. Prachuap Khiri Khan: Nam Tok Huay Yang, near Thap Sakae, 30–200 m alt., in a sunny and grassy place on a granite hill, *T* 7726. Nakhon Si Thammarat: Thung Song, in tropical rain forest near a waterfall, Nam Tok Yong, 100–140 m alt., in an open marshy place, *T* 8195.

79. **Panicum auritum** PRESL ex NEES, Agrost. Bras. 116. 1829; RIDLEY, Fl. Malay Penin. **5**: 226. 1925; GILLILAND in Gardens' Bull. **19**: 163. 1962; BOR, Grass. Burma, India and Pakistan 324. 1960 and in Dansk Bot. Arkiv **23**: 153. 1965.

Phitsanulok: Tung Salaeng Luang National Park, near Guest House, ca. 500 m alt., on open grassland, *T* 11298. Phra Nakhon: Bang Khen, north of Bangkok, on a rather wet path between rice fields, *T* 270. Nakhon Si Thammarat: Thung Song, in a tropical rain forest near a waterfall, Nam Tok Yong, 100–140 m alt., on an open grassy marsh, *T* 8191.

80. **Panicum brevifolium** LINN., Sp. Pl. **1**: 59. 1753; BOR in Dansk Bot. Arkiv **23**: 153. 1965.

Loei: Phu Kradung, on the plain at its summit, ca. 1100–1200 m alt., *T* 564.

81. **Panicum humidorum** HAM. ex HOOK. f., Fl. Brit. Ind. **7**: 53. 1896.

Lampang: campus of Huay Tak Forest Station, ca. 320 m alt., on open grassland, *T* 10599 & 10590.

82. **Panicum incomtum** TRIN., Gram. Panic. 200. 1826; BOR in Dansk Bot. Arkiv **20**: 162. 1962.

Loei: Phu Luang, from Ban Na Luang to north ridge, *T* 1035.

83. **Panicum notatum** RETZ., Obs. Bot. **6**: 18. 1786; BOR in Dansk Bot. Arkiv **20**: 162. 1962.

Panicum montanum ROXB., Fl. Ind. **1**: 315. 1820.

Chiang Rai: at the higher elevation of Doi Tung, 1200–1450 m alt., in an open grassy field, *T* 11142. Chiang Mai: at the middle elevation of Doi Chiangdao, 1500 m alt., in a bamboo thicket, *T* 10176. Lamphun: at the higher elevation of Doi Khun Tan, 1200–1374 m alt., on a grassy slope in mixed forest, *T* 9277. Loei: Phu Kradung, on the plain at its summit, ca. 1100–1200 m alt., *T* 563.

84. **Panicum repens** LINN., Sp. Pl. ed. 2, **1**: 87. 1762; BOR in Dansk Bot. Arkiv **20**: 163. 1962.

Chiang Mai: at the lower elevation of Doi Suthep, 350-700 m alt., on open wet ground along a stream, *T* 9435. Samut Prakan: Ban Bang Pu Kao, along the seashore, on a dried rice field, *T* 7562.

85. **Paspalidium flavidum** (RETZ.) A. CAMUS in LECOMTE, Fl. Gén. Indo-Chine, 7: 419. 1922; BOR in Dansk Bot. Arkiv 20: 163. 1962—*Panicum flavidum* RETZ. Obs. 4: 15. 1768.

Mae Hon Son: along the road between Mae Sariang and Mae La Noi, 450 m alt., in deep deciduous forest, *T* 10377. Lampang: campus of Huay Tak Forest Station, ca. 320 m alt., in *Tectona* forest, *T* 10583, Tham Pha Thai in Huay Tak, ca. 350 m alt., *T* 10672.

86. **Paspalum conjugatum** BERG. in Act. Helv. Phys. Math. 7: 129. 1772; BOR in Dansk Bot. Arkiv 20: 164. 1962.

Chiang Rai: Doi Tung, en route from Ban Huai Khrai to Wat Doi Tung, 500 m alt., on a sunny slope, *T* 10930. Loei: en route from Nam Thop to Ban Na Luang, eastern foot of Phu Luang, 300-400 m alt., along a footpath between dried up rice fields, *T* 1978. Prachuap Khiri Khan: Nam Tok Huay Yang, near Thap Sakae, 30-200 m alt., on a granite hill, in an open grassy place at edge of forest, *T* 7740.

87. **Paspalum orbiculare** FORST., Fl. Ins. Austr. Prodr. 7: 7. 1786; BOR in Dansk Bot. Arkiv 20: 164. 1962.

Lampang: campus of Huay Tak Forest Station, ca. 320 m alt., on open grassland, *T* 10585.

88. **Paspalum vaginatum** Sw., Prodr. Veg. Ind. Occ. 21. 1788; BOR in Dansk Bot. Arkiv 20: 164. 1962.

Phra Nakhon: Bang Khen, north of Bangkok, on wet ground in a rice field, *T* 240.

89. **Perotis hordeiformis** NEES apud HOOK. & ARN., Bot. Beech. Voy. 247, 248. 1838; BOR, Grass. Burma, India and Pakistan 611. 1960 and in Dansk Bot. Arkiv 20: 152. 1962.

Mae Hong Son: along the road between Mae Sariang and Mae La Noi, 400 m alt., on sandy ground in a sunny place, *T* 10388.

90. **Phragmites karka** (RETZ.) TRIN. ex STEUD., Nom. Bot. ed. 2, 2: 324. 1841; BOR in Dansk Bot. Arkiv 20: 142. 1962; W. CLAYTON in Kew Bull. 21: 116. 1967.

Phitsanulok: Tung Salaeng Luang National Park, near waterfall, ca. 500 m alt., on an open sandy river bed, *T* 11239.

91. **Pogonatherum crinitum** (THUNB.) KUNTH, Enum. Pl. 1: 478. 1833; BOR in Dansk Bot. Arkiv 20: 175. 1962—*Andropogon crinitus* THUNB., Fl. Japon. 40. 1784.

Chiang Rai: en route from Ban Lang Lat to the middle elevation of Doi Pacho (Doi Langka), 1050-1450 m alt., on pebbly ground in a thin mixed forest, *T* 3557. Chiang Mai: at the lower elevation of Doi Suthep, 400-800 m alt., on dry ground in a deciduous forest, *T* 4454. Lamphun: en route from Ban Khun Tan to Doi Khun Tan, 1100 m

alt., in mixed forest, *T* 9206. Nakhon Si Thammarat: Thung Song, in a tropical rain forest near waterfall, Nam Tok Yong, 100-140 m alt., on an open clayey bank, *T* 8200.

92. ***Pseudoechinolaena polystachya*** (H. B. K.) STAPF in PRAIN, Fl. Trop. Afr. 9: 495. 1919; BOR in Dansk Bot. Arkiv 23: 154. 1965—*Echinolaena polystachya* H. B. K., Nov. Gen. & Sp. 1: 119. 1816.

Chiang Rai: Doi Tung, ca. 1100 m alt., on side of path on a moist slope, *T* 11170. Phitsanulok: Phu Rom Rot, one of the peaks of Phu Miang, 1200-1600 m alt., in a banana thicket, *T* 11538.

93. ***Sacciolepis angusta*** (TRIN.) STAPF in PRAIN, Fl. Trop. Afr. 9: 763. 1920; BOR in Dansk Bot. Arkiv 20: 164. 1962.

*Loei: Phu Kradung, on the plain at its summit, ca. 1200 m alt., in a grassy open field, *T* 763.

94. ***Sacciolepis indica*** (LINN.) CHASE in Proc. Biol. Soc. Wash. 21: 8. 1908; BOR in Dansk Bot. Arkiv 20: 165. 1962—*Aira indica* LINN. Sp. Pl. (in errata), 1753.

Chiang Rai: at the higher elevation of Doi Tung, 1200-1450 m alt., in a grassy open field on a mountain ridge, *T* 11138. Mae Hong Son: along the road between Mae Sariang and Mae La Noi, 300-450 m alt., on a wet bank in a grove along a road, *T* 10374. Loei: Phu Kradung, ca. 1200 m alt., on open grassland, *T* 9053.

94-a. ***Sacciolepis indica*** (LINN.) CHASE var. ***villosa*** (HOOK. f.) OHWI comb. nov. —*Panicum indicum* LINN. var. *villosum* HOOK. f., Fl. Brit. Ind. 7: 42. 1896.

Loei: Phu Kradung, ca. 1200 m alt., on open grassland, *T* 9039.

95. ***Sacciolepis turgida*** RIDLEY, Fl. Mal. Penin. 5: 231. 1925; BOR in Dansk Bot. Arkiv 20: 165. 1962.

Chiang Mai: en route from Mae Klang waterfall to Ban Yang, along the Nam Mae Klang, on the approach to Doi Inthanon, 350-600 m alt., on moist, sandy soil in an open place, *T* 2325.

96. ***Setaria pallide fusca*** (SCHUM.) STAPF & HUBB. in Kew Bull. 1930: 259; BOR in Dansk Bot. Arkiv 20: 165. 1962—*Panicum pallide fuscum* SCHUMACH., Beskr. Guin. Pl. 58. 1827.

Chiang Rai: Doi Pa Hom Pok, NW of Phan, 1300-2000 m alt., *T* 9608. Chiang Mai: along the highway between Chom Thong and Ban Luang Forest Station, 700-1200 m alt., on rather dry ground in a dry deciduous forest, *T* 10280 & 10281. Mae Hong Son: along the road between Mae Sariang and Mae La Noi, 300-450 m alt., in a dry grove along road in an open place, *T* 10382. Lampang: campus of Huay Tak Forest Station, ca. 320 m alt., in *Tectona* forest, *T* 10584, along the road between Huay Tak and Ngao, ca. 300 m alt., on an open grassy roadside, *T* 10681. Loei: Phu Kradung, on the plain at its summit, ca. 1200 m alt., in a sunny place, *T* 776, *ibid.* 250-930 m alt., in a sunny grassy place, *T* 8770.

96-a. ***Setaria pallide fusca*** (SCHUM.) STAPF & HUBB. var. ***hirtipes*** OHWI in Act.

Phytotax. Geobot. **23**: 109. 1968.

Lamphun: en route from Ban Khun Tan to Doi Khun Tan, ca. 700 m alt., common in an open place along the way, *T 9188*.

97. **Setaria palmifolia** (KOEN.) STAPF in Journ. Linn. Soc. Bot. **42**: 186. 1914; BOR in Dansk Bot. Arkiv **20**: 166. 1962—*Panicum palmifolium* KOEN. in Naturf. **23**: 208. 1788.

Chiang Mai: at the higher elevation of Doi Suthep (Doi Pui), 1200–1685 m alt., *T 9388*. Phitsanulok: Phu Rom Rot, one of the peaks of Phu Miang, 1200–1600 m alt., in a banana thicket, *T 11542*. Phetchabun: Phu Miang, along the way between the hill tribe villages, 1200–1300 m alt., in a bamboo thicket, *T 11406*. Nakhon Si Thammarat: at lower elevation of Khao Luang, in an open grassy field at ca. 300 m alt., *T 8528*.

98. **Setaria plicata** (LAM.) T. COOKE, Fl. Bombay **2**: 919. 1908; BOR in Dansk Bot. Arkiv **20**: 166. 1962—*Panicum plicatum* LAM., Encycl. Méth. Bot. **4**: 736. 1797.

Chiang Rai: Doi Pa Hom Pok, NW of Phan, 1300–2000 m alt., *T 9603*. Lamphun: at the higher elevation of Doi Khun Tan, 1200–1374 m alt., on a grassy slope in light forest, *T 9266*, ibidem, on a grassy slope in mixed forest, *T 9270*. Loei: Phu Kradung, *T 950*, ibidem, ca. 1100 m alt., in evergreen forest, *T 9029*, ibidem, 930–1200 m alt., in dense evergreen forest, *T 8804*.

99. **Setaria verticillata** (LINN.) P. BEAUV., Ess. Agrost. **51**, 178. 1812; BOR in Dansk Bot. Arkiv **23**: 155. 1965—*Panicum verticillatum* LINN., Sp. Pl. ed. 2, **1**: 82. 1762.

Lampang: Doi Pang La, Huay Tak, ca. 400 m alt., on open riverside, *T 10775*.

100. **Sorghum nitidum** (VAHL) PERS., Syn. Pl. **1**: 101. 1805; BOR, Grass. Burma, India and Pakistan **245**. 1960; JANSEN in Reinwardtia, **2**: 343. 1953—*Holcus nitidus* VAHL, Symb. Bot. **2**: 102. 1791.

Lamphun: en route from Ban Khun Tan to Doi Khun Tan, ca. 700 m alt., on dry ground in light deciduous forest, *T 9192*.

101. **Spinifex littoreus** (BURM. f.) MERR. in Philip. Journ. Sci. Bot. **7**: 229. 1912; BOR, Grass. Burma, India and Pakista **366**. 1960; GILLILAND in Gardens' Bull. **19**: 177. 1962—*Stipa littorea* BURM. f., Fl. Ind. **29**. 1768.

Prachuap Khiri Khan: Bang Saphan, 0–150 m alt., on sandy ground in sunshine near the sea, *T 14655*.

102. **Spodiopogon lacei** HOLE in Indian For. Rec. **5**: 6. 1915; BOR, Grass. Burma, India and Pakistan **246**. 1960 and in Dansk Bot. Arkiv **20**: 176. 1962.

Chiang Mai: Doi Chiangdao, in mixed forest, 800 m alt., *T 4069*.

103. **Sporobolus diander** (RETZ.) BEAUV., Ess. Agrost. **26**, 147, 178. 1812; BOR in Dansk Bot. Arkiv **20**: 152. 1962—*Agrostis diandra* RETZ., Obs. Bot. **5**: 19. 1789.

Lampang: campus of Huay Tak Forest Station, ca. 320 m alt., on open grassland, *T 10586*. Nakhon Si Thammarat: on a limestone hill in suburb of Thung Song, in

crevices in sunny limestone, *T* 8274.

104. ***Sporobolus fertilis*** (STEUD.) W. CLAYTON in Kew Bull. 19: 291. 1965—*Agrostis fertilis* STEUD., Synop. Pl. 1: 170. 1854.

Sporobolus indicus sensu auct. asiat.; BOR, Grass. Burma, India and Pakistan 630. 1960 and in Dansk Bot. Arkiv 20: 152. 1962, not R. BR.

Chiang Rai: at the higher elevation of Doi Tung, 1200–1450 m alt., in a grassy field on a mountain ridge, *T* 11140. Ching Mai: along the highway between Chom Thong and Ban Luang Forest Station, 700–1200 m alt., on a rather dry roadside in a semishaded place, *T* 10284. Phitsanulok: Phu Rom Rot, one of the peaks of Phu Miang, 1200–1600 m alt., in the bushy margin, *T* 11537.

105. ***Sporobolus kerrii*** BOR in Kew Bull. 1949: 252 and in Dansk Bot. Arkiv 20: 152. 1962.

Loei: Phu Kradung, on the plain at its summit, 1100–1200 m alt., on dry ground in an open place, *T* 560; Phu Luang, on its northeastern ridge, 1300–1562 m alt., on moist sandy open ground, *T* 1566.

106. ***Sporobolus tetragonus*** BOR in Kew Bull. 1949: 251 and in Dansk Bot. Arkiv 20: 153. 1962.

Lamphun: en route from Ban Khun Tan to Doi Khun Tan, ca. 600 m alt., common in light deciduous forest, *T* 9189.

107. ***Sporobolus virginicus*** (LINN.) KUNTH, Rév. Gram. 1: 67. 1829; BOR, Grass. Burma, India and Pakistan 634. 1960; GILLILAND in Gardens' Bull. 19: 178. 1962.

Prachup Khiri Khan: in a stone-pit at Khao Chrongwan, 0–30 m alt., on limestone hill with red clay earth, in an open place, *T* 7628.

108. ***Sporobolus wallichii*** MUNRO ex TRIN. in Journ. Bot. (London) 27: 171. 1889; BOR in Dansk Bot. Arkiv 20: 153. 1962.

Lampang: Doi Pang La, Huay Tak, ca. 400 m alt., in a grassy field, *T* 10778.

109. ***Stenotaphrum helferi*** MUNRO ex HOOK. f., Fl. Brit. Ind. 7: 91. 1896; GILLILAND in Gardens' Bull. 19: 178. 1962.

Nakhon Si Thammarat: at the lower elevation of Khao Luang, interior of Wat Kiri Wang, 150 m alt., on dry ground in deep forest, *T* 4559.

110. ***Themeda arundinacea*** (ROXB.) RIDLEY in Trans. Linn. Soc. 3: 401. 1893; BOR in Dansk Bot. Arkiv 20: 176. 1962—*Anthistiria arundinacea* ROXB., Fl. Ind. 1: 256. 1820.

Chiang Rai: at the higher elevation of Doi Tung, 1200–1450 m alt., in a grassy field on a mountain ridge, *T* 11145. Chiang Mai: at the higher elevation of Doi Suthep, near Maeo village, 1300–1500 m alt., on a sunny clayey slope on a roadside, *T* 10518. Lamphun: at the higher elevation of Doi Khun Tan, 1200–1374 m alt., on a grassy slope in light forest, *T* 9268. Loei: Phu Kradung, ca. 1200 m alt., on open grassland, *T* 8807; *ibid.*, on the plain at its summit, ca. 1200 m alt., on open grassland,

T 8882.

111. ***Themeda caudata*** (NEES) A. CAMUS in LECOMTE, Fl. Gén. Indo-Chine, 7: 364. 1922; BOR, Grass. Burma, India and Pakistan 250. 1960—*Anthistiria caudata* NEES in HOOK. & ARN., Bot. Beech. Voy. 245. 1838.

Loei: Phu Kradung, ca. 700 m alt., on a dry slope by a sunny path, *T* 370.

112. ***Themeda triandra*** FORSSK., Fl. Aegypt.-Arab. 178. 1775; BOR, Grass. Burma, India and Pakistan 254. 1960 and in Dansk Bot. Arkiv 20: 176. 1962.

Chiang Rai: at the higher elevation of Doi Tung, 1200–1450 m alt., in a grassy sunny field, *T* 11143. Chiang Mai: at the lower elevation of Doi Suthep, 400–800 m alt., on dry ground in a deciduous forest, *T* 4449. Loei: Phu Kradung, on the plain at its summit, ca. 1100–1200 m alt., on dry ground in a sunny place, *T* 557.

113. ***Themeda villosa*** (POIR.) A. CAMUS in LECOMTE, Fl. Gén. Indo-Chine, 7: 364. 1922; BOR, Grass. Burma, India and Pakistan 254. 1960 and in Dansk Bot. Arkiv 23: 166. 1965—*Anthistiria villosa* POIR. in LAMARCK, Encycl. Méth. Bot. Suppl. 1: 396. 1814.

Loei: Phu Kradung, ca. 700 m alt., on dry ground in a sunny place, *T* 369. Nakhon Si Thammarat: at the lower elevation of Khao Luang, in an open grassy field at ca. 300 m alt., *T* 8529.

114. ***Thysanolaena maxima*** (ROXB.) O. KUNTZE, Rev. Gen. Pl. 2: 794. 1891; BOR in Dansk Bot. Arkiv 20: 153. 1962—*Agrostis maxima* ROXB., Fl. Ind. 1: 319. 1820.

Chiang Mai: southeastern slope of Doi Inthanon, interior of Ban Yang, ca. 1800 m alt., in a grassy field on a mountain slope, *T* 3039; at the higher elevation of Doi Suthep (Doi Pui), 1000–1685 m alt., in a sunny place by a road, *T* 3204; Doi Suthep, west of Chiang Mai, on an open slope by roadside, ca. 900 m alt., *T* 4; Mae Klang waterfall, north of Chom Thong, in an open place, ca. 300 m alt., *T* 89.

115. ***Tripogon trifidus*** MUNRO ex STAPP in Kew Bull. 1892: 85; BOR, Grass. Burma, India and Pakistan 524. 1960.

Chiang Mai: below the summit of Doi Chiangdao, 1900–2175 m alt., on limestone crevices in thicket at ridge, *T* 10085.

Cyperaceae

1. ***Bulbostylis barbata*** (ROTTB.) C. B. CLARKE in HOOK. f., Fl. Brit. Ind. 6: 651. 1893; RAYMOND in Dansk Bot. Arkiv 23: 343. 1966—*Scirpus barbatus* ROTTB., Descr. & Icon. Rar. Pl. 52. 1773.

Mae Hong Son: along the road between Mae Sariang and Ban Mae La Noi, on sandy ground in an open place, 400 m alt., *T* 10387.

2. ***Bulbostylis densa*** (WALL. ex ROXB.) HAND.-MAZZ. in KARSTEN & SCHENK, Vegetationsb. 20 (7): 16. 1930; RAYMOND in Dansk Bot. Arkiv 23: 343. 1960—*Scirpus densus* WALL. ex ROXB., Fl. Ind. 1: 231. 1820.

Mae Hong Son: along the road between Mae Sariang and Mae La Noi, 300-450 m alt., on clayey ground in a dry deciduous forest, *T* 10384.

3. **Carex baccans** NEES in WIGHT, Contr. Bot. India 122. 1834; RAYMOND in Mém. Jard. Bot. Montréal No. 53: 50. 1959 and in Dansk Bot. Arkiv 23: 257. 1966.

Chiang Mai: southeastern slope of Doi Inthanon, interior of Ban Yang, ca. 2800 m alt., in a grassy field on a mountain slope, *T* 3033, at the middle elevation of Doi Inthanon, 1350-1900 m alt., in a grassy field on mountain slope, *T* 2576. Loei: eastern slope of Phu Luang, 900-1400 m alt., in a marsh in thin forest, *T* 1797.

4. **Carex cruciata** WAHL. in Vet. Akad. Handl. Stockholm 23: 149. 1803; RAYMOND, ll. cc. 46, 254.

Chiang Rai: at the higher elevation of Doi Tung, 1200-1450 m alt., in a grassy open field, *T* 11136, Doi Pa Hom Pok, NW of Phan, in a deep mossy forest, 1600 m alt., *T* 9604. Chiang Mai: at the higher elevation of Doi Suthep (Doi Pui), 1200-1685 m alt., *T* 9384, ibidem, on an open grassy slope at edge of forest, *T* 9482. Phitsanulok: Phu Rom Rot, one of the peaks of Phu Miang, 1200-1600 m alt., in a banana thicket, *T* 11553. Phetchabun: Phu Miang, along the way between the hill tribe villages, 1200-1300 m alt., in a bamboo thicket, *T* 11407 (!?). Loei: Phu Kradung, ca. 1200 m alt., open grassland, *T* 9032, ibid. on the plain at its summit, 1100-1200 m alt., *T* 552.

5. **Carex filicina** NEES in WIGHT, Contr. Bot. India 123. 1834; RAYMOND in Mém. Jard. Bot. Montréal, No. 53: 48. 1959.

Chiang Rai: below the summit of Doi Pa Hom Pok, NW of Phan, 2000-2350 m alt., *T* 9627. Loei: eastern slope of Phu Luang, 900-1400 m alt., in a marsh in thin forest, *T* 1798.

6. **Carex nemostachys** STEUD. in Flora 29: 23. 1846; RAYMOND in Mém. Jard. Bot. Montréal no. 53: 84. 1959 and in Dansk Bot. Arkiv 23: 261. 1966.

Nakhon Nayok: between log cabin and motels, Khao Yai National Park, ca. 800 m alt., on a dry bank along a river in deep forest, *T* 7349.

7. **Carex perakensis** C. B. CLARKE in HOOK. f., Fl. Brit. Ind. 6: 720. 1894; RAYMOND, ll. cc. 74, 259.

Chiang Mai: at the middle elevation of Doi Chiangdao, 1500 m alt., on an open limestone ridge, *T* 10174, at the higher elevation of Doi Inthanon, 1900-2595 m alt., in a mossy forest on a mountain slope, *T* 2840.

8. **Carex platyrhina** OHWI in Act. Phytotax. Geobot. 22: 139. 1967.

Chiang Mai: southeastern slope of Doi Inthanon, interior of Ban Yang, ca. 2300 m alt., in a deep evergreen forest on a mountain slope, *T* 3036.

9. **Carex tricephala** BÖCKL. in Flora 58: 263. 1875; RAYMOND, ll. cc. 76, 260.

Lampang: campus of Huay Tak Forest Station, ca. 320 m alt., in a bamboo thicket, *T* 10592, Doi Palad, north of Lampang, ca. 600 m alt., on wet clayey soil in a forest,

T 10839.

10. **Cobresia siamensis** OHWI in Act. Phytotax. Geobot. **23** : 109. 1968.

Chiang Mai : below the summit of Doi Chiangdao, 1900–2175 m alt., on limestone in an open thicket on a ridge, *T* 10084.

11. **Cyperus brevifolius** (ROTTB.) HASSK., Cat. Hort. Bog. 24. 1844 ; RAYMOND in Dansk Bot. Arkiv **23** : 357. 1966—*Kyllinga brevifolia* ROTTB., Descr. & Icon. 13. 1773.

Chiang Rai : Doi Pa Hom Pok, NW of Phan, in an open place, 800 m alt., *T* 9735. Phetchabun : Phu Miang, along the way between the hill tribe villages, 1200–1300 m alt., in an open marshy place, *T* 11389. Loei : Phu Luang, on its northeastern ridge, 1300–1562 m alt., in a marsh in an open place, *T* 1547.

12. **Cyperus compactus** RETZ., Obs. Bot. **5** : 10. 1789 ; KERN in Reinwardtia **6** : 63. 1961 ; RAYMOND in Dansk Bot. Arkiv **23** : 354. 1966.

Phitsanulok : Tung Salaeng Luang National Park, near Guest House, ca. 500 m alt., on open pond margin, *T* 11297. Loei : en route from Nam Thop to Ban Na Luang, eastern foot of Phu Luang, 300–400 m alt., in a dried up ricefield, *T* 1977. Khon Kaen : in the suburbs of Chum Phae, in a cropped ricefield, *T* 8691.

13. **Cyperus cuspidatus** H. B. K., Nov. Gen. & Sp. **1** : 204. 1815 ; RAYMOND in Dansk Bot. Arkiv **23** : 350. 1966.

Mae Hong Son : along the road between Mae Sariang and Mae La Noi, on a open dry sandy bank along a stream, ca. 400 m alt., *T* 10386, ibidem, on clayey ground in a dry deciduous forest, 300–400 m alt., *T* 10378. Lamphun : en route from Ban Khun Tan to Doi Khun Tan, ca. 800 m alt., on dry ground in a light deciduous forest, *T* 9199.

14. **Cyperus cyperoides** (LINN.) O. KUNTZE, Rev. Gen. Pl. **3** (2) : 333. 1898 ; RAYMOND in Dansk Bot. Arkiv **23** : 355. 1966—*Scirpus cyperoides* LINN., Mant. Pl. **2** : 181. 1771.

Chiang Rai : Doi Pa Hom Pok, NW of Phan, 1300–2000 m alt., *T* 9609. Lamphun : at the higher elevation of Doi Khun Tan, 1200–1374 m alt., on a wet forest slope, *T* 9271. Phetchabun : Phu Miang, along the way between the hill tribe villages, 1200–1300 m alt., in a bamboo thicket, *T* 11405. Nakhon Si Thammarat : at lower elevation of Khao Luang, in an open grassy field at ca. 400 m alt., *T* 8525.

15. **Cyperus diffusus** VAHL, Enum. Pl. **2** : 321. 1806 ; RAYMOND in Dansk Bot. Arkiv **23** : 348. 1966.

Chiang Rai : Doi Pa Hom Pok, NW of Phan, 600–1300 m alt., *T* 9734, Doi Tung, ca. 600 m alt., along a sunny path on a slope, *T* 11154. Mae Hong Son : along the road between Mae Sariang and Mae La Moi, 300–450 m alt., on wet ground along road in semishade, *T* 10375. Lampang : campus of Huay Tak Forest Station, ca. 320 m alt., in a bamboo thicket, *T* 10580. Phitsanulok : Tung Salaeng Luang National Park, near a waterfall, ca. 500 m alt., in a light forest, *T* 11238. Prachuap Khiri Khan : in

a stone-pit at Khao Chrongwan, 30-90 m alt., on a limestone hill, in an open place, *T* 7681, Bang Saphan, 0-150 m alt., in an open marshy place in arable land, *T* 7759. Nakhon Si Thammarat: Wat Kiri Wang, on a dry hill, *T* 14481.

16. **Cyperus digitatus** ROXB., Fl. Ind. 1: 209. 1820; RAYMOND in Dansk Bot. Arkiv 23: 343. 1966.

Prachuap Khiri Khan: Bang Saphan, 0-150 m alt., in an open marshy place on a road-side, *T* 7762.

17. **Cyperus distans** LINN. f., Suppl. Pl. Syst. Veg. 103. 1781; RAYMOND in Dansk Bot. Arkiv 23: 346. 1966.

Nakhon Si Thammarat: at the lower elevation of Khao Luang, in an open field at ca. 300 m alt., *T* 8531.

18. **Cyperus dubius** ROTTB., Descr. & Icon. Rar. Pl. 20. 1773; RAYMOND in Dansk Bot. Arkiv 23: 356. 1966.

Tak: Lan Sang National Park, 250-500 m alt., on wet ground along a river in mixed forest, *T* 8658. Phitsanulok: Tung Salaeng Luang National Park, near a waterfall, ca. 500 m alt., in a light evergreen forest, *T* 11235. Prachuap Khiri Khan: Khao Chong Grackok, near Bang Saphan, 0-150 m alt., in a calcareous rocky place, in crevices on open limestone, *T* 7609.

19. **Cyperus exaltatus** RETZ., Obs. Bot. 5: 11. 1789; RAYMOND in Dansk Bot. Arkiv 23: 344. 1966.

Tak: Ban Musoe, 750-900 m alt., on wet ground in a semishady place, *T* 8638.

20. **Cyperus haspan** LINN., Sp. Pl. 1: 45. 1753; RAYMOND in Dansk Bot. Arkiv 23: 350. 1966.

Phitsanulok: Phu Rom Rot, one of the peaks of Phu Miang, 1200-1600 m alt., in an open marshy place, *T* 11555, Tung Salaeng Luang National Park, near Guest House, ca. 500 m alt., on open margin of a pond, *T* 11304. Loei: Phu Luang, at its north-eastern ridge, 1300-1562 m alt., in an open marshy place, *T* 1578.

21. **Cyperus imbricatus** RETZ., Obs. Bot. 5: 12. 1789, RAYMOND in Dansk Bot. Arkiv 23: 344. 1966.

Phra Nakhon: Bang Khen, north of Bangkok, on a ridge between ricefields, *T* 268. Trang: Trang, on open wet ground in lowland, *T* 152.

22. **Cyperus iria** LINN., Sp. Pl. 1: 45. 1753; RAYMOND in Dansk Bot. Arkiv 23: 347. 1966.

Mae Hong Son: along the road between Mae Sariang and Mae La Noi, 300-450 m alt., on wet ground along road in semishade, *T* 10385. Loey: Phu Kradung, *T* 949. Khon Kaen: in the suburbs of Chum Phae, in a marshy place at the edge of a ricefield, *T* 8688.

23. **Cyperus javanicus** HOUTT., Nat. Hist. 2: 13. 1782; RAYMOND in Dansk Bot. Arkiv 23: 355. 1966.

Samut Prakan: Samut Prakan to Bang Pakong (in Chachoengsao), in an open swampy place by a canal at sealevel, *T* 117.

24. **Cyperus malaccensis** LAM., Ill. 1: 146. 1791; RAYMOND in Dansk Bot. Arkiv 23: 345. 1966.

Samut Prakan: Ban Bang Pu Kao, along seashore in a marshy place by a stream, *T* 7559.

25. **Cyperus kyllingia** ENDL., Cat. Hort. Acad. Vindob. 1: 94. 1842; RAYMOND in Dansk Bot. Arkiv 23: 358. 1966.

Kyllinga monocephala ROTTB., Descr. & Icon. Rar. Pl. 13. 1773.

Chiang Rai: below the summit of Doi Pa Hom Pok, NW of Phan, 2000–2350 m alt., *T* 9621. Nakhon Si Thammarat: Wat Kiri Wang, on a dry hill, *T* 14493.

26. **Cyperus monophyllus** VAHL, Enum. Pl. 11. 1806; OHWI in Mem. Coll. Sci. Kyoto Univ. ser. B., 18: 136. 1944.

Cyperus malaccensis LAM. var. *brevifolius* BÖCKLR. in Linnaea 35: 604. 1868.

Samut Prakan: en route from Ban Bang Pu Kao to Samut Prakan, in a saline field, *T* 7579.

27. **Cyperus pilosus** VAHL, Enum. Pl. 2: 354. 1806; RAYMOND in Dansk Bot. Arkiv 23: 345. 1966.

Phitsanulok: Tung Salaeng Luang National Park, near Guest House, ca. 500 m alt., at the pond-side, *T* 11305.

28. **Cyperus polystachyos** ROTTB., Progr. 21. 1772; RAYMOND in Dansk Bot. Arkiv 23: 352. 1966—*Pycnus polystachyos* (ROTTB.) BEAUV., Pl. Oware 2: 48. 1807.

Phra Nakhon: Bang Khen, north of Bangkok, on a ridge between ricefields, *T* 269.

29. **Cyperus procerus** ROTTB., Descr. & Icon. Rar. Pl. 29. 1773; RAYMOND in Dansk Bot. Arkiv 23: 345. 1966.

Pathum Thani: Rangsit, north of Bangkok, in a sunny marsh, *T* 283.

30. **Cyperus pseudokyllingioides** KUEKENTH. in Engl., Pflanzenreich Heft 101: 501. 1936.

Courtoisia cyperoides NESS in WIGHT, Contr. Bot. Ind. 92. 1834.

Loei: en route from Nam Thop to Ban Na Luang, eastern foot of Phu Luang, 300–400 m alt., on a dried up ricefield, *T* 1975.

31. **Cyperus rotundus** LINN. Spec. Plant. 1: 43. 1753; RAYMOND in Dansk Bot. Arkiv 23: 346. 1966.

Samut Prakan: Ban Bang Pu Kao, along the seashore, on a sunny roadside, *T* 7560.

32. **Cyperus sanguinolentus** VAHL, Enum. Pl. 2: 351. 1806; RAYMOND in Dansk Bot. Arkiv 23: 353. 1966—*Pycnus sanguinolentus* (VAHL) NEES in Linnaea 9: 283. 1834.

Phetchabun: Phu Miang, along the way between the hill tribe villages, 1200–1300

m alt., in a grassy field in a marsh, *T 11391*.

33. **Cyperus stoloniferus** RETZ., Obs. Bot. 4: 10. 1786; RAYMOND in Dansk Bot. Arkiv 23: 346. 1966.

Samut Prakan: Ban Bang Pu Kao, along the seashore, in a dry ricefield, *T 7561*.

34. **Cyperus tenuiculmis** BÖCKLR. in Linnaea 36: 286. 1870; RAYMOND in Dansk Bot. Arkiv 23: 346. 1966—*Cyperus zollingeri* sensu auct.: A. CAMUS in LECOMTE, Fl. Gén. Indo-Chine 7: 67, 1912, non STEUD.

Lamphun: at the higher elevation of Doi Khun Tan, 1200–1374 m alt., on a grassy slope in a light forest, *T 9265*.

35. **Fimbristylis dichotoma** (LINN.) VAHL, Enum. Pl. 2: 287. 1806; RAYMOND in Dansk Bot. Arkiv 23: 335. 1966—*Scirpus dichotomus* LINN., Sp. Pl. 1: 50. 1753.

Chiang Rai: Doi Pa Hom Pok, NW of Phan, 1300–2000 m alt., *T 9607*, at the higher elevation of Doi Tung, 1200–1450 m alt., in an open place, *T 11133*. Mae Hong Son: along the road between Mae Sariang and Mae La Noi, 300–450 m alt., on wet ground along road in semishade, *T 10380*. Lamphun: en route from Ban Khun Tan to Doi Khun Tan, ca. 900 m alt., on dry ground in a light deciduous forest, *T 9190*. Lampang: campus of Huay Tak Forest Station, ca. 320 m alt., in open grassland, *T 10581*. Phetchabun: Phu Miang, along the way between the hill tribe villages, 1200–1300 m alt., in a somewhat marshy place on a roadside, *T 11388*, ibidem, in an open grassy stream, *T 11390*.

36. **Fimbristylis ferruginea** VAHL, Enum. Pl. 2: 291. 1806; RAYMOND in Dansk Bot. Arkiv 23: 334. 1966—*Scirpus ferrugineus* Linn., Sp. Pl. 1: 50. 1753.

Samut Prakan: Samut Prakan to Bang Pakong (in Chachoengsao), in an open place by a canal at sealevel, *T 120*, Ban Bang Pu Kao, along the seashore, on an aride ricefield, *T 7563*. Prachuap Khiri Khan: in a stonepit at Khao Chrongwan, 0–30 m alt., on a limestone hill with red clay earth, in a grassy and marshy place, *T 7640*.

37. **Fimbristylis fusca** (NEES) C. B. CLARKE in HOOK. f., Fl. Brit. Ind. 6: 649. 1893; RAYMOND in Dansk Bot. Arkiv 23: 331. 1966; KERN in Blumea 15: 435. 1967—*Abildgaardia fusca* NEES in WIGHT, Contrib. Bot. Ind. 95. 1834.

Nakhon Nayok: Khao Kiew, on a high ridge in Khao Yai National Park, ca. 1250 m alt., on a grassy field in a dry sunny place, *T 7471*.

38. **Fimbristylis hookeriana** BÖCKLR. in Linnaea 37: 22. 1871; KERN in Reinwardtia 6: 44. 1961; RAYMOND in Dansk Bot. Arkiv 23: 334. 1966.

Chiang Mai: at the lower elevation of Doi Suthep, 350–700 m alt., on a rock covered with sand in an open place, *T 9433*. Loei: Phu Kradung, ca. 1200 m alt., on an open rock of sandstone, *T 9022*, ibidem, on the plain at its summit, ca. 1200 m alt., on open marshy grassland, *T 8883*.

39. **Fimbristylis miliacea** (LINN.) VAHL, Enum. Plant. 2: 287. 1806; KERN in Reinwardtia 6: 40. 1961; RAYMOND in Dansk Bot. Arkiv 23: 327. 1966—*Scirpus milia-*

ceus LINN., Syst. Veg. ed. 10, 2: 868. 1759.

Khon Kaen: in the suburbs of Chum Phae, in a ricefield, *T* 8691. Pra Nakhon: Bang Khen, north of Bangkok, on a ridge between the ricefields, *T* 271. Prachuap Khiri Khan: Bang Saphan, 0-150 m alt., in an open marshy place on the roadside, *T* 7787.

40. **Fimbristylis ovata** (BURM. f.) KERN in Blumea 15: 125. 1967—*Carex ovata* BURM. f., Fl. Ind. 194. 1768.

Fimbristylis monostachyos (LINN.) HASSK., Pl. Jav. Rar. 61. 1848; RAYMOND in Dansk Bot. Arkiv 23: 328. 1966—*Abildgaardia monostachya* (LINN.) VAHL, Enum. Pl. 2: 296. 1805—*Cyperus monostachyos* LINN., Mant. Pl. 2: 180. 1771.

Loei: Phu Kradung, 250-930 m alt., in a light deciduous forest with abundant bamboo, *T* 8768.

41. **Fimbristylis polytrichoides** (RETZ.) R. BR., Prodr. Fl. Nov. Holl. 226. 1810; KERN in Reinwardtia 6: 49. 1961; RAYMOND in Dansk Bot. Arkiv 23: 339. 1966—*Scirpus polytrichoides* RETZ., Obs. Bot. 4: 11, 1786.

Prachuap Khiri Khan: in a stone-pit at Khao Chrongwan, 0-30 m alt., on a limestone hill with red clay earth, in an open place by a road, *T* 7660.

42. **Fimbristylis trichophylla** RIDL. var. **erecta** HOLLT. ex KERN in Blumea 8: 141. 1955 and in Reinwardtia 6: 47. 1961; RAYMOND in Dansk Bot. Arkiv 23: 337. 1966.

Phangnga: on a small island of Takua Thung, on limestone, *T* 8100.

43. **Fimbristylis tristachya** R. BR., Prodr. Fl. Nov. Holl. 226. 1810; KERN in Blumea 8: 131. 1955 and in Reinwardtia 6: 45. 1961; RAYMOND in Dansk Bot. Arkiv 23: 334. 1966.

Phatthalung: north of Khuan Khanum, on red clayey soil in an open swampy place, *T* 8132.

44. **Fuirena ciliaris** (LINN.) ROXB., Fl. Ind. 1: 184. 1820; RAYMOND in Dansk Bot. Arkiv 23: 318. 1966—*Scirpus ciliaris* LINN., Mant. Pl. 2: 12. 1771.

Chiang Mai: near Mae Klang waterfall, interior of Chom Thong, ca. 350 m alt., on moist, sandy soil in an open river-bed, *T* 2208.

45. **Fuirena umbellata** ROTTB., Progr. 27. 1772; RAYMOND in Dansk Bot. Arkiv 23: 318. 1966.

Phitsanulok: Tung Salaeng Luang National Park, near Guest House, ca. 500 m alt., scattered in the shallow pond, *T* 11300. Nakhon Si Thammarat: in the suburb of Tung Song, in an open and swampy place, *T* 8139.

46. **Gahnia tristis** NEES in Linnaea 9: 301. 1831 nom. nud., and in HOOK. & ARN., Bot. Beech. Voy. 228. 1837; RAYMOND in Dansk Bot. Arkiv 23: 363. 1966.

Loei: Phu Kradung, on the plain at its summit, ca. 1100-1200 m alt., *T* 551.

47. **Hypolytrum nemorum** (VAHL) SPRENG., Syst. Veg. 1: 233. 1825; KERN in Reinwardtia 6: 31. 1961; RAYMOND in Dansk Bot. Arkiv 23: 316. 1966—*Schoenus ne-*

morum VAHL, Symb. Bot. 3: 8. 1794.

Hypolytrum latifolium L. C. RICHARD in PERS. Syn. Pl. 1: 70. 1805.

Nakhon Nayok: between log cabin and motels, Khao Yai National Park, ca. 800 m alt., on dry ground along a river in deep shade, *T* 7350.

48. ***Lipocarpa chinensis*** (OSB.) KERN in Blumea, Suppl. 4: 167. 1958 and in Reinwardtia 6: 32. 1961; RAYMOND in Dansk Bot. Arkiv 23: 318. 1966—*Scirpus chinensis* OSBECK, Dagb. Ostind. Resa 220. 1757.

Lipocarpa argentea (VAHL) R. BR. ex NEES in Linnaea 9: 287. 1835.

Loei: Phu Kradung, on the plain at its summit, ca. 1200 m alt., on sandy soil in a sunny place, *T* 775.

49. ***Rhynchospora rubra*** (LOUR.) MAKINO in Bot. Mag. Tokyo 17: 180. 1903; KERN in Reinwardtia 6: 68. 1961; RAYMOND in Dansk Bot. Arkiv 23: 359. 1966—*Schoenus ruber* LOUR., Fl. Cochinch. 1: 52. 1790.

Lamphun: en route from Ban Khun Tan to Doi Khun Tan, ca. 900 m alt., in a light deciduous forest, *T* 9191. Loei: Phu Kradung, ca. 1200 m alt., on open grassland, *T* 9038. Phatthalung: north of Khuan Khanum, on red clayey ground in an open swampy place, *T* 8133.

50. ***Rhynchospora rugosa*** (VAHL) GALE in Rhodora 46: 275. 1944; KERN in Reinwardtia 6: 69. 1961; RAYMOND in Dansk Bot. Arkiv 23: 361. 1966—*Schoenus rugosus* VAHL, Eclog. Amer. 2: 5. 1798.

Rhynchospora glauca VAHL, Enum. Pl. 2: 233. 1806.

Nakhon Nayok: Khao Kiew, a high ridge in Khao Yai National Park, ca. 1250 m alt., on a grassy open field, *T* 7470.

51. ***Scirpus siamensis*** (C. B. CLARKE) KERN in Blumea 9: 219. 1958 and in Reinwardtia 6: 34. 1961; RAYMOND in Natural. Canad. 86: 230. 1959 and in Dansk Bot. Arkiv 23: 321. 1966—*Scirpus squarrosus* L. var. *siamensis* C. B. CLARKE in Hosseus, in Beih. Bot. Centralbl. 27: 460. 1910.

Chiang Mai: near Mae Klang waterfall, interior of Chom Thong, ca. 350 m alt., on sandy soil on a dry, sunny riverbed, *T* 2212.

52. ***Scirpus wichurai*** BÖCKLR. in Linnaea 36: 729. 1870; KERN in Reinwardtia 6: 33. 1961; RAYMOND in Natural. Canad. 86: 226. 1959 and in Dansk Bot. Arkiv 23: 320. 1966.

Loei: Phu Kradung, on the plain at its summit, ca. 1200 m alt., on an open stream margin, *T* 8887.

53. ***Scleria ciliaris*** NEES in WIGHT, Contr. Bot. Ind. 117. 1834; KERN in Reinwardtia 6: 73. 1961 and in Blumea 9: 174. 1961.

Scleria bancana MIQ., Fl. Ind. Bat. Suppl. 602. 1861.

Chiang Mai: Doi Suthep, west of Chiang Mai, in wet sandy soil by a roadside, in a mixed forest, ca. 1000 m alt., *T* 10. Nakhon Si Thammarat: in the suburb of Thung

Song, on red clayey ground at the edge of marsh, *T* 8135.

54. ***Scleria levis*** RETZ., Obs. Bot. 4: 13. 1786; KERN in Reinwardtia 6: 72. 1961 and in Blumea 9: 164. 1961; RAYMOND in Dansk Bot. Arkiv 23: 365, 1966.

Scleria hebecarpa NEES in WIGHT, Contr. Bot. Ind. 117. 1834.

Chiang Rai: along the highway between Chiang Rai and Chiang Khon, 450–500 m alt., in a deciduous forest, *T* 11190. Mae Hong Son: along the road between Mae Sariang and Mae La Noi, 300–450 m alt., on wet ground in an open place, *T* 10376. Lampang: campus of Huay Tak Forest Station, ca. 320 m alt., in *Tectona* forest, *T* 10582, Doi Pang La, Huay Tak, ca. 400 m alt., on a grassy slope in a bamboo thicket, *T* 10766.

55. ***Scleria lithosperma*** (LINN.) SW. var. ***linearis*** BENTH., Fl. Austral. 7: 430. 1878; KERN in Blumea 9: 192. 1961; RAYMOND in Dansk Bot. Arkiv 23: 368. 1966.

Prachuap Khiri Khan: Nam Tok Huay Yang, near Thap Sakae, 30–200 m alt., on a granite hill, in light forest, *T* 7708.

56. ***Scleria parvula*** STEUD., Syn. Pl. Glum. 2: 174. 1855; KERN in Blumea 9: 202. 1961 and in Reinwardtia 6: 75. 1961; RAYMOND in Dansk Bot. Arkiv 23: 372. 1966.

Scleria fenestrata FR. & SAV., Enum. Pl. Japon. 2: 122, 549. 1879.

Loei: Phu Kradung, on the plain at its summit, ca. 1200 m alt., in a marshy glade in grassland, *T* 8888.

57. ***Scleria terrestris*** (LINN.) FASSETT, in Rhodora 24: 159. 1924; KERN in Blumea 11: 170. 1961 and in Reinwardtia 6: 72. 1961; RAYMOND in Dansk Bot. Arkiv 23: 365. 1966—*Zizania terrestris* LINN. Sp. Pl. 2: 991. 1753.

Nakhon Si Thammarat: Khao Kao, Thung Song, on red soil in an open place by a road on a limestone mountain, *T* 8159.