

NOTES ON MALAY COMPOSITAE

by

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(Rijksherbarium, Leiden)

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In working up the materials of the genera *Anaphalis*, *Gnaphalium* and *Blumea* for Backer's "Flora van Java" some new species, varieties and forms have come to light. The results of this work can by far not be considered to be complete, as the great lot of specimens collected in Java belonging to the genera under consideration are preserved in the "Herbarium van 's Lands Plantentuin te Buitenzorg". Owing to the war these specimens were not available as yet. However, it may be useful to publish the novelties hitherto discovered.

INULEAE-GNAPHALINAE.

Many authors have indicated already that the genera *Anaphalis* DC. and *Gnaphalium* L. are difficult to be separated. Miquel (Fl. Ind. Bat. II, 1856, 90) reduced *Anaphalis* to a section of *Gnaphalium*, as he did with *Antennaria*. This should be reasonable, were there not still more genera very closely allied to *Gnaphalium* and hardly to be separated, e. g. *Helichrysum*. It is up to a monographer of the *Gnaphalinae*, which of the closely related genera have to be considered sections of *Gnaphalium* and which have to be kept separate. As to the Javanese species it seems possible, though not easy, to distinguish *Anaphalis* from *Gnaphalium*. The heads of *Gnaphalium* contain few bisexual disc-flowers and two to numerous rows of female ray-flowers. Bentham and Hooker (Gen. Plant. II, 1876, 303) call the "heads of *Anaphalis* subdioecious". Clarke (Comp. Ind., 1876, 101) indicated already that one can find in the same species plants with heads containing a great number of female ray-flowers and few bisexual disc-flowers, as well as plants with a smaller number of female ray-flowers and many bisexual disc-flowers. Boerlage (Fl. Ned. Ind. II, 1899, 193) found still more variation in the heads of *Anaphalis*. He stated bisexual disc-flowers with divided,

as well as such with undivided styles in variable numbers in various heads of one species. Like Bentham and Hooker he found, that the bisexual disc-flowers are not always sterile. Indeed the type-specimen of *Anaphalis longifolia* (Bl.) DC. (in the Rijksherbarium, Leiden) seems to have ripe achenes arisen from disc-flowers. Heads apparently do not vary as to the proportion of bisexual disc-flowers and female ray-flowers in one and the same plant. However, in various plants of the same species this proportion is often variable, e. g. from three bisexual disc-flowers and numerous female ray-flowers to bisexual disc-flowers only (but never female flowers only). Of the three species, widely distributed in Java, I found in:

Anaphalis javanica (Reinw.) Schultz-Bip. (of 53 specimens)

55 % with heads having only bisexual flowers,

45 % with heads having female ray-flowers and bisexual disc-flowers.

Anaphalis viscida (Bl.) DC. (of 30 specimens)

50 % with heads having only bisexual flowers,

50 % with heads having female ray-flowers and bisexual disc-flowers.

Anaphalis longifolia (Bl.) DC. (of 90 specimens)

5½ % with heads having only bisexual flowers,

5½ % with heads having very few female ray-flowers and numerous bisexual disc-flowers,

89 % with heads having numerous female ray-flowers and very few bisexual disc-flowers.

As to the Javanese species of *Anaphalis* a clear separation between two groups strikes the eye. On the one hand there are the closely allied *A. javanica* (Reinw.) Schultz-Bip. and *A. viscida* (Bl.) DC., on the other *A. longifolia* (Bl.) DC. and *A. maxima* (O. K.) Steen. Apart from a different proportion of the female and the bisexual flowers, the last group also lacks the characteristic broadened setae of the pappus of the bisexual flowers, though a slight broadening is to be seen. Koorders (Exc. Fl. Java III, 1912, 330, 331) placed the species of the last group, tending to *Gnaphalium*, into that genus, which, however, seems not justified because of the undeniably close affinity to *A. javanica*.

A new variety and new combinations.

Anaphalis viscida (Bl.) DC. f. *Horsfieldii* (Miq.) comb. nov.;
Gnaphalium viscida var. *Horsfieldii* Miq., Fl. Ind. Bat. II, 1856, 94 — This form having leaves not so strongly involute at the margins and on greater distances than usual, is a parallel-form of *A. javanica* (Reinw.) Schultz-Bip. f. *Junghuhniana* (Miq.) Boerl., having the same characteristics.

Anaphalis longifolia (Bl.) DC. var. **lanigera** var. nov.; caulis et folia superne cinnamomeo-fulvide scabride glandulosi et, ut folia subtus, dense albide lanato-tomentosi.

JAVA: East-Java, G. Andjasmoro, summit, Oct. (*Winckel 547*, L.¹), type); G. Panderman, summit, near Batoe, 2000 m alt., May (*Groenhart 229*, U.), ib., June (*van Leer s. n.*, L.).

Of the three specimens available there was one with one row of female ray-flowers and numerous bisexual disc-flowers and two with many rows of female ray-flowers and few bisexual disc-flowers.

var. **sindoroensis** (Hochreut.) comb. nov.; *Gnaphalium sindoroense* Hochreut. in *Candollea* V, 1931—1934, 312.

Gnaphalium luteo-album L. ssp. **affine** (Don) comb. nov.; *Gnaphalium affine* Don, *Prod. Fl. Nepal.*, 1825, 173; *Gnaphalium gracile* Bl., *Bijdr.*, 1825, 900, non H. B. K.; *Gnaphalium Javanum* DC., *Prod.* VI, 1837, 222; *Gnaphalium multiceps* Wall. ex DC., *Prod.*, 1837, 222; *Gnaphalium gracillimum* Schultz-Bip. (non Perrott.) in *Zoll., Syst. Verz. Ind. Arch.*, 1854, 124; *Gnaphalium Reinwardtianum* Miq., *Pl. Jung-huhn.*, 1854, 503; *Gnaphalium luteo-album* var. **multiceps** Hook., *Fl. Br. Ind.* III, 1882, 288 — The area in Java adjoins that of *Gnaphalium luteo-album* L. ssp. **typicum**. *Gn. luteo-album* ssp. **affine** is to be found in East-Java and the Lesser Sunda Islands, furthermore in Australia, the Philippines, Taiwan, Japan, China, Indochina, Siam, Hongkong, India, *Gn. luteo-album* ssp. **typicum** occurs in West-Java, furthermore in Australia, New Guinea, the Philippines, Indochina, India, Madagascar, Mauritius, Africa, Europe. As a rule the European specimens of *Gn. luteo-album* ssp. **typicum** have bigger heads (4—4½ mm long) and pale green or pale brownish involucre scales, of which the outer ones are more or less broadly ovate. Most of the Asiatic and Australian specimens have smaller heads (3½—4 mm long) and darker brownish involucre scales, of which the outer ones are ovate. However, specimens of the latter description have been actually found in Europe, while in Java a few specimens with very pale involucre scales have been collected. Clarke (*Comp. Ind.*, 1876, 114) found specimens with yellow, golden-yellow or pale yellow involucre scales in the Indian mountains, but with brown or reddish-brown involucre scales in the plains of the River Ganges and of Central India. Finding all kinds of transitions

¹) L. means Leiden, Rijksherbarium; U. Utrecht, Botanisch Museum en Herbarium der Rijksuniversiteit; Bz. Herbarium en Museum voor de systematische Botanie van 's Lands Plantentuin, Buitenzorg; G. Geneva, Institut de Botanique.

between these extremes, he called all specimens *Gn. luteo-album* L. However, Hochreutiner mentions (in *Candollea* V, 1931—1934, 313), specimens with brown, as well as with golden-yellow involucre scales growing side by side. They appeared to him so much different, that he felt inclined to distinguish two separate species. A sheet is to be found in the Rijksherbarium, Leiden, to which two plants with brownish and two with yellowish involucre scales from Australia, are attached, which were evidently growing on the same spot. It seems reasonable to consider both taxonomical units as two subspecies of one and the same species. They are to be distinguished by the size of the heads (of ssp. *typicum* 3½—4½ mm long, of ssp. *affine* 3—3½ mm long) and the colour of the involucre scales (of ssp. *typicum* more or less pale brownish, of ssp. *affine* citrine to golden yellow).

INULEAE-PLUCHEINAE.

To *Blumea* DC. there belong species, which are well limited and characteristic, such as *Bl. riparia* (Bl.) DC. and *Bl. arfakiana* Martelli. However, species of which the specimens are by no means quite similar, but show more or less important differences, are more frequent in this genus. Often the differences are too trifling to distinguish a separate species. Thus, polymorphous species are inevitable, of which moreover the conception of various authors is different. Their diagnoses of one and the same species are often considerably unlike, one describing the receptacle to be glabrous, the other describing it to be hirsute, etc. Examples of such polymorphous species are: *Bl. Junghuhniana* (Miq.) Boerl., *Bl. lacera* (Burm.) DC. and especially *Bl. macrophylla* (Bl.) DC. They create the dilemma: which is to be considered as a separate species and which is a variety of the polymorphous species. Hooker (*Fl. Br. Ind.* III, 1882, 260) was of the opinion that this genus is very unsatisfactory and is difficult to be separated from *Laggera*. The achenes (which in other genera of the *Compositae* often form valuable characteristics) are more or less similar in the various species, the shape of the leaves, the pubescence, etc. vary in one and the same species. There is conformity among the authors about the opinion, that cultivation of these variable species will facilitate the discrimination of the taxonomical units. It is probable that hybrids occur (*Mattf. in Engl., Bot. Jahrb.* 62, 1928, 420). *Bl. intermedia* nov. spec. makes the impression to be intermediary between *Bl. riparia* (Bl.) DC. and *Bl. lacera* (Burm.) DC. Specimens with leaves and tomentum like *Bl. mollis* (Don) Merrill and with inflorescences and heads like *Bl. lacera* (Burm.) DC. var.

javanica (Bl.) nov. comb., which have been found in the Malay Archipelago (*Waitz s. n.*, L.; Java, Buitenzorg, Oct., *coll. Hort. Bog.*, L.) may be hybrids of these two. Specimens apparently belonging to *Blumea bullata* nom. nov., but with subglabrous receptacles (Java, Kletak, 1500 m alt., *Mousset 856*, L.; Tjibodas, *Sapiin 229*, U., 2166, U.) might be hybrids between this species and *Bl. macrophylla* (Bl.) DC.

New species, varieties, forms and combinations.

Blumea intermedia spec. nov. (Fig. 1—2).

Herbacea, plus quam 40 cm alta (fragmen); caulis teres minute

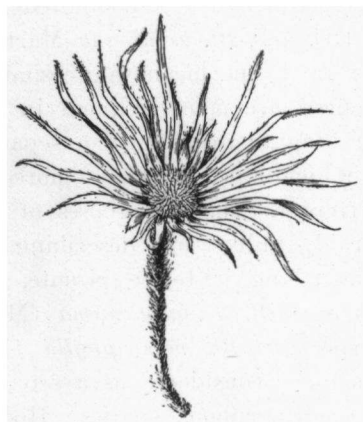


Fig. 1 — *Blumea intermedia* spec. nov.,
receptacle, $\times 3$.

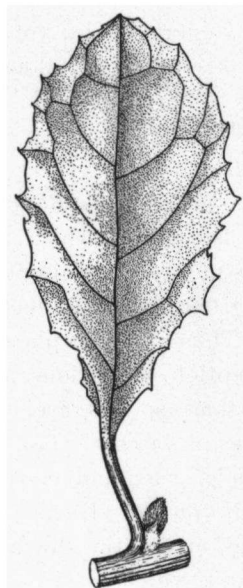


Fig. 2 — *Blumea intermedia* spec. nov.,
leaf, nat. size.

glandulosus, parte superiore griseo-villosa, 4 mm diametro. Folia superiora alterna (1—2 cm distantia) sessilia spathulato-elliptica, apice obtusa, basi gradatim attenuata, irregulariter repande dentata (dentibus late triangularibus, crassis, 3—11 mm distantibus) pinninervia (nervis utrinque 4—6) chartacea, supra scabra, infra adpresse griseo-villosa, 4—7 cm longa, $1\frac{1}{2}$ —3 cm lata, in axillis alabastris pallide brunneo-villosis; folia inflorescentiae minora acuta, etiam supra breviter villosa, ± 2 cm longa, 7—10 mm lata. Capitula longiuscule paniculata (panicula terminalis 10 cm lata, 20 cm longa) pedunculata (pedunculus $1\frac{1}{2}$ —

2½ cm longus, ½ mm diametro cum ramis inflorescentiae pallide brunneo-villosus) campanulata, 1 cm longa; involucrem campanulatum, 6-seriatum, squamis linearibus, exterioribus dense adpresse griseo-villosis, interioribus apicis margine pilosis, parte centrali angusta glandulosa villosa, omnibus acutis, ± ½ mm latis. Flores disci bisexuales ± 12; corolla tubuloso-infundibularis, 5 mm longa, lobis 5 brevibus glabris; antherae basi sagittatae, appendicibus basalibus filiformibus, longiusculis inter se connexis, apice subrotundatae; styli ramuli breves obtusi e corolla exserti; achenium cylindricum, 5-costatum, apice parce pilosum eiusque margine brevissime fimbriatum, 1 mm longum; pappo uni-seriato, setis albis scabris, corollam longitudine aequantibus, caducis. Flores radii



Fig. 3 — *Blumea pachycephala* spec. nov., head, × 3.

feminei numerosi; corolla filiformis, lobis 3 brevissimis; styli ramuli obtusi e corolla exserti; achenium et pappus achenio et pappo in floribus bisexualibus similes. Receptaculum alveolatum, pilis sparsis albis, ½ mm longis, deinde caducis contectum.

Bl. lacera (Burm.) DC. differs from the present species by the glabrous receptacle and by the shape of the leaves. The inflorescence and the receptacle of *Bl. intermedia* agree with those of *Bl. riparia* (Bl.) DC. The anthers were badly developed.

SUMATRA: Krakatau, Verlaten Eiland, May, *Backer s. n.* (L., type); **JAVA:** Baros, near Soekaboemi, *Boerlage s. n.* (L.).

Blumea pachycephala spec. nov. (Fig. 3).

Herbacea, grandis, plus quam 1 m alta (fragmen); caulis teres

costatus glaber obscure purpureo-brunneus (siccus), 8 mm diametro. Folia alterna (6—8 cm distantia) subsessilia (petiolus brevissimus, 3 mm longus), anguste oblonga longissima subintegra (dentibus brevissimis, callosis) apice longe acuta, basi attenuata, 3—4 cm lata, 18—26 cm longa, chartacea pinninervia (nervis utrinque \pm 15, nervis reticulatis infra prominentibus), supra obscura verrucoso-scabra bullata, infra pallida, parce breviter pilosa. Capitula paniculata (panicula magna laxa terminalis, 50 cm longa, 15 cm lata), pedunculata (pedunculus $\frac{1}{2}$ — $1\frac{1}{2}$ cm longus, parce breviter pilosus, glandulosus, interdum bracteis minutis, 3 mm longis, praeditus) cylindrica crassa multiflora, 10—12 mm longa, 8—10 mm diametro; involucrem subcampanulatum capitulo brevior, 8—10 mm longum; squamis interioribus linearibus, exterioribus lanceolato-ellipticis, obscuris, omnibus apice longe acutis, subglabris, parce adpresse pilosis, apicis margine pilosis, parte centrali obscura angustissima. Flores disci bisexuales \pm 12; corolla anguste infundibularis, basi tumida, 7—8 mm longa, lobis 5 triangularibus acutis glandulosis, apice pilis nonnullis longis praeditis; antherae basi sagittatae, appendicibus basalibus filiformibus, inter se connexae, apice subrotundatae, e corolla exsertae; styli ramuli breves obtusi, e corolla longe exserti; achenium oblongum costatum pilosum (iuvenile); pappo uni-seriato, setis sordide albis scabris corollam longitudine fere aequantibus. Flores radii feminei numerosi; corolla filiformis, $6\frac{1}{2}$ mm longa, lobis 3—4 longiusculis angustis subobtusis; styli ramuli subacuti e corolla longe exserti; achenium et pappus achenio et pappo in floribus bisexualibus similes. Receptaculum alveolatum glabrum.

Allied to *Bl. macrophylla* (Bl.) DC., but different by the heads, the leaves and the almost glabrous stem.

J a v a : Soerabaia, G. Andjasmoro, Aug., *Radermacher s.n.* (L., type).

Blumea acutata DC. var. *floresiana* (Schultz-Bip.) comb. nov.; *Conyza floresiana* Schultz-Bip.! in Zoll., Syst. Verz. Ind. Arch., 1854, 121; *Blumea floresiana* Boerl., Fl. Ned. Ind. II, 1899, 239.

Blumea macrophylla (Bl.) DC. var. *sylvatica* (Bl.) comb. nov.; *Conyza sylvatica* Bl.!, Bijdr., 1825, 898; *Blumea sylvatica* DC., Prod. V, 1836, 447.

Blumea lacera (Burm.) DC. var. *javanica* (Bl.) comb. nov.; *Conyza javanica* Bl.!, Bijdr., 1825, 897; *Conyza lacera* Bl.!, Bijdr., 1825, 897; *Erigeron javanicum* Bl.!, in herb. Blume 1861; *Blumea lacera* var. *Blumei* DC.!, in Wight, Contrib. Bot. Ind., 1834, 14; DC., Prod. V, 1836, 436; *Blumea lacera* var. *Burmanni* DC., Prod. V, 1836, 436, non DC. in

Wight, Contrib. Bot. Ind., 1834, 14; *Blumea javanica* Zoll. in Flora N. R. V, 1847, 531.

var. *meraukensis* var. nov.; *Blumea lacera* Lauterbach in Nova Guinea VIII, II, 1910, 336; Mattfeld in Engl., Bot. Jahrb. 62, 1928, 420 p.p. — Caulis et folia parce pilosi. Folia spathulata, grosse dentata (dentibus late triangularibus mucronatis), apice subrotundata. Paniculae elongatae laxae; capitula parva, ± 6 mm longa et diametro.

New Guinea: South West Part, Merauke, alang alang field, Oct., Versteeg 1844 (L., type; U.); Merauke, Koch s. n. (L.). Flowers yellow.

var. *microcephala* var. nov. — Caulis, folia, squamae involucri parce pilosi. Capitula parva, 5 mm longa; corolla $3\frac{1}{2}$ mm longa, achenium $\frac{1}{2}$ mm longum.

Sumatra: West Coast, G. Singgalang, feet, Aneh-cleft, shrubby, 360 m alt., July, Schiffner 2750 (L., type).

var. *amboinensis* var. nov. — Folia spathulata, dentata (dentibus parvis, $\pm \frac{1}{2}$ mm longis); paniculae pauciflorae laxae; capitula parva, 6—7 mm longa.

Amboina, July—Nov., C. B. Robinson 415 (L., type); Amboina, Sept., Zippelius s. n. (L.), leaves elongated, to 20 cm long; Amboina, coll. unknown (L.).

Blumea bullata nomen novum; *Conyza chinensis* Bl., Bijdr., 1825, 898; cum var. *poliolepis* Miq., Pl. Junghuhn. 1854, 500; Fl. Bat. II, 1856, 52, non Linn.; *Blumea chinensis* DC., Prod. V, 1836, 444, quoad descriptionem — This species cannot be the same as *Conyza chinensis* L., Sp. Pl. ed. 2, 1763, 1208, as was supposed by Blume, De Candolle and Miquel. Its leaves can hardly be called "subtus tomentosus", being sparsely hirsute beneath especially on the nerves and its heads are not "terminalibus congestis", but the inflorescences are small, loose axillary and terminal panicles, together forming a large leafy terminal panicle. Neither can the remark "raro plures quam tres flores simul congesti" concern the Malaysian species. Linné's species was described from China, whereas the present species occurs in Java. It is a pity, that the war prevents comparing Linné's original specimen.

Blumea humifusa (Miq.) Clarke, var. *monochasialis* var. nov. — Folia inferiora raro breviter petiolata (petiolus $\pm \frac{1}{2}$ cm longus) basi breviter attenuata. Capitula monochasialia.

Java: Semarang, Koedoes, coll. unknown 45 (L., type). ? Java, Blume 1995, sub nomine "*Conyza javanica?*" (L.); Timor, herb. Praetorius (L.).

Blumea riparia (Bl.) DC. f. *angustifolia* forma nova. — Folia superiora oblongo-lanceolata ad lanceolata, basi breviter acuta, apice longissime acutata, 6½—12 cm longa, 1—3 cm lata.

SUMATRA: West Coast, G. Koerintji, 2000 m alt., May, *Bünnemeyer 10329* (L., type, U.); G. Merapi, 900 m alt., Sept., *Bünnemeyer 4837* (L.); ib., 1150 m alt., Sept., *Bünnemeyer 4918* (L.); Benkoelen, Enggano, South coast, beach to the South of Boea Boea, June, *Lütjeharms 4208* (L.), non-flowering; Bangka, Mintok, forests, Oct., *Amand s.n.* (U.).

JAVA: West Java, G. Malabar, 1400—1600 m alt., July, *Denker 104* (L.); G. Tankoeban Prahoe, 600 m alt., *Junghuhn s.n.* (U.); Tjibodas, *Sapiin 2103* (L.); G. Papandajan, *Went s.n.* (L.); Semarang, Kedoengdjati, April, *Koorders 24501* (L.); Java, *Junghuhn 50* (L.), *s.n.* (L.).

BORNEO: Br. N. Borneo, G. Kinabaloe, 1200 m alt., Tenompok, bridle trail, Dec., *Clemens 51063* (L.); Dallas, 900 m alt., Dec., *Clemens 27559* (L.); Peniboekan, 1200—1500 m alt., Febr., *Clemens 31556* (L.); Tawao, Elphinstone Prov., Oct-March, *Elmer 20500* (L., U.).

CELEBES: Salajar, shrubby, ± 350 m alt., May, *Docters van Leeuwen 1707* (U.); Boeton, South East Lipoemangan, in a low forest, 250—320 m alt., Aug., *Elbert 2721* (L.).

Distribution: Taiwan, the Philippines, Sikkim.

VERNONIEAE-VERNONINAE (cf. *Blumea* I, 1935, 369—456).

Vernonia arborea Ham. var. *papanensis* Koster.

RIOUW ARCH.: P. Karimoen, Sebele-Poelau-Belat, along the edge of a forest on a swampy soil, 6 m alt., Aug., *Zwart 16* (Bz.). Flowers pinkish yellowish white; tree 28, 70 m high, 33—46 cm thick. The inflorescence of this specimen is not conspicuously corymbose, as it is in the type, but corymbosely paniculate.

Vernonia Junghuhniana Koster.

JAVA: Soerabaia, near Grisee, Sekapoeh, *Dorgelo 3015* (L.); near Grisee, Soetje, *Dorgelo s.n.* (L.); near Grisee, *Backer 37537* (L.); Bawean, *Dorgelo 136* (L.).

A new locality is added to the area known.

Vernonia Elmeri Merrill.

SOELA ISLANDS: P. Mangoli, Woetadontaka, *Exp. v. Hulstijn 220* (L.).

The area as far as known at this time, is extended to the East approaching that of the closely related *V. lanceolata*.

***Vernonia lanceolata* (Warbg.) Mattf.**

Celebes: Manado, G. Klabat, forest in an open place on a stony and sandy soil, rare, scattered, 2000 m alt., Jan., *Steup 173* (Bz.). Flowers purplish blue.

This specimen, a fairly bad one, is slightly different from those collected up to this time, having mucronate involucre scales. Its habitat extends the area of this species as far as known at this time to the West.

***Vernonia laxiflora* Less.**

Lesser Sunda Islands: Bali, near Batoe-lake, 1100—1400 m, lava-rocks, steep earth walls, etc., common, *van Steenis 7950* (Bz.), herbs 7—26 cm high, leaves crowded at the base; Bangli, wall of a temple, 500 m alt., *van Steenis 7980a* (Bz.); N.W. Tedjagoela, grassy and other fields, common, 100 m alt., *van Steenis 7737* (Bz.).

This *Vernonia* was only collected twice in Bali up to this time.

***Vernonia coerulea* Koster var. *glabrata* Koster.**

Lesser Sunda Islands: Flores, along along field, Jan., *de Voogd s. n.* (Bz.).

This variety had been collected before in Soemba only.

***Vernonia cymosa* Bl. var. *Teysmanniana* (Miq.) Koster.**

Java: East Java, Dorowati, *Dorgelo s. n.* (L.).

***Vernonia cymosa* Bl. var. *tengerensis* (Hochreut.) comb. nov.;** *Vernonia eupatorioides* var. *tengerensis* Hochreutiner in *Candollea* V, 1931—1934, 297.

Shrubby, to 4 m high (fide Hochreutiner), strongly villous; hairs spreading, crisped, striate. Heads large, 7—8 mm long, \pm 25-flowered; involucre 5½ mm long, purplish; corolla 5—6 mm long, broad.

Java: East Java, G. Tengger, *Hochreutiner 2738* (G.), *Went s. n.* (L.), *Schimper s. n.* (L.); ib., Tosari, *van Dillewijn s. n.* (L.); ib., Ajag Ajag, *Gisius s. n.* (L.); ib., Ngadisari, *Koorders 37427* (L.); Idjen, Pantjoer-Idjen, *Koorders 28532* (L.); Kawah-Idjen, *Koorders 43354* (L.); G. Ardjoeno, above Tretès, *Backer 3724* (L.); in Casuarina-forests, 2000—2700 m alt., Jan.-Febr., July-Sept. Flowers violet (fide Hochreutiner).

EUPATORIEAE-AGERATINAE (cf. *Blumea* I, 1935, 483—510).

***Eupatorium nodiflorum* Wall.**

Lesser Sunda Islands: Bali, along along field, Jan., *de Voogd s. n.* (Bz.), leaves broader, 5-nerved, up to 2 cm; Soemba, West,

in grassy places, common, 400 m alt., July, *de Voogd 1821* (Bz.), to 1 m high. Flowers pale violet.

This species, which had been collected only once before in the Malay Archipelago, viz. in Lombok, is difficult to be separated from specimens of *E. japonicum* Thunb. with simple leaves. However, the leaves of *E. japonicum* are longer petiolate and membranous, whereas those of *E. nodiflorum* are sessile and subcoriaceous. It still has to be decided, whether *E. japonicum* Thunb., *E. cannabinum* L. and *E. nodiflorum* Wall. are not three subspecies of one polymorphous species.

Eupatorium odoratum L., which is indigenous in tropical America, has now been collected in Sumatra, Medan, *van der Meer Mohr* s. n. (Bz.).