

**DIAGNOSES BORAGINACEARUM NOVARUM
REGIONIS 'FLORAE MALESIANAE'**

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More extensive descriptions and additional data of the new taxa introduced in this paper will follow in the account of the family Boraginaceae in 'Flora Malesiana' itself by the same author.

CORDIA L.

Cordia aspera* Forst. subsp. *aspera*, *subsp. nov.

Folia usque ad 22 cm longa, ovata, latitudine manifeste longiora, subtus dense tomentosa, acuta. Flores in inflorescentia valde numerosa. Calyx fructifer obconicus, 3.5(–4) mm latus. Fructus 8 mm fere longus, 4 mm in diametro transversali latus.

Distribution – In Malesia: Borneo, Philippines, Moluccas, New Guinea.

Cordia aspera* Forst. subsp. *microcarpa* Riedl, *subsp. nov.

Folia usque ad 10–12 cm tantum longa, ovata vel suborbiculari-acuminata. Calyx fructifer subpatelliformis, ad 5 mm latus. Fructus 5(–6) mm longus, 4 mm in diametro latus. — Typus: *Verheijen 4495* (L), Flores.

Distribution – Sumbawa, Flores, Timor.

Cordia aspera* Forst. subsp. *miquelii* Riedl, *subsp. nov.

Folia latitudine manifeste longiora, ovato- vel oblongo-acuminata, supra laxius strigillosa quam in typo, interdum glabrescentia, juvenilibus exclusis subtus et laxius tomentosa. Inflorescentia plerumque e floribus multo paucioribus composita, ramis saepe incrassatis. Calyx florifer pro longitudine quam in typo latus, cyathiformis, lobis post florendum revolutis. Fructus ut in typo. — Typus: *Koorders 16283/3* [L; sub *C. strigilloso* Miq. (det. Koorders), rev. 'EMD' (= E. Meijer Drees) 1949: *Cordia miquelii* Meijer Drees], Celebes, Prov. Minahassa, 1896.

Distribution – Celebes, endemic.

Cordia monoica* Roxb. subsp. *subpubescens* (Decne.) Riedl, *stat. nov.

Cordia subpubescens Decne., *Nouv. Ann. Mus. Hist. Nat. (Paris) sér. 3, 3* (1834) 395.

Differt a subspecie typica ramis breviter appresse pubescentibus pilis longioribus patentibus immixtis (in subsp. *monoica* pili breves rigidi, patentis, pili longiores suberecti), pyrenis in fructu 6 mm diam. (9–12 mm in typo).

Distribution — Java, Kangean Islands, Bali, Sumbawa, Flores, Timor.

Note — *Cordia monoica* subsp. *monoica* is found in India and Sri Lanka.

CYNOGLOSSUM L.

Cynoglossum castaneum Riedl, *spec. nov.*

Herba biennis vel perennis, ad minimum 75 cm alta. Partes basales et apicales caulis desunt. Caulis et rami elongati pilis brevibus, appressis, plerumque retrorsis laxiuscule vestiti. Folia basalia et inferiora caulina ignota, media et superiora sessilia, supra antrorse, subtus irregulariter pilis brevibus strigulosa, media 10–12 cm longa, 1.5 mm fere lata, basi angusta, apice acuta, superiora 2.5–5.5 cm longa, 0.5–1.5 cm lata, semiamplexicaulia, acuta. Inflorescentia post florendum valde elongata. Bractae nullae. Pedicelli floriferi ad apicem inflorescentiae 1.5 mm, fructiferi inferiores usque ad 5 mm longi. Calyx 2.5 mm sub anthesi, 3(–3.5) mm sub fructu, laciniis fere ad basin liberis, ovatis, 2 mm latis, subacutis, antrorse strigulosis. Corolla infundibuliformis vel limbo subexplanato, tubo calyce subaequilongo, coeruleus imprimis secus nervos, ceterum alba, 3.5–4 mm longa, 7 mm in diametro lata, glabra, lobis oblongo-obovatis, rotundatis, 2 mm longis. Antherae infra fornice subsessiles, ellipsoideae ad ovoideae, 1 mm fere longae. Fornices trapezoideo-subquadrati, apice involuti, bilobi. Stylus 0.8 mm sub anthesi longus, demum 2.5 mm stigmate nullo. Nuculae 5 mm longae, 4 mm latae, ovatae, glochidiis in margine densissime basibus confluentibus, ceterum ventraliter et dorsaliter subaequaliter distributis, colore castaneo-nitidae, areola parva, subapicali. — Species nova subgeneris *Eleutherostyli* Brand habitu valido, nuculis 5(–6) mm longis castaneis valde insignis. — Typus: *Afriastini* 488 (K), Central Java, Blumbang, Mt Lawu, 26-xi-1982.

Cynoglossum glabellum Riedl, *spec. nov.*

Perennis rhizomatis ramis repentibus, caule ascendente, 40–45 cm alto infra glabro, regionem inflorescentiae versus strigoso, simplice vel ramo unico. Una cum caule rosula foliorum sterilis evoluta. Folia rosulae petiolo 3–5 cm longo suffulta, lamina 5–7 cm longa, 1–1.8 cm lata; folia caulina inferiora florendi tempore iam emarcida, media 3–6 cm longa, 7–14 mm lata, basi attenuata sessilia, superiora 1.8–3 cm longa, 7–10 mm lata, basi lata sessilia, omnia acuta, in facie superiore tuberculis calcareis rare pilos breves ferentibus numerosioribus, in facie inferiore tuberculis calcareis perpaucis obsita, margine ciliata. Inflorescentia furcata ramis erectis vel simplex, laxa, 1.5–8 cm longa, e floribus 7–11 tantum composita. Bractae nullae. Pedicelli 4–6 mm longi, sub fructu recurvati. Calycis lacinae usque ad basin liberae 2 mm longae, 1.3 mm latae sub anthesi, 4 mm longae, 2 mm latae sub fructu, subobtusae, nervis reticulatis perscurae, ad ima basin crispule pilosae, ad marginem ciliatae. Corolla intense coerulea, aestivatione malvacea, 4–5 mm longa, 8–10 mm in diametro lata, glabra tubo calyce brevior vel subaequilongo, lobis obovatis, 3–3.5 mm longis, reticulato-nervis. Filamenta distincta, 0.2 mm longa, infra fornice inserta, antherae oblongae vel ovato-oblongae, 0.8 mm longae. Fornices quadrati, distincte bilobi, in margine papilloso. Stylus sub fructu 2.5 mm longus; stigma nullum evolutum. Nuculae ovatae, 4–4.5 mm longae, 2.5 mm latae, disco plano, glochidiis extra dense, in disco laxe dispositis. — Species nova subgeneris *Eleutherostyli* Brand characteribus numerosis ab omnibus ceteris distat, e.g. rosula sterili foliorum evoluta, caule infra, foliis et calycis laciniis in facie pilis carentibus, corollae colore, tubo brevi. — Typus: *Veldkamp & Stevens* 5554 (L), New Guinea, Goropu Mts (Mt Suckling), 1750 m, 9° 34' S, 148° 56' E, 11-vi-1972.

Cynoglossum timorense Riedl, *spec. nov.*

Herba annua (?) 30–40 cm alta, a basi fere ramosa, caule pilis patentibus vel retrorsis in parte inferiore, antrorsis in parte superiore vestito. Folia lanceolata ad obovata vel oblonga, petiolum versus attenuata, acuta vel minutissime acuminata, subtus distincte reticulatim nervosa, pilis subpatentibus, rigidis obsita, inferiora petiolo 5–10 mm longo suffulta, lamina 1.5 cm longa, 0.7 cm lata, media petiolo brevior, lamina 3–3.5 cm longa, 0.9–1 cm lata, superiora petiolo 0–2 mm longo suffulta, lamina 1.5–2.5 cm longa, 0.6 cm lata. Inflorescentia laxa, post florendum elongata, 15 cm vel ultra longa. Bracteae in parte inferiore inflorescentiae foliis similes, in parte superiore nullae. Pedicelli filiformes, 1 mm sub anthesi, 3–7(–15) mm sub fructu, recurvati. Calyx 1.5–2 mm sub anthesi, 2–2.5 mm sub fructu, laciniis usque ad basin liberis, 0.8–1 mm latis, antrorse strigillosis. Corolla campanulata vel infundibuliformis, tubo calyce brevior, 2.5(–3) mm longa, 4.5 mm in diametro lata, glabra, lobis ellipticis, 1.5 mm longis. Antherae subsessiles, ovoideae, 0.6 mm longae, inter fornicem dispositae. Fornices trapeziformes-subquadrati, ad apicem subinvoluti, indistincte emarginati. Stylus 0.3 mm longus sub anthesi, demum a nuculis obiectus. Nuculae ovatae disco plano, 2 mm longae, 1.5 mm latae, glochidiis in margine densis basibus confluentibus, in disco aequaliter distributae. — Species e subgenere *Paracynoglossa* (Popov) Riedl, *C. lanceolato* Forsk. proxima, ab eo imprimis pedicellis filiformibus, fornicum latitudine longiorum forma diversa. — Typus: *van Steenis 18303* (L), Central Port. Timor, Mt Perdido, 1750–2100 m, 23-xii-1953.

Distribution – Lombok, Flores, Timor.

EHRETIA L.**Ehretia moluccana** Riedl, *spec. nov.*

Arbor ...? Rami juveniles primo obscure brunnei, demum canescentes. Folia petiolo 0.5–3 cm longo suffulta, lamina (3) 5–18 cm longa, 1.5–9 cm lata, lanceolata usque ad oblongo-lanceolata vel ovato-lanceolata, margine integro, interdum undulato, apice acuta vel acuminata, basi truncata, nervis 5–7 utraque percursa, supra subtusque glabra. Inflorescentia axillaris vel terminalis in ramis brevissimis, subcorymbosa floribus numerosis in capitulis compluribus congestis, postea laxissime expansa, pedunculo 1.5–3 cm longo suffulta. Pedicelli quam 1 mm breviores. Calyx cupuliformis, 1.5 mm sub anthesi longo, 2 mm lato, lobis lanceolatis parte quarta inferiore tantum connatis, pilis laxis patentibus secus marginem ornatis. Corolla alba, 3–3.5 mm longa, 5 mm fere in diametro lata, tubo cylindrico-campanulato sursum gradatim dilatato, lobis reflexis vel subexplanatis, 2.5 mm longis, 1 mm ad basin latis, apice rotundatis, sed margine revoluto quasi acutis. Filamenta longe exserta, antherae lineares, 1 mm fere longae. Stylus 4–4.5 mm longus, 0.8–1 mm longe bifidus ramis haud divaricatis; stigma parvum, subcapitatum, paulo indistinctum. Fructus ignotus. — Inter species floribus haud secundis, corolla parva inflorescentia pilosa, calycis laciniis pilis longis in margine ornatis, in facie glabris, corollae tubo quam calyx longiore insignis, *E. keyensi* novo-guineensi proxima. — Typus: *Beguín 1695* (L), Arch. Ind. Ternate, Lagoena, alt. c. 200 m, 4-viii-1921. Co-Typus: *de Vogel 3211* (L), N Moluccas, Halmahera, Ekor, Bukit Talikimangari, 0° 49' N, 127° 52' E, 29-ix-1974.

Distribution – Ceram, Ternate, Halmahera.

HELIOTROPIUM L.**Heliotropium madurense** Riedl, *spec. nov.*

Annua, 6–35 cm alta, caule erecto, rubescenti-brunneo, imprimis in parte superiore ramoso, sed postea ramis nonnullis saepe et prope basin, pilis brevibus antrorsis strigilloso. Folia sessilia, mox emarcescentia, linearia, 0.7–1.5 cm longa, 1–1.2 mm lata, basi attenuata, subacuta vel subobtusata,

marginem revolutum, pilis rigidis tuberculis calcareis insidentibus, saepe et incrustationibus calcareis ad margines tecta. Cymae demum spiciformes, divaricati vel suberecti, pedicellis sub fructu 2–3 mm distantibus. Bracteae inferiores 2.5, superiores 1.5 mm longae. Pedicelli sub fructu 1–1.2 mm longi. Calyx 1.5 mm longus, lobis ovatis, 0.8 mm latis, subobtusis, pilis nonnullis rigidis appressis tectus. Corolla infundibuliformis, alba, 1.8–2 mm longa, pilis setiformibus vestita, tubo calyce aequante, limbo 1.5 mm diametente, lobis ovatis ad obovatis, aestivatione subvalvatis, 0.8 mm longis. Antherae ovatae, in parte superiore tubi subsessiles. Stylus 0.3 mm longus, stigma 0.4 mm longum, apice obtuse conica medio e disco lato oriente. Nuculae 1 mm longae, ovatae, albido-pulverulentae. — Species nova *Heliotropio strigoso* Willd. affinis, calycibus, corollis at nuculis minoribus, nuculis haud strigosis ab eo differt, a *Heliotropio paniculato* R. Br. praeterea stylo stigmatate multo longiore. — Typus: *Backer 20943* (L.), Madoera, S of Tamberoe, alt. 100 m, 21-iii-1915.

TRIGONOTIS Stev.

Trigonotis subrosulata Riedl, *spec. nov.*

Basis ignota, sed plus minusve repens ut videtur. Caules erecti vel ascendentes, 12–17 cm alti, simplices vel ima basi tantum ramosi, folia subrosulata gerentes, in parte inferiore densissime pilis longis patentibus, in sicco fulvescentibus vestiti, in partibus ceteris pilis antrorsis appressis albis strigosi. Folia oblonga vel elliptica vel lanceolato-oblonga vel obovato-oblonga, petiolo 0.5–2.5 cm longo, manifeste alato, secus marginem pilis longis patentibus vestito suffulta, lamina 2–7 cm longa, 0.7–2.2 cm lata, folia rosularia in petiolos gradatim attenuata, folium singulum caulinum basi lata, rotundata, semiamplexicauli sessili, omnia apice longe acuminata, nervis lateralibus indistinctis, facie superiore opace viridi pilis saepe sparsis appressis, in parte proximali irregulariter directis, in parte distali antrorsis vestita, subtus pallida pilis antrorsis imprimis secus nervum medianum et margines densis strigosa. Cymae semper geminatae, in ramis lateralibus prope basin orientibus vel in caule principali terminales, ebracteatae, ramis aut in parte inferiore nudis aut flore singulo in axilla inter ramos praeditae et tota longitudine floriferae. Pedicelli 0.5–3 mm longi, in flore singulo axillari ad 5 mm, dense strigosi. Calyx florifer 2.5–3 mm longus, lobis 2–2.5 mm longis, 0.8 mm latis, fructifer usque ad 4.5 mm elongatus lobis 3–3.5 mm longis, usque ad 1.1 mm latis, ovato-lanceolatis, acutis, imprimis ad basin, secus nervum medianum et margines antrorse strigosis. Corolla alba, 4 mm longa, tubo ca. 2 mm longo, lobis suborbicularibus, 2 mm in diametro fere longis latisque, late rotundatis, glabris. Fornices 0.8 mm fere lati, 0.3 mm longi, minute papillati. Stamina 1 mm fere longa, antherae 0.8 mm longae, e fauce exsertae. Stylus 1 mm fere longus, stigma indistinctum. Nuculae tetrahedricae, 1 mm fere longae, atrobrunneae, laeves, glabrae, nitidae, angulis costatis, dilute brunneis. — *A T. philippinensi* Merr. valde affini e ditione vicina descripta differt pilis patentibus densis in sicco fulvescentibus partis inferioris caulis, foliis longioribus in parte inferiore caulis subrosulatim congestis petioliis alatis suffultis, caulino singulo basi lata semiamplexicauli, calyce longiore lobis angustioribus et costis nucularum dilutius brunneis. — Typus: *McGregor BS 19575* (L.), Insulae Philippinenses, Luzon borealis: subprov. Ifugao, Mt Polis.