

Vernonia adenophylla Merrill, sp. nov. § *Strobocalyx*.

Frutex scandens, partibus junioribus plus minusve breviter sordide brunneo-pubescentibus, ramis teretibus, glabris, ramulis breviter dense pubescentibus, circiter 2 mm. diametro; foliis oblongo-ellipticis, integris, 5-7 cm. longis, 2-3 cm. latis, subcoriaceis vel firmiter chartaceis, basi rotundatis, apice brevissime late obtuseque acuminatis vel obtusis, utrinque, costa excepta, glabris, supra subolivaceis nitidis, minute puncticulato-glandulosis, subtus subconcoloribus et distincte punctato-glandulosis, nervis primariis utrinque circiter 8, subtus distinctis, elevatis, arcuato-anastomosantibus, reticulis sublaxis, gracilibus, elevatis, haud vermicularibus; petiolo breviter pubescenti, 5-7 mm. longo; inflorescentiis terminalibus, paniculatis ad 15 cm. longis, foliaceis, ramis primariis paucis, subpatulis, inferioribus ad 8 cm. longis, superioribus brevioribus, capitulis subcorymbosis; capitulis circiter 1 cm. longis, pedunculis bracteisque extus dense breviter brunneo-pubescentibus, pedunculo 5-9 mm. longo, bracteis linearibus, pubescentibus, circiter 1 mm. longis; involucri bracteis inferioribus ovatis, acutis vel obtusis, 1.5 mm. longioribus, interioribus gradatim longioribus, internis oblongis vel oblongo-lanceolatis, circiter 4 mm. longis et 1.8-2 mm. latis, omnibus extus pubescentibus, intus glabris; floribus circiter 10, corolla 9 mm. longa, tubo gracili, glabro, lobis lineari-oblongis vel lanceolatis, 2 mm. longis, glabris; acheniis subteretibus, obscurissime costatis, glabris, circiter 2.5 mm. longis, setis numerosis, albidis, 8 mm. longis, exterioribus brevioribus.

UPPER BURMA: Ngawchang Valley, *Vernay-Cutting Exped. 469* (Ward), Mar. 31, 1939, subtropical pine and mixed forests, semiscandent, the highest branches at least scrambling, the leaves with fine gland like dots, pappus white, alt. about 1200 m.

A species superficially somewhat resembling *Vernonia Chevalieri* Gagnep. of Indo-China, and like that species having glandular-punctate leaves, but the reticulations are not at all vermiculiform. Another recently described species with glandular-punctate leaves is *V. Chunii* Chang, from Hainan, but this has heads with only two or three flowers. The leaves subtending the primary branches of the inflorescences are gradually reduced, varying from 4 to 1 cm. in length, similar in all respects to the normal leaves except in size.

Prenanthes Vaillant**Prenanthes volubilis** Merrill, sp. nov.

Herba scandens, partibus junioribus plus minusve subferrugineo-pubescentibus, caulibus teretibus, glabris, longitudinaliter striatis, circiter 3 mm. diametro, internodiis 4-7 cm. longis; foliis perspicue subhastato-cordatis, oblongo-lanceolatis, chartaceis vel subcoriaceis, 8-12 cm. longis, 2.5-4 cm. latis, sursum angustatis, perspicue acuminatis, lobis basalibus rotundatis, 1.5-2 cm. longis latisque, margine distanter (3-6 mm.) apiculato-dentatis vel apiculato-serratis, dentibus angustis, incrassatis, vix 0.5 mm. longis, supra olivaceo-viridibus praesertim ad costam nervosque plus minusve breviter pubescentibus, subtus pallidioribus ad costam nervosque breviter pubescentibus, nervis basalibus 5-7, supra basin utrinque 3-4, omnibus distinctis, gracilibus, arcuato-anastomosantibus, reticulis distinctis; petiolo 2-3.5 cm. longo, glabro, vel juniore parce pubescente; cymis axillaribus terminalibus-

que, 4–6 cm. longis, subferrugineo-pubescentibus, plerumque paucifloris; capitulis 5–12, circiter 11-floris, 12 mm. longis, 6 mm. diametro; involucri bracteis extus plus minusve brunneo, pubescentibus, exterioribus ovatis vel oblongo-ovatis, 2–3 mm. longis, intermediis gradatim longioribus, interioribus circiter 8, oblongis vel oblongo-lanceolatis, acutis vel subobtusis, 1 cm. longis, 3–4 mm. latis; floribus purpureis circiter 11, omnibus ligulatis, tubo gracili, 5 mm. longi extus sursum leviter ciliato, ligulis oblongis, glabris, circiter 6.5 mm. longis, 3–3.5 mm. latis, lobis 5, parvis, oblongis, obtusis vel acutis, 0.5 mm. longis; antheris 4 mm. longis, acutis vel acuminatis; acheniis linearibus, haud rostratis, glabris, circiter 4 mm. longis (immaturis), setis copiosis, albidis, 6–7 mm. longis, scaberulis.

UPPER BURMA: Htawgaw, *Vernay-Cutting Exped.* 159 (Ward), Dec. 26, 1938, in second growth thickets, pine-oak forests, alt. 1500–1800 m., a scrambling plant with purple flowers.

Because of its purple flowers and certain details of floral structure I have placed this in *Prenanthes*, it being one of the few known scandent species in that genus. It is remotely allied to the Indian *Prenanthes scandens* Hook. f. & Th., differing notably in its vegetative characters and especially in its much thicker, more numerous flowered heads, the much broader involucre bracts being pubescent externally.

Aster Linnaeus

Aster Helenae Merrill, sp. nov.

Herba perennis 20–40 cm. alta ut videtur *A. trinervio* Roxb. affinis, caulibus erectis, haud ramosis, deorsum 2 mm. diametro, teretibus, glabris, supra basin, longe foliatis, internodiis plerumque 4–10 mm. longis; sursum inter foliis breviter subcinereo-hirsutis; foliis basalibus longe (2–5 cm.) petiolatis, oblonge-ellipticis (lamina 4–6 cm. longa, 1–2 cm. lata, margine pauciter grosse dentata), caulinis magis numerosis, lanceolatis, 5–7 cm. longis, 5–12 mm. latis, utrinque subaequaliter angustatis, apice graciliter acute acuminatis, base longe cuneatis, petiolo breviter hirsuto, 4–7 mm. longo, margine distanter pauciter serrato-dentatis, dentibus acutis, utrinque plerumque 3 vel 4, omnibus pallidis vel pallide olivaceis, supra breviter consperse hispidulo-scaberulis, subtus conspersissime breviter hispidulis praesertim ad costam nervosque, nervis primariis utrinque 2 vel 3, adscendentibus, arcuato-anastomosantibus, reticulis laxis, basi 3-plinerviis; inflorescentiis corymbosis, 4–5 cm. longis, 5–7 cm. latis, foliosis, capitulis 5–15, longe graciliter pedunculatis, pedunculis breviter cinereo-hirsutis, 1–2 cm. longis, paucibracteatis, bracteis 2 vel 3, linearis, 2–5 mm. longis; capitulis 8–9 mm. longis, sub anthesin circiter 12 mm. diametro; involucri bracteis ca. 3-seriatis, anguste oblongis vel lineari-oblongis, omnibus acuminatis, exterioribus brevioribus angustioribusque, interioribus circiter 4 mm. longis et 0.7 mm. latis, externis subadpresse cinereo-hirsutis internis tenuioribus, margine late submembranaceis, subglabris; floribus radialibus circiter 20, ligulis pallide purpureis, anguste oblongis, circiter 6 mm. longis et 1 mm. latis, circa ad marginem graciliter 2-nerviis, apice rotundatis, basi subcuneatis; florum discis numerosis, corolla circiter 6 mm. longa, sursum ampliata, lobis oblongis, acutis vel acuminatis, recurvatis, 1.2 mm. longis; acheniis compressis, oblongis, deorsum angustatis, parcissime consperse breviter hirsutis vel deorsum glabris, circiter 2 mm. longis.