

ILEX LONGECAUDATA COMBER (AQUIFOLIACEAE)—A NEW RECORD FOR INDIA

During a scrutiny of the genus *Ilex* of the family *Aquifoliaceae*, an interesting material (DD) collected from Nagaland has been identified by the author as *Ilex longecaudata* Comber which is related to other Indian species, such as *Ilex triflora* Blume and *I. embelioides* Hook. f. but differs in its long caudate leaf apex and punctate nature of the leaves. Further, glabrous stemmed form, *I. longecaudata* var. *glabra* Hu [Journ. Arn. Arb. 31(3): 246. 1950] has been described from Yunnan province (alt. 1400 m) which Hu considered as a possible new species if more material were available for study. From among the gift material received by CAL several years back, the *Isotype* of *Ilex longecaudata* Comber has also been located. Further the *Holotype* of this species available at Kew Herbarium has also been scrutinised at the request of the author.

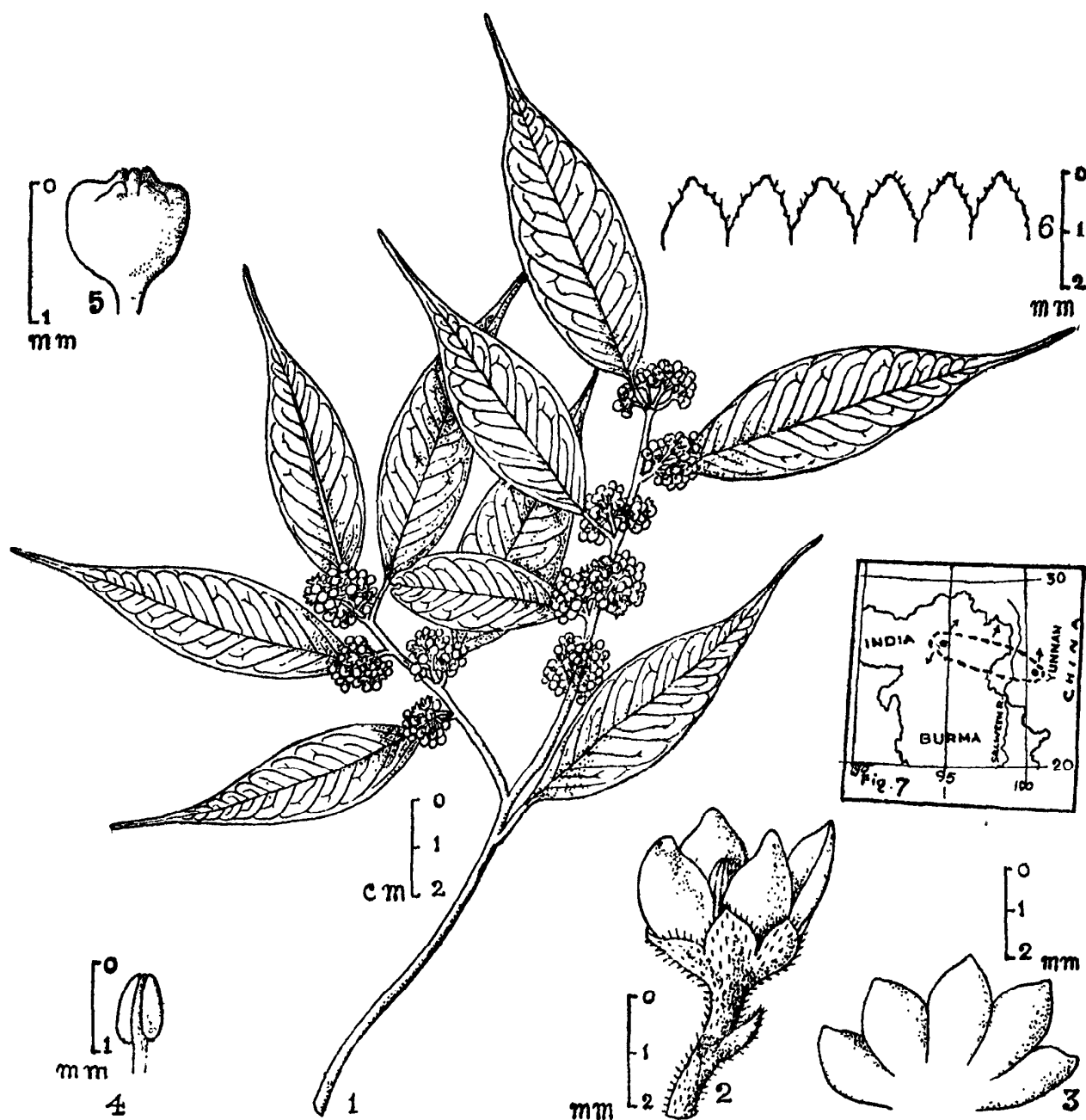
The species is chiefly distributed in Yunnan, China where it grows at alt. 1400-2700 m and the present record from Nagaland extends its distribution further west. It is also quite possible to locate the species and also the var. *glabra* Hu from the adjoining regions of Manipur hills bordering Nagaland and also Tirap and Lohit districts of Arunachal Pradesh.

To facilitate easy identification, a detailed description and diagram of the species is added.

Ilex longecaudata Comber emend. Hu in Journ. Arn. Arb. 31(3): 245. 1950; Comber, Notes Roy. Bot. Gdn. Edinburgh 18(86): 54. 1933. *Ilex* sp. aff. *embelioides* Hook. f. List in Notes Roy. Bot. Gdn. Edinburgh 17 (83-85): 151-1930.

An evergreen small tree 3 m (Forrest)—9 m (Hu) high. Branches slender, ashy or light brown, grooved, puberulent in the groove, glabrous; leaf-scars crescent-shaped,

lenticels elliptic; terminal bud puberulent with ciliated scale. *Stipules* subulate and slightly falcate, persistent. *Leaves* lanceolate or elliptic, 6.5-9 cm long, 2-2.5 cm wide, thinly coriaceous, upper surface shining olive, midrib grooved, glabrous, margin entire, slightly recurved, apex caudate upto 2 cm long, cuspidate, lower surface pale, punctate, midrib prominently ridged, wrinkled, base cuneate or obtuse; lateral nerves 9-12 pairs, anastomosing near the margin, obscure above; petiole 6-12 mm long, canaliculate and puberulent above, plicate and keeled beneath. *Male inflorescence* pseudo-paniculate, axillary, central axis 4-7 mm long, puberulent; bracts deltoid, coriaceous, puberulent and ciliate; individual branches 3-flowered cymose; peduncle 4 mm long, pedicels 2 mm long, puberulous, with 0.2 minute basal prophylla; flowers 4-5 (rarely -6) merous, unisexual by abortion, greenish yellow; sepals 4-6, shortly united, orbicular lobes, 1 mm long, 2.5 mm across, sparingly ciliate; petals 3-5, shortly united, obovate, 2.5 mm long; stamens 3-5, epipetalous, alternate, anther ovate, filament short and stout, about 1.2 mm long; rudimentary ovary subglobose, style 0, apical end truncate, about 1 mm in diameter, 4-grooved. *Female inflorescence* fasciculate or pseudoraceme, axillary, very puberulent, pedicels 2-3 mm long; sepals 4-5 (rarely -6) merous, explanate after fruiting, 3 mm across, lobes deltoid, acute, ciliate; petals erect, ovate, 2 mm long; staminode three-fourth the length of the petals, the sterile anthers ovoid; ovary large, subglobose, 2 mm in diameter, the stigma thick-discoid convex. *Fruit* small, globose, 3-4 mm in diameter, the stigma subcolumnar or discoid, much elevated, the style evident. *Pyrenes* 5, elliptic in outline, smooth, 3-striate, esulcate on the back, 2.5 mm long,



Ilex longicaudata Gomer emend. Hu

Figs. 1-7: 1. Twig with inflorescence. 2. Male Flower. 3. Petals. 4. Stamen. 5. Rudimentary ovary. 6. Sepals. 7. Map showing the distribution of species.

1.25 mm wide, endocarp coriaceous. (Description of female flower and fruit after Hu l.c.).

Specimens examined: INDIA: Nagaland: Zekwera, 2500 m on 23.4.1935, N. L. Bor 2740 (male, DD). CHINA: Yunnan: Shweli-Salwin divide, Lat. 25° 20 'N' 3300 m in July 1917, G. Forrest. 15657 (male, *Isotype*—CAL; *Holotype* K).

Distribution: This species is chiefly distributed in China endemic to Yunnan province (Localities—Shang-pa, Ping-Pienhsien Shungning and Keng-ma, male, female after Hu and Yu) and in India, only from Nagaland for the present, as recorded here.

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PHANERA NICOBARICA BALAKR. & THOTH. (CAESALPINIACEAE)—
A NEW AND INTERESTING SPECIES FROM GREAT NICOBAR ISLAND

Phanera nicobarica Balakr. & Thoth. *sp. nov.* inter species sectionis *Megantherae* de Wit ad *P. stipularem* (Korth.) Benth. accedens sed petiolis longioribus et crassioribus, pedicellis longioribus, petalis oblongo-lanceolatis, stipite ovarii breviori, stigmate peltato, ovulis numerosis ab ea recedens.

Frutex scandens, magnus; caulis 3-5 cm crassus ad basim; capreoli circinnati, simplices, lignescentes, ad nodos ramulorum inserti; ramuli juniores dense brunneo-hirsuti, graciles, 6-10 cm longi, stipulis imbricatis plurimis gemmis vegetativis dense hirsutis tegentibus; stipulae falcatae, obovatae, rotundatae ad apices, 4-5 mm longae, 3-4 mm latae, scariosae, brunneae, pubescentes, caducae. *Folia* ovata, breviter cordata ad basim, 7-14 cm longa, 6-12 cm lata, glabra; lobi 2-5 cm longi, acuti vel subacuti; nervi 11-13, infra porcati et sparsim cinereo-puberuli; nervuli sublitter reticulati; petioli 5-9 cm longi, glabri, validi. *Inflorescentia* simplex, corymbose racemosa, 8-10 cm longa, 10-12 cm lata; rachis 4-7 cm longa, dense minute brunneo-hirsuta; pedicelli usque ad 7 cm longos, infimi longissimi, dense minute puberuli, cicatricibus bractearum delapsarum lunatis notati ad bases; bracteola solitaria, inserta ad medium pedicelli, lineari-subulata, 4-5 mm longa, caduca. *Flores* 5-6 cm lati, albi vel laete cremei. *Receptaculum* cylind-

ricum, carnosum, cavitate angusto, latius ad basim et apicem, 1.0-1.2 cm longum, 2-3 mm crassum, striatum, dense minute brunneo-pubescent. *Sepala* 5, anguste-lanceolata, acuminata, incrassata ad margines, 2.2-2.4 cm longa, 3-4 mm lata, extra dense minute puberula. *Petala* 5, basi unguiculata oblongo-lanceolata, sinuato-cordata basi, acuta apice, undulata marginibus, 2.4-2.6 cm longa, 1.0-1.2 cm lata, alba, nervis distinctis, extra sparsim puberula per costam et aliquot nervos; unguis 2.0-3.5 mm longi, brunneo pilosi ad utrinque costas. *Stamina* fertilia 3; filamenta 8-10 mm longa, sparsim minute puberula; antherae lineari-oblongae, 9-11 mm longae, rubrae, dehiscentis longitudinalibus duabus ad anticas et dorsales on utraque theca. *Staminodia* 2 vel 3, gracilia, sigmoidea in gemmis, simpliciter curva in floribus, 5-8 mm longa, minute puberula ad bases. *Ovarium* brevi-stipitatum, complanatum, 1.0-1.3 cm longum, 2-3 mm latum, dense sericeo-tomentosum, brunneum, multiovulatum; stylus 1.4-1.8 cm longus, minute puberulus; stigma tumidum, sub-globosum, peltatum. *Fructus* ignotus (Figs. 1-12).

GREAT NICOBAR: 15 km on East-West Road, $\pm$ 100 m, 23 Aug. 1975, Balakrishnan 3043 A (HOLOTYPE in CAL); *ibid.* 3043 B-C (ISOTYPE in CAL); *ibid.* 3043 D-F (ISOTYPE in PBL); 18 km on North-South Road, $\pm$ 25 m, 17 July 1976, Balakrishnan 3824 A-B (PARATYPE in CAL); *ibid.* 3824 C-F (PARATYPE in PBL); on the way from