

A NEW SPECIES OF *BUPLEURUM* LINN. (UMBELLIFERAE) FROM ANDHRA PRADESH, INDIA

Bupleurum andhricum Nayar et Ban. sp. nov.

Species *B. plantaginifolio* Wt. valde affinis, sed foliis lanceolatis vel ellipticis, involucri et involucelli phyllis minoribus, fructibus minoribus, valleculis 3-4 vittatis, commissuris 4-5 vittatis differt.

Herba. Caulis teres, erectus, striatus, medullosus, ramosus vel repetite pseudo-dechotomo-furcatus; rami erecti glabri. *Folia inferiora* alterna, simplicia, oblongo-lanceolata vel elliptica 7-17 cm × 1.3-2.5 cm, ad basim attenuata, margine integra ad apicem sensim mucronata, membranacea; nervis lateralibus 3-5 jugis, in utraque pagina leviter conspicuis; basi in petiolum alatum, vaginiformiter amplexicaulem attenuata. *Folia superiora* alterna, sessilia, elliptica vel elliptico-lanceolata, 1.5-4 cm × 0.5-0.9 cm ad apicem mucronata margine integra, membranacea, supra viridia, infra pallida; nervis lateralibus 2-jugis, supra subconspicuis, infra prominentibus. *Inflorescentiae* axillares vel terminales; *Pedunculi* 0.6-2.5 cm longi, glabri. *Umbellae* 3-8 radiatae; radiis inaequalibus, tenuibus, 1.5-3 cm longis. *Involucri phylla* 3-4, inaequalia, elliptica vel obovata, 0.5-1.5 cm longa, apice obtusa et mucronata, glabra, venis lateralibus 2-3 jugis. *Involucelli phylla* 5, subaequalia, obovata, 2-6 mm longa, ad basim angusta, ad apicem obtusa et mucronata, glabra, venis lateralibus 1-2 jugis. *Pedicelli* 1-3 mm longi, glabri. *Calycis* dentes 5, subconspicui, brevissimi. *Petala* 5 obovata vel suborbicularia, ± 0.5 mm longa, concava, margine integra, pallide flava. *Stamina* 5; filamentis 0.5 mm longis; antherae ± 0.2 mm longis. *Stylopodium* subplanum, carnosum. *Styli* breves, 0.4 mm longi, divaricati, stigmata inconspicua. *Fructus* oblongus, 3-3.5 mm longus; vittae valliculares 3-4, commissurales 4-5.

Holotypus: Lectus in loco Palakonda in dist. Godavari, in provincia Andhrice, die 1.10.1920, a V. Narayanaswami at positus in CAL subnumero 370A.

Bupleurum andhricum M. P. Nayar et R. N. Ban. sp. nov.

Herb. *Stem* terete, erect, striate, medullose, branched or repeatedly pseudodichotomously branched; branches erect, glabrous. *Lower leaves* alternate, simple, oblong-lanceolate, elliptic, 7-17 cm × 1.3-2.5 cm, attenuate at the base, margin entire, apex gradually mucronate, membranaceous; lateral

nerves 3-5 on either side of the midrib, slightly prominent on both surfaces; petioles alate, vaginiform, amplexicaul. Upper leaves alternate, sessile, elliptic to elliptic-lanceolate, 1.5-4 cm × 0.5-0.9 cm, mucronate at the apex, entire at margin, membranaceous, upper surface green, lower surface pallid, lateral nerves 2 on either side of the midrib, subconspicuous on the upper surface and prominent on the lower surface. *Inflorescence* terminal and axillary; peduncle 0.6-2.5 cm long, glabrous. *Umbels* 3-8 rayed, rays unequal, slender, 1.5-3 cm long. *Involucral leaves* 3-4, unequal, elliptic to obovate, 0.5-1.5 cm long, apex obtuse to mucronate, glabrous, lateral veins 2-3 pairs. *Involucell leaves* subequal, obovate, 2-6 mm long, narrowed at the base, apex obtuse to mucronate, glabrous, lateral veins 1-2 pairs. *Pedicel* 1-3 mm long, glabrous, calyx teeth 5, subconspicuous, very short. *Petals* 5, obovate or suborbicular, ± 0.5 mm long, concave, margin entire, pale yellowish. *Stamens* 5, filament 0.5 mm long; anthers ± 0.2 mm long. *Stylopodium* subflat, fleshy. *Style* short, 0.4 mm long, divaricate, stigma inconspicuous. *Fruit* oblong, 3-3.5 mm long, vallecular vittae 3-4, commissural vittae 4-5.

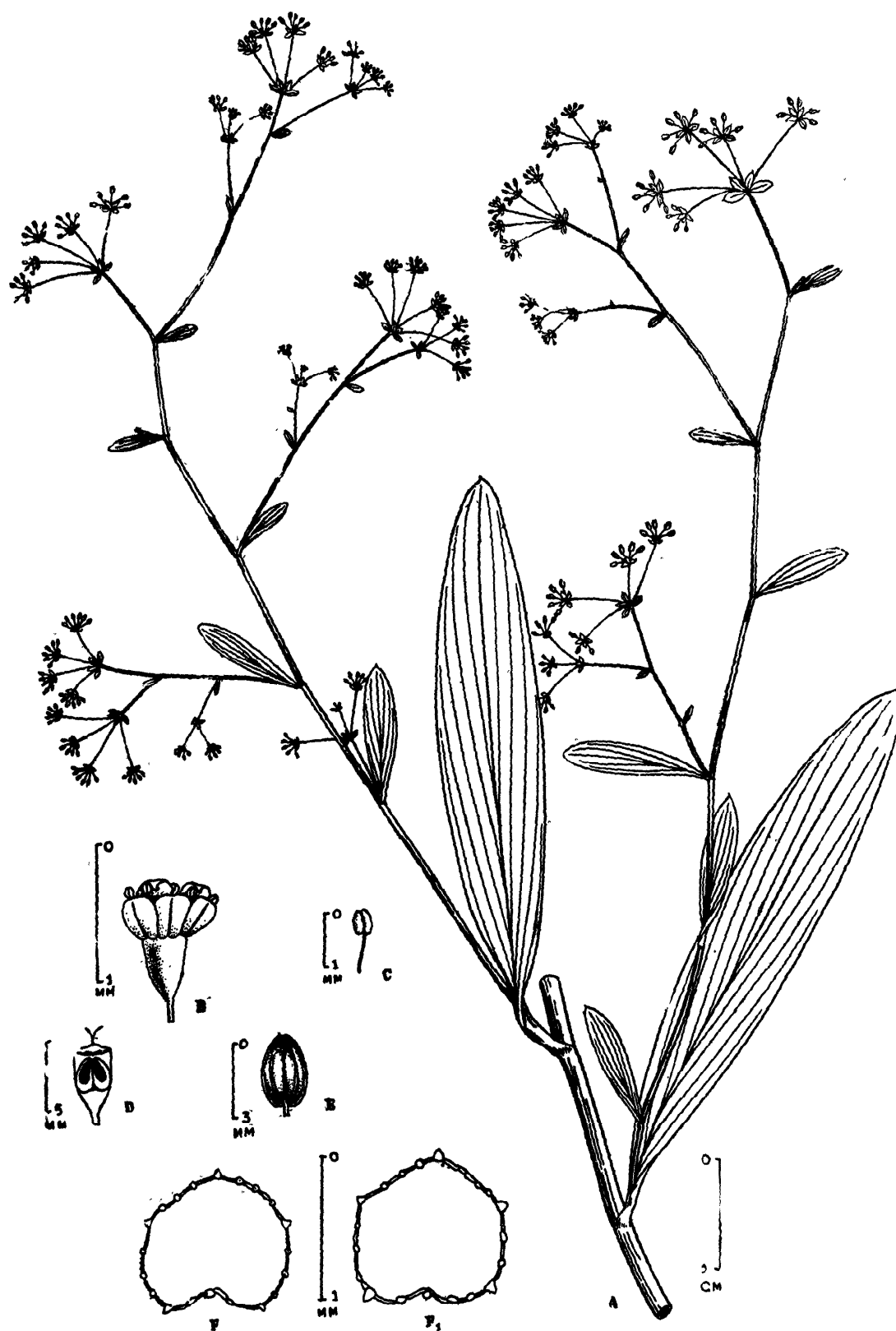
Distribution: INDIA: Andhra Pradesh: Palakonda, Godavari District, 762 m, Oct. 1920—V. Narayanaswami 370A (CAL); *ibid.*—V. Narayanaswami 370B & C (CAL); Devagiri, Parlakimedi, Northern Circars, Dec. 1902—E. Candler & I. H. Burkill 17965 (ISIM); near Sunkarimetta, Visakhapatnam, 1150 m, Aug. 1960—N. P. Balakrishnan 109 A-D (CAL); *ibid.*, 1300 m, Sept. 1961—N. P. Balakrishnan 744 (CAL).

This interesting species is allied to *B. plantaginifolia* Wt. but differs in having lanceolate or elliptic leaves, smaller involucral and involucell leaves, smaller fruits with less prominent ridges, 3-4 vitta in vallecular cavity and 4-5 vitta in commissural surface; whereas *B. plantaginifolia* has spatulate leaves with abruptly ending mucronate apex, longer involucral and involucell leaves, large fruit with prominent ridges, 1 vitta in vallecular cavity and 2 vitta in commissural surface.

N.B. ISIM=Industrial Section, Indian Museum, Calcutta.

M. P. NAYAR AND R. N. BANERJEE

Botanical Survey of India, Howrah



Bupleurum andhricum Nayar et Ban.
 A. Branch. B. Flower. C. Stamen. D. T. S. of the ovary. E. Fruit. F-F₁. T. S. of a mericarp.