

**LUDWIGIA HYSSOPIFOLIA (G. DON) EXELL—A NEW RECORD FOR THE
UPPER GANGETIC PLAIN AND RAJASTHAN**

While making a general study of the *Ludwigias* in the Botanical Survey of India, Northern Circle Herbarium at Dehra Dun (BSD), the authors came across a few plants of this species collected from Chitrakut (Banda District) in Uttar Pradesh and Lohargal in Rajasthan. The occurrence of the plant in the above areas forms an additional information about its distribution in the country.

The plant has been reported in our floras from Kerala, Bihar, Orissa and Assam states. Bennet (1966) reported it from West Bengal. Vajravelu and Rathakrishnan (1967) reported it from Dharampuri district, Tamil Nadu. The junior author (paper in press) recently noted its occurrence in Maharashtra and Nagaland. The present report from Chitrakut (Uttar Pradesh) and Lohargal (Rajasthan) is its first record from Upper Gangetic Plain and Rajasthan respectively. The data of distribution given above indicate that the plant has a wide distribution in the country and the fact that it has not been mentioned for several areas is due to the reason that it has often been confused in our herbaria with *Ludwigia perennis* Linn. (= *L. parviflora* Roxb.) or *L. prostrata* Roxb.

Ludwigia hyssopifolia (G. Don) Exell, Garcia de Orta, 5: 471, 1957. *Jussiaea hyssopifolia* G. Don, Gen. Syst. 2: 693, 1832. *J. fissendocarpa* Haines in Journ. As. Soc. Beng. n.s. 15: 313, 1920. *Fissendocarpa linifolia* (Vahl) Bennet in Journ. Bomb. nat. Hist. Soc. 67 (1): 126, 1970.

Haines (1961) treats this species under *Jussiaea* (sect. *Fissendocarpa* Haines) with the name *J. fis-*

sendocarpa Haines. Raven (1963), while revising the Old World species of *Ludwigia*, also holds similar view that this species should constitute a monotypic section, but he treats it under *Ludwigia* in his new section, *Fissendocarpa* (Haines) Raven, with the name *L. hyssopifolia* (G. Don) Exell. Recently, Bennet (1970) has raised this section to generic level with the name, *Fissendocarpa* (Haines) Bennet, and treats the species *Fissendocarpa linifolia* (Vahl) Bennet. We have followed Raven in treating the species under *L. hyssopifolia*.

Specimens examined: UTTAR PRADESH: Nandakini banks, Chitrakut, 19th Nov. 1957, M. A. Rau 3833 & 3837. RAJASTHAN: Lohargal, Sept. 1960, N. C. Nair 962 (BSD).

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**HYPERICUM GRIFFITHII HOOK. F. ET THOMS. EX DYER EMEND. S. N. BISWAS
—A NOTEWORTHY FLOWERING PLANT FROM EASTERN HIMALAYAS**

Thiselton Dyer's description of *Hypericum griffithii* (Hook. f., Fl. Brit. Ind. 1: 253. 1874) from Bhutan, was incomplete as there was no description of flowers and Dyer (*l.c.*) commented "flowers unknown" Hence its correct identity and systematic position could not be established. After Dyer (*l.c.*) this species has so far not been described in any flora. As far as the collection of this taxon is concerned it is poorly represented in Indian herbaria. The author is fortunate to examine the collections of G. L. Searight 108 (CAL) made from Chumbi

Valley road (Tona), Tibet in April 1905 (in duplicate) and this enabled the author to give a complete description of the species especially the flower and fruits which are important for sectional and specific delimitation.

As to its affinity it is closely allied to *H. grandifolium* Choisy but is recognisable in having trichotomous corymbose cymes, lanceolate bracts, wider obovate petals punctate with black glands and ovary with 5 styles. It is also allied to *Hypericum androsaemum* L. but can be distinguished by the terete

stems, petals obovate and longer than sepals, ovary with 5 styles and ellipsoid-oblong capsules. The species can be placed under the section *Norysca* (Spach) Endl. A complete description of the taxon with an illustration (Figs. 1-8) is therefore given for correct identification.

Hypericum griffithii Hook. f. et Thoms. ex Dyer in Hook. f. Fl. Brit. Ind. 1: 253. 1874. emend. S. N. Biswas.

Erect, glabrous shrubs. *Stems* stout, terete, dark reddish-brown. *Leaves* sessile, (4-) 4.5-10.5 × 2.7-5.3 cm, broadly ovate, ovate-oblong or ovate-rounded, base subcordate or subamplexicaul, apex obtuse to sharply acute or apiculate, entire glabrous on both surfaces, undersurface gland punctate with black

dots (few in number), veins prominent and raised beneath, depressed above, lateral veins 6-8 pairs, arching upwards and united into an intermarginal vein near the margin. *Flowers* in trichotomous corymbose cymes, 4-9 (-10) cm across, terminal up to 20 flowered; bracts 2.5-3.5 mm long, lanceolate, acute at apex; pedicels 0.8-2 cm long, slightly dilated upwards. *Sepals* 5, 4.5 × 1.8-2 mm, free near to the base, chartaceous, ovate-lanceolate, acute to acuminate at apex, gland punctate mainly at the periphery, persistent. *Petals* 5, 1.8-2 × 0.9-1 cm, submembranous, yellowish, obovate, prominently veined, punctate with black glands. *Stamens* 5-adelphous, 8-8.5 (-9) mm long, \pm 20 stamens in each bundle, filaments unequal, glabrous, anthers 0.5-0.7 mm long, oblong, dorsifixed. *Ovary* 5-7.5 mm long ellipsoid-oblong narrowed into a short stipe, 5-locular with axile placentas; styles 5, 8.5-9.5 mm long, free, erect, stigma capitate. *Capsule* ellipsoid to ellipsoid-oblong tipped with persistent styles and narrowed into a short stipe. *Seeds* brown \pm 0.9 mm long, broadly-oblong, acute at both ends, with longitudinal ribs and fine transverse striae in between the ribs.

E. HIMALAYAS: Bhutan, 1861-62, *Griffith* 833 (isotype CAL).

Fls. and Frs. April-May.

Specimens examined: Tibet, Chumbi Valley road (Tona), April 1905, alt. 900 m-1200 m, G. L. *Searight* 108 (CAL).

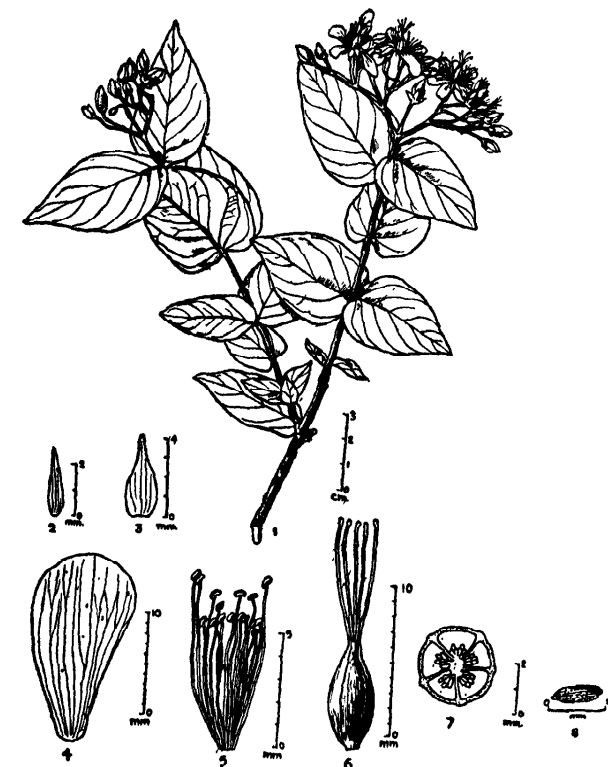
Distribution: Bhutan Himalaya and Tibet (Chumbi Valley) in between Bhutan and Sikkim.

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Hypericum griffithii Hook. f. et Thoms. ex Dyer emend. S. N. Biswas
Figs. 1-8: 1. Habit. 2. A bract 3. A. sepal. 4. A petal.
5. Stamen fascicle. 6. A pistil. 7. T.S. ovary. 8. A seed.