



***Neanotis wightiana* (Rubiaceae): A new distributional record for Odisha, India and taxonomic notes on its variations**

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Abstract: While preparing an inventory of flowering plants of Similipal Biosphere Reserve, Odisha, few interesting specimens of family Rubiaceae were collected and identified as *Neanotis wightiana* (Wall. ex Wight & Arn.) W.H. Lewis. The scrutiny of literature and herbarium specimens (CAL) revealed that this species is hitherto not reported from Odisha. Therefore, the said species is reported here as a new distributional record for the state. Taxonomic description, dissected floral parts, photograph and taxonomic notes on its variations as observed in field have been provided for easy identification.

Key Words: *Neanotis wightiana*, New record, Rubiaceae, Similipal Biosphere Reserve.

Introduction

Similipal Biosphere Reserve is located in the Mayurbhanj district of Odisha state, which lies in the tri-junction of three states viz., Jharkhand, Odisha and West Bengal. It lies between 21° 29' to 22° 08' N latitude and 86° 04' to 86° 38' E longitude. It has a unique assemblage of number of ecosystems such as mountains, forests, grasslands, wetlands and harbours enormous diversity of tropical flora and fauna and provides shelter to many rare and endangered plants. It is considered as Himalayas of Odisha because of its enormous influence over the climatic condition of the state and its neighbourhood (Parida, 1997). During the botanical exploration in Similipal Biosphere Reserve, few interesting specimens have been collected. After scrutiny of relevant literature (Hooker, 1880; Haines, 1921-25; Kanjilal *et al*, 1939; Saxena & Brahmam, 1995; Singh *et al*, 2001) and comparison with the specimens housed at CAL it is identified as *Neanotis wightiana* (Wall. ex Wight & Arn.) W.H. Lewis belonging to family Rubiaceae, which has not been reported hitherto from Odisha. Detailed taxonomic description with dissected floral parts, photographs and taxonomic notes on its variations have been provided for easy identification. The voucher specimens have been deposited at Similipal Tiger Reserve Herbarium, Baripada, Odisha.

Neanotis wightiana (Wall. ex Wight & Arn.) W.H. Lewis in Ann. Missouri Bot. Gard. 53: 40. 1966. *Hedyotis wightiana* Wall.

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ex Wight & Arn., Prodr. Fl. Ind. Orient.1: 410. 1834. *Anotis wightiana* (Wall. ex Wight & Arn.) Hook. f. in Hook. f. (ed.), Fl. Brit. India 3: 75. 1880; C.E.C. Fisher in Rec. Bot. Surv. India 12 (2):100.1938; Kanjilal *et al.*, Fl. Assam 3: 40.1939. Fig. 1.

Procumbent herbs; rooting at nodes. Stems quadrangular, strigose. Leaves simple, opposite-decussate, ovate or ovate-elliptic, 0.6–2.5 × 0.4–1.8 cm, base cuneate, margins entire, ciliate, apex acute, coriaceous, sparsely pubescent; lateral nerves inconspicuous; stipules interpetiolar, membranous, trifid. Inflorescence capitate cymes on axillary branchlets, several flowered; bracts reduced. Flowers 1-3 mm long. Calyx pale green; tube short; lobes 3 (4), ovate, 0.5-1 × c. 2 mm, glabrous to pubescent, margins ciliate, acute, recurved. Corolla white, tubular; lobes 3 (4), ovate-oblong, 0.5–2.5 × 0.5–3 mm, acute to obtuse at apex, glabrous. Stamens 3–4; filaments glabrous, inserted near the base of corolla tube. Ovary broadly ovate, c. 1.5 × 1.5 mm, compressed, 2-loculed; style simple, c. 0.5 mm long, pubescent; stigma bifid, pubescent. Capsules laterally compressed, globose to orbicular, c. 2 × 2 mm, 2-loculed; seeds 1-2 per locule, rugose when dry.

Flowering & Fruiting: August-November.

Habitat: Growing in meadows near stream at about 856 m. altitude.

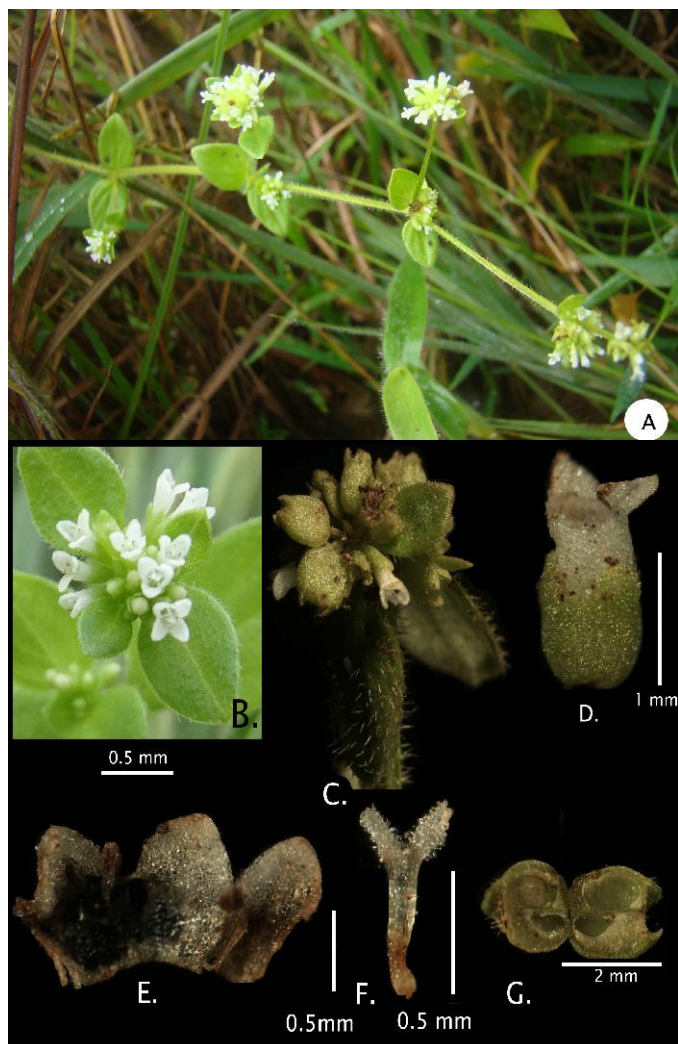


Figure 1: *Neanotis wightiana* (Wall. ex Wight & Arn.) W.H. Lewis: **A.** Habit; **B.** Flowers closeup view with its variation in petals; **C.** Inflorescence; **D.** Flowers; **E.** Petal opened; **F.** Style; **G.** L.S. of Ovary.

Taxonomic notes: Usually the genus *Neanotis* W.H.Lewis having tetramerous flowers, in present collection the flowers shows the variations in number of its calyx and corolla lobes which are 3 as a constant character, except few flowers are tetramerous. Despite this Clarke (Hook. f., 1880) had observed that the flowers are white in the 2-carpellary, light blue in the 3-carpellary and blue in the 4-carpellary specimens. Although the present collection has only 2 carpels.

Distribution: India: Andhra Pradesh, Assam, Manipur, Mizoram, Odisha (Simlipal Biosphere Reserve) and Tamil Nadu. World: Australia, Bhutan, China, Indonesia, Malaysia, Myanmar, Philippines, Thailand and Vietnam.

Specimens examined: INDIA, Odisha: Similipal Biosphere Reserve, Jenabil, 08.09.2013, Kar & Nayak 638 (Similipal Tiger Reserve Herbarium); Assam: Cherrapunjee (Khasia hills), 01.06.1911, Burkill & Banerjee 167 (CAL); Khasia & Jaintia hills, 17.06.1958, Panigrahi 16332; Kamrup Dist., 20.06.74, S.K. Das 51242 (CAL); Nagaland: Kohima (Naga hills), Prain 201162 (CAL); Meghalaya: Nongthimai (Shillong), 30.07.1957, Panigrahi 3931 (CAL); Mizoram: Theiriati, Deb 31268 (CAL); North Vanlaipai, Singh 97166 (CAL); Tamil Nadu, Nilgiris, 01.09.1957, Sebastine 4203 (CAL).

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