

**A NEW VARIETY OF *SOLANUM AMERICANUM* MILL. (SOLANACEAE),
FROM EASTERN GHATS, INDIA**

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Keywords: Solanum; New taxon; Eastern Ghats; India.

Solanum L., is economically and medicinally important genus and one of the largest genera of flowering plants with c. 1500 species distributed in all continents, except Antarctica (Vorontsova, *et al.*, 2013). In India, the genus is represented by 48 species (Reema Kumari, 2004), of which 13 species are reported from Odisha (Saxena and Brahmam, 1995). During revisionary studies and exploration of the genus *Solanum* L. of Eastern Ghats, the authors came across some interesting specimens from the districts of Kandhamal, Ganjam and Gajapati in Odisha state, India. These specimens closely resemble *Solanum americanum* but differ by its height, stem, number of flowers, ovary and style characters (Table 1). Therefore, it is described here as a new variety of *Solanum americanum* Mill. var. *odishensis* **var. nov.**

***Solanum americanum* Mill. var. *odishensis* Kalidass & P. Murugan, **var. nov.** (Fig. 1).**

Diagnosis: *Solanum americanum* var. *odishensis* is closely allied to *Solanum americanum* Mill., but differs from it in having prickly angular stem, inflorescence 5-8 flowered, style erect, densely villous in middle and curved at apex.

Type: INDIA, Odisha: Kandhamal District, G. Udayagiri Forest range, 14 July 2015, 20°07'204"N, 084°22'187"E, ±658m, Kalidass & Murugan 18021 (*Holotype:* CAL!, *Isotypes:* MH!, RPRC!).

Erect annual herbs, 100-130 cm high. Stem 4-angular with prickles, branched, pubescent-glabrescent; branches ascending. Leaves simple, alternate or sub-opposite, ovate or ovate-lanceolate, 4-9×3-5 cm, cuneate or obtuse at base, margin entire to sinuate or sinuate-dentate, acute or acuminate at apex, pale beneath, glabrous or pubescent on both surfaces; lateral nerves 4-6 pairs; petioles 2-3 cm long, flat or terete. Inflorescence axillary or extra-axillary, umbellate or sub-umbellate cymes, 5-8 flowered. Flowers 3-5 mm long, creamy white; peduncle 2-3 cm long, slender, glabrous or pubescent; pedicels 8-10 mm long, slender, glabrous. Calyx 5-lobed, valvate, 1.5 mm in diameter, base united; calyx-lobes deltoid, each lobe less than 1 mm long, green, pubescent, margin ciliate, reflexed away from mature berries, persistent. Corolla valvate, 5-lobed, 2-3 mm in diameter, star-like, base united; lobes ovate or lanceolate 2.5 mm long, reflexed, margin ciliate. Stamens 5, epipetalous; anthers lanceolate, 1 mm long, yellow, dithecous, basifixed and dehisces apically; filament c. 0.5 mm long, glabrous. Ovary globose, c. 0.8 mm long, glabrous; style less than 1.5 mm long, filiform, densely villous in the middle, curved at apex; stigma capitate, green. Berries globose, 5-8 mm in diameter black or dull black when ripe, glossy. Seeds 10-30, ovate or orbicular, 1.0-1.5 mm long, brownish-white, compressed.

Flowering and fruiting: May - September.

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Etymology: *Solanum americanum* var. *odishensis* is named after the state Odisha, one of plant diversity zones in Eastern Ghats, India.

Distribution: The new variety is distributed in the Odisha state of India as an Eastern Ghats element.

Habitat: *Solanum americanum* var. *odishensis* is found to grow in open scrub forest, usually near water courses and shady localities. It grows along with *Lantana camara* L., *Sida acuta* Burm. f., *Sesamum indicum* L., *Solanum torvum* Sw., *Albizia lebbek* (L.) Benth., *Neolamarckia cadamba* (Roxb.) Bosser.

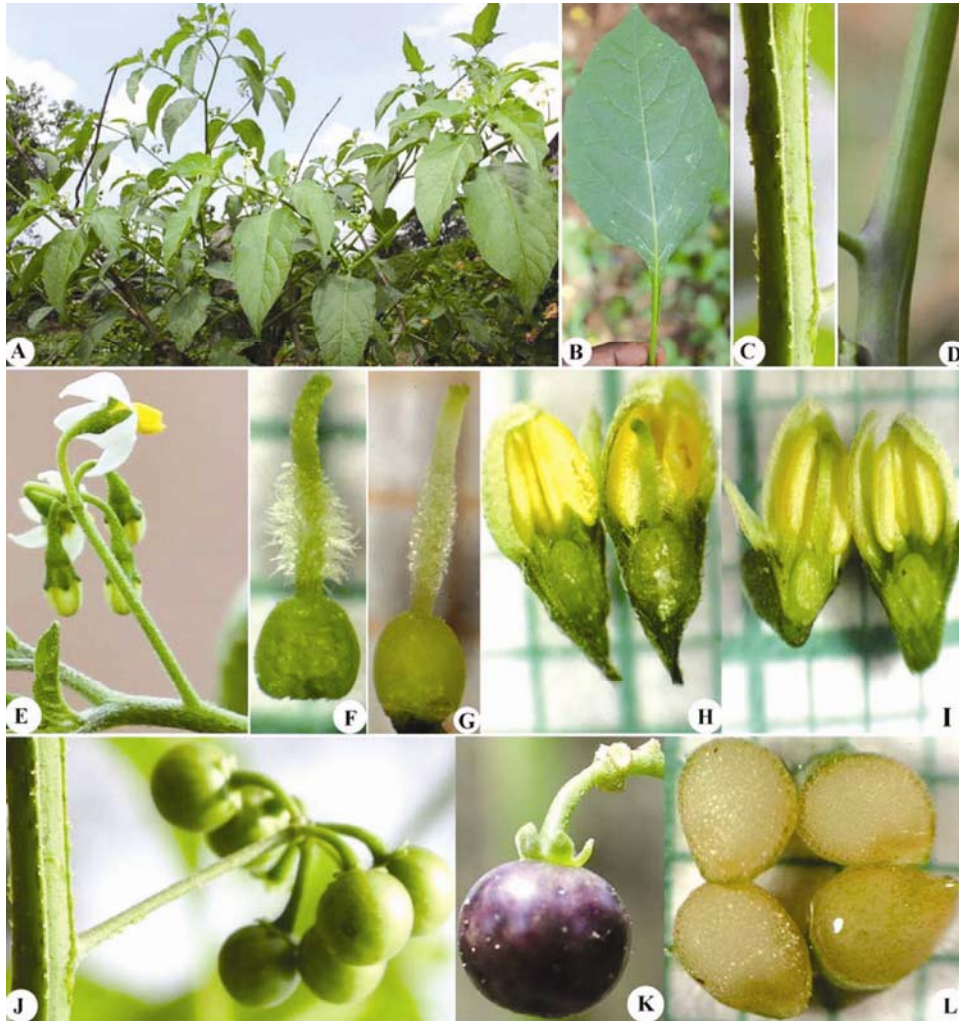


Fig. 1. *Solanum americanum* Mill. var. *odishensis*, var. nov. A. Habit; B. Leaf; C. Stem; E. Inflorescence; F. Pistil; H. L.S. of flower bud; J. Fruiting twig; K. Fruit; L. Seeds; *Solanum americanum* Mill. D. Stem; G. Pistil; I. L.S. of flower bud.

Paratypes: INDIA, Odisha state, Kandhamal District, Paburia, 20°09'308"N, 084°15'339"E and Alt. ±681 MSL; 14.07.2015, *Kalidass & Murugan* 18024 (RPRC) Kalinga Ghat, 20°09'867"N, 084°24'870"E and Alt. ±737 MSL; 15.07.2015, *Kalidass & Murugan* 18027 (RPRC) Ganjam District, Sikulipadara, 19°24'086"N, 084°20'372"E and Alt. ±594 MSL; 19.08.2015, *Kalidass & Murugan* 18045 (RPRC) Gajapati District, Parlakhemundi, Jajpur, 18°47'630"N 084°07'230"E and Alt. ±71 MSL; 21.08.2015, *Kalidass & Murugan* 18067 (RPRC) Ganjam District, Taptapani, 19°29'126"N, 084°23'660"E and Alt. ±439 MSL; 22.08.2015, *Kalidass & Murugan* 18087 (RPRC).

Table 1. Comparison of *Solanum americanum* Mill. var. *odishensis* var. *nov.* and *Solanum americanum* Mill. var. *americanum*

Character state	<i>Solanum americanum</i> Mill. var. <i>odishensis</i> var. <i>nov.</i>	<i>Solanum americanum</i> Mill. var. <i>americanum</i>
Plant height	100 – 130 cm	≤100cm
Stem	Angular, prickly	Terete, non-prickly
Number of flowers	5-8 flowered	4-6 flowered
Ovary	Globose, less than 1mm long	Ovoid, more than 1mm long
Style	Less than 1.5 mm long, densely villous at middle	More than 1.5 mm long, densely glandular at middle

Acknowledgements

The authors are grateful to Shri. Shashi Paul, I.F.S., Chief Executive, Regional Plant Resource Centre, Bhubaneswar for their encouragement and facilities. Thanks are also due to Forest & Environment Department, Government of Odisha, Bhubaneswar for financial support to this project.

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(Manuscript received on 25 January 2016; revised on 12 April 2016)