

Ipomoea tuberculata Ker Gawl. (Convolvulaceae): a new addition to the flora of Banaskantha, North Gujarat

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ABSTRACT

A new species, *Ipomoea tuberculata* Ker Gawl. (Convolvulaceae) from Indian dry deciduous forest Banaskantha district (Gujarat, India) is described and illustrated. *Ipomoea tuberculata* Ker Gawl. collected from virampur village of Amirghadh taluka of Banaskantha district, is reported here as a new addition for the flora of Banaskantha. Detailed taxonomic description along with colored photo plate, distribution map and associates are provided here for its easy identification.

Key words: *Ipomoea tuberculata*, Convolvulaceae, New record, Banaskantha, Gujarat

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INTRODUCTION

Ipomoea L. is one of the dominant genera of Convolvulaceae. It is represented by about 650 species, distributed mostly in the tropical and warm temperate region of the world, especially of North and South America [6]. In India, the genus *Ipomoea* is represented by 60 species and 10 varieties [14]. In Gujarat 25 *Ipomoea* species recorded [7-9, 15].

During floristic survey of Virampur village of Amirghadh taluka of Banaskantha district (Figure: 1) the authors collected unknown specimens of *Ipomoea* species. On critical study of these specimens using relevant taxonomic literatures [15, 1], online e-floras (e flora of india) and illustrations, the specimen was identified as *Ipomoea tuberculata* Ker Gawl. Exploration of other regional floristic literature Patel [10] recorded Seven *Ipomoea* species, Dabgar [2] noted five *Ipomoea* species, Patel [13] listed thirteen *Ipomoea* species, Meena [8] recorded thirteen *Ipomoea* species, Patel [11] noted nine species. Relevant literature proved that the collected species has not been recorded from whole Banaskantha till date. Therefore, *Ipomoea tuberculata* Ker Gawl. reported here additional report of the state of Gujarat. Detailed taxonomic description and photographs of diagnostic characters (Figure: 2) of the species is provided and facilitate its easy field identification.

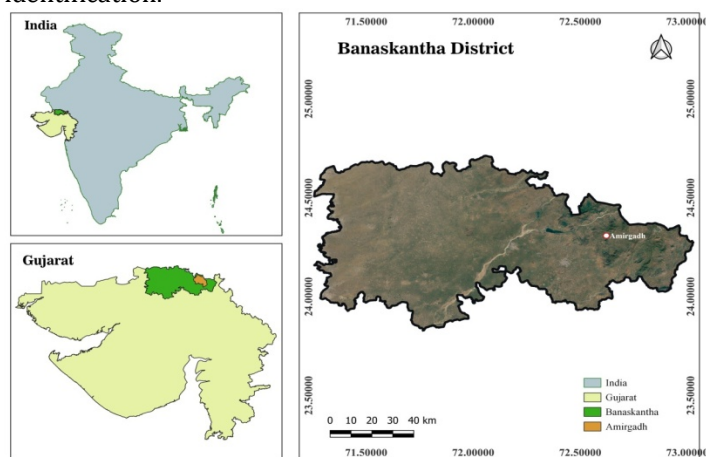


Figure: 1 Distribution map

MATERIAL AND METHODS

Morphological description and ecological information presented here are based on field observations and material collected during fieldwork of the Virampur village Banaskantha in the period of October, 2022. Species identify confirmed by comparison with the pertinent literature [1, 15, 4-6].

RESULTS AND DISCUSSION

Taxonomic accounts

Ipomoea tuberculata Ker Gawl. Fp. in Bot. Reg. 1: t. 86 (1816)

Holotype: India. Gujarat, Banaskantha, Virampur, 2022, 24.2644° N, 72.6726° E.

Annual milky climbers, 3- 5 m long. Stem twinning, smooth, glabrous, tubercled when mature. Leaves palmate partite, 6 - 10 x 8 - 12 cm, 7 - 9 lobed; lobes linear lanceolate, obtuse at apex, glabrous, margin entire. Petioles 3 - 6 cm long, glabrous. Inflorescence axillary, 1 - 3 flowered cymes; peduncle 5 - 10 cm long, glabrous. Flowers, bracteate, pedicellate; pedicels 1.5 - 2 cm long, enlarged in fruit, glabrous; bracts small, linear, caducous, 0.3 x 0.2 cm long, glabrous. Sepals 5, sub-equal, 6 - 1 x 0.5- 0.8 cm, thick, protuberant at centre, outer two sepals smaller, inner three sepals slightly larger than outer sepals, smooth, white at margin, glabrous. Corolla 5-lobed, 3 - 5 cm long, hypocrateriform, yellow with purple throat, tube 2.5 - 3.5 cm long, dark purple inside; lobes 2 - 3 cm long, 5 - 7 cm wide at mouth, glabrous, mid-petaline bands yellow, apiculate. Stamens 5; filaments unequal, 0.6 - 1.2 cm long; attached at 4 mm above the tube, included, hairy at base; anthers 0.3 cm long. Ovary 0.2 x 0.3 cm, ovoid, glabrous, 4-locular; ovule 1 in each locule; style 1.5 cm long, glabrous; stigma 0.2 x 0.1 cm, bilobed, capitate. Fruits 1.3 x 1.2 cm, sub globose, 4-valved, glabrous, brownish. Seeds 0.6 - 0.1 x 0.6 - 0.8 mm, black, pubescent, hairy at margin, hairs up to 0.5 - 1 cm long (Figure: 2).

Flowering and Fruiting time: September-December

Habitat: It occurs in dry region, climbing near roadside bushes.

Locality: Banaskantha, North Gujarat, India.

Latitude: 24.2644° N, **Longitude:** 72.6726° E

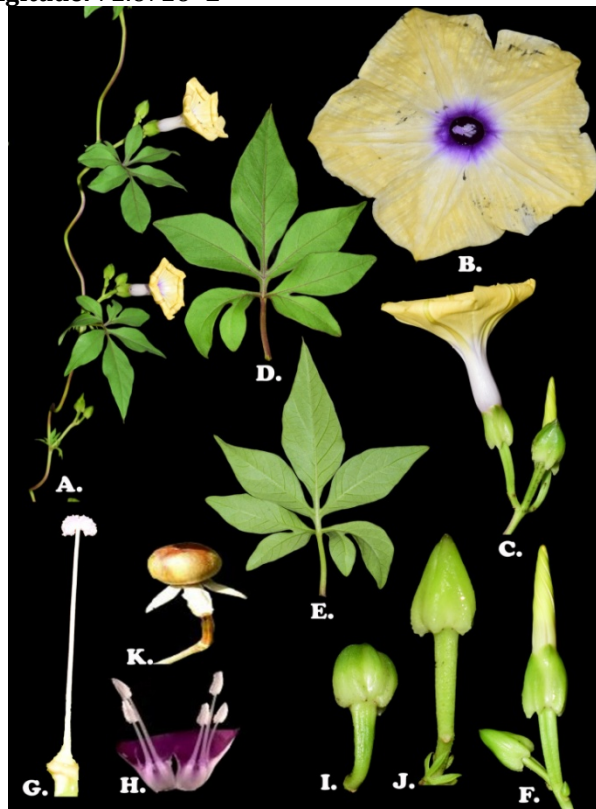


Figure: 2 *Ipomoea tuberculata* Ker Gawl.: A. Twing B. and C. Flower D. and E. Leaves F. to J. Bud G. Gynoecium H. Androecium I. and K. Fruit

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