

Ipomoea parasitica (Kunth) G. Don (Convolvulaceae), a new plant record for Odisha, India

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ABSTRACT

The wild occurrence of an interesting climber *Ipomoea parasitica* (Kunth) G. Don (Convolvulaceae) is reported from Koraput district as a new distributional record for the state of Odisha. A brief botanical description, nomenclature, notes on ecology, flowering and fruiting and illustration of different plant parts are provided in this paper to facilitate easy identification.

Key words: *Ipomoea*, New Record, Koraput, Eastern India

1. INTRODUCTION

The family Convolvulaceae are comprised of 59 genera and about 1900 species, which occur mostly in the tropics and warm temperate parts of the world (Staples & Brummitt, 2007). Of these, *Ipomoea* and *Convolvulus* are two species-rich genera with more than 820 species under them. The genus *Ipomoea*, an exceptionally large and diverse taxon, alone is represented by 650 species, of which half of them are concentrated in Americas and Asian countries (Mabberley, 2017). As many as 65 species are reported to occur in India with greater species concentration in the southern and western India (Undirwade & Bhadane, 2017).

In connection with the floristic study of Koraput District of Odisha under plant biodiversity inventory programme of Eastern Ghats in the year 2018-19, we collected a botanically interesting climber belonging to the genus *Ipomoea* from village Madamgandhi, Koraput district, Odisha. A thorough scrutiny of literature, detailed examination of plant specimens and matching with authentic herbarium specimens including images of specimens in Kew Herbarium Catalogue (<https://apps.kew.org/herbcat/navigator.do>), its identity could be ascertained as *Ipomoea parasitica* (Kunth) G. Don (Convolvulaceae).

Biju (2002) first reported the occurrence of *Ipomoea parasitica* in India from Kerala, Tamil Nadu and Kerala and subsequently Shimpale (2012), from Maharashtra and Pal (2012) from Andhra Pradesh and Chhattisgarh States. Subsequently, the species has been recorded from different parts of Maharashtra state by Undirwade *et al.* (2015) and Undirwade and Bhadane (2017). Therefore, as on today, in India, this species is known to grow in Kerala, Tamil Nadu, Karnataka Maharashtra, Andhra Pradesh and Chhattisgarh states. The present report on occurrence of *Ipomoea parasitica*

from Koraput district of Odisha is very interesting from phytogeographical point of view and extends the distributional range of the species to Eastern India. The nomenclature, detailed botanical description, phenology, ecology, citation of specimens studied and colour photographs are provided below for easy identification of the taxon. The herbarium specimens are available in the Herbarium of Regional Plant Resource Center (RPRC), Bhubaneswar, Odisha.

2. TAXONOMIC TREATMENT

Ipomoea parasitica (Kunth) G. Don, Gen. Syst. 4: 275. 1838; Wood, Carine, Harris, Wilkin, Williams & Scotland, Kew Bull. 70: 31. 2015; Wood, Muñoz-Rodríguez, Williams and Scotland, Phytokeys 143: 496. 2020; Biju, Rheede 12: 76. 2002. *Convolvulus parasiticus* Kunth, Nov. Gen. Sp. Pl. 3: 103. 1819. *Convolvulus circinnatus* Willd. ex Roem. & Schult. Syst. Veg. 4: 302. 1819. *Ipomoea perlonga* B. L. Rob., Proc. Amer. Acad. Arts 29: 319. 1894. (Figure. 1)

Type: Venezuela, near Caracas, Humboldt & Bonpland *s.n.* (Holotype P 00670753!).

Annual vines; stem twining, stout and with scattered soft spiny projections, herbaceous towards tip, glabrous, terete, hollow. Leaves petiolate, simple, 3–10 × 2–9 cm, ovate to deltoid, apically acuminate, mucronate, basally cordate, glabrous and pale below, sparsely pilose above; midrib and lateral veins raised beneath; petioles 3–5 cm, slightly pubescent. Flowers in axillary, few to several (up to 20)- flowered cymes; peduncle about 5 cm, pubescent, terete; bracts small, linear-lanceolate, caducous; pedicels short, stout, pubescent, slightly dilated above, spreading at a wide angle and often reflexed in fruits. Sepals 5, slightly unequal in size; outer 2 elliptic, obtuse and mucronate, pilose outside, glabrous inside, scarious; inner 3 elliptic-oblong to widely ovate, apiculate, glabrous, scarious. Corolla purple or blue, sericeous in bud, throat whitish, funnel-shaped, tube up to 4 cm long, white outside, yellowish inside, deeply 5-lobed. Stamens inserted; anthers long; filaments white, subequal, attached above the corolla base, white ciliolate at base. Ovary conical, glabrous; disc small, annular; style inserted, glabrous; stigma bilobed, globose, papillate. Fruits capsular, broadly ovoid, acute above a small apical corona; pedicels enlarged and recurved in fruit, fruiting sepals slightly enlarged and reflexed. Seeds 4, ovate to elliptic, glabrous to puberulous, brown.

Flowering:

September – December

Fruiting:

November –February

Ecology:

Ipomoea parasitica was found growing in roadsides along forest fringes among bushes and shrubs. The associated species are *Lantana camara*, *Chromolaena odorata*, *Clerodendrum viscosum*, *Nicandra physaloides* and *Jatropha gossypifolia* etc.

Distribution:

It is a New World species native to the American continents and known to occur in Brazil, Bolivia, Venezuela, Costa Rica, Honduras, El Salvador, Guatemala, Mexico and Lesser Antilles. However, it thoroughly naturalized as an escape from cultivation in India and many other countries. *Ipomoea parasitica* has been reported to occur in south, western and eastern India covering the states of Kerala, Tamil Nadu, Karnataka, Maharashtra, Andhra Pradesh and Chhattisgarh. The present report extended its distribution in the state of Odisha in eastern India.

Specimens Examined:

India: Odisha: Koraput district, Madamgandhi village (N 18°35'1.41" and E 82°59'8.44", 126 msl), 14.12.2019, P. K. Das & P. K. Kamila 11081 (RPRC). (Figure 2)

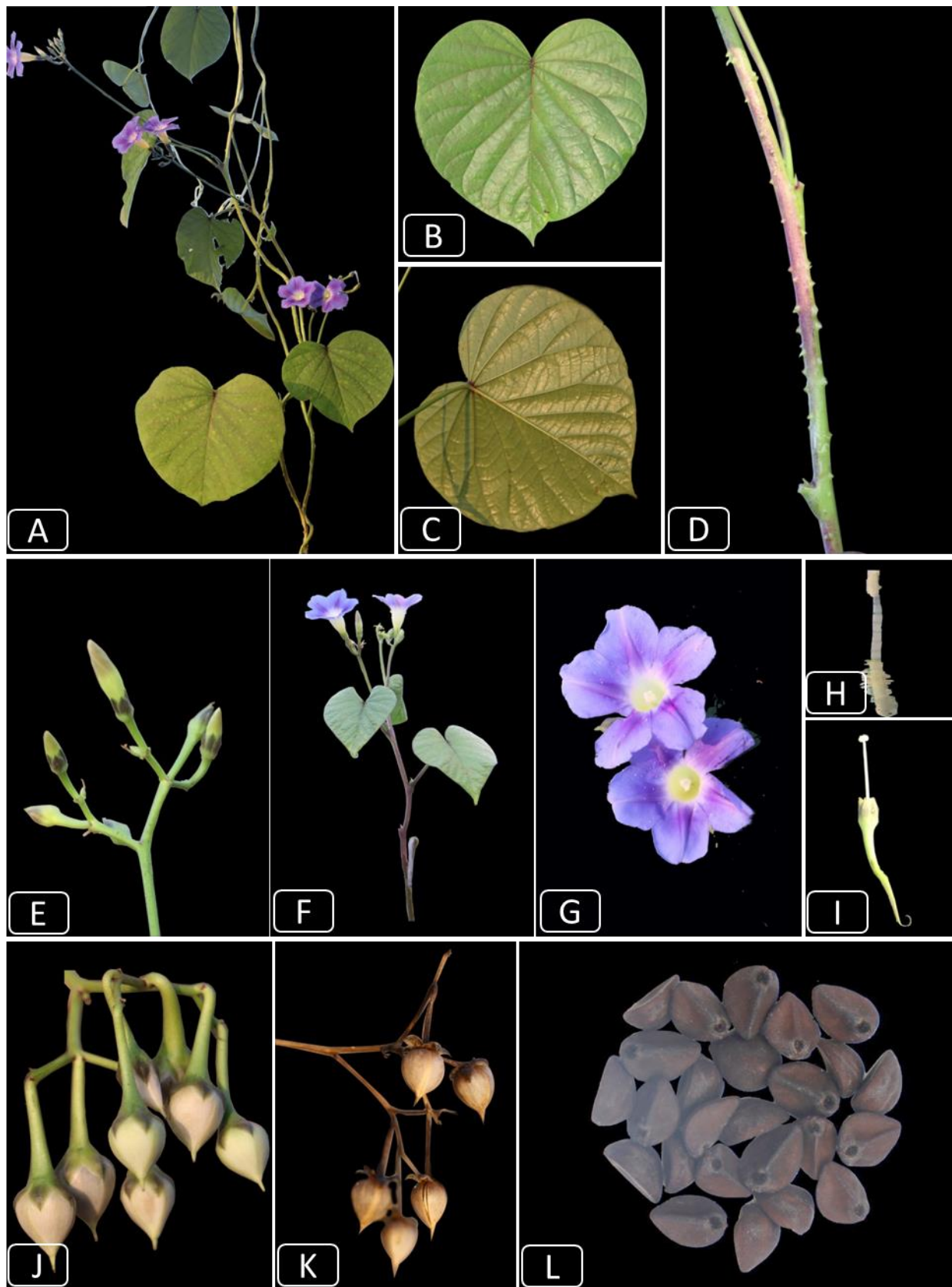


Figure 1: Different vegetative and floral parts of *Ipomoea parasitica* (Kunth) G. Don- A. Habit; B-C. ventral and dorsal side of leaf; D. spiny projections on stem; E. flower buds; F. flowering twig; G. whitish throat of flower; H. stamen; I. pistil; J-K. young and mature fruits; L. seeds



Figure 2: Voucher specimen deposited in the herbarium of Regional Plant Resource Centre (RPRC), Bhubaneswar, Odisha.

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Authors contribution:

All authors have contributed equally to manuscript.

Ethical approval

The ethical guidelines for plants & plant materials are followed in the study for species collection & identification.

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Conflicts of interest:

The authors declare no conflict of interest.

Data and materials availability

All data associated with this study are present in the paper.

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