



## Short Communication

# Census of the genus *Ipomoea* in Jalgaon District, Maharashtra, India

Undirwade D.N.<sup>1\*</sup> and Bhadane V.V.<sup>2</sup>

<sup>1</sup>Department of Botany, B.P. Arts S.M.A. Sci., K.K.C. Com. College, Chalisgaon, India

<sup>2</sup>Department of Botany, Pratap College, Amalner, India  
dckumar82@gmail.com

Available online at: [www.isca.in](http://www.isca.in), [www.isca.me](http://www.isca.me)

Received 11<sup>th</sup> January 2017, revised 5<sup>th</sup> February 2017, accepted 9<sup>th</sup> February 2017

## Abstract

The present paper reports 25 species under genera *Ipomoea* of family Convolvulaceae from Jalgaon district of Maharashtra. *Ipomoea* is the largest genus in the family Convolvulaceae. The family Convolvulaceae consists of 50 genera and more than 1200 species. The genus *Ipomoea* comprising about 600 species from all over the world and about 35 species were reported from Maharashtra<sup>1</sup>. They are generally herbaceous or shrubby climbers and rarely erect. Plants are usually laticiferous and have simple leaves, flowers hypogynous, pentamerous, regular and bisexual. The fruits are mostly loculicidal capsules, rarely fleshy or indehiscent. The family comprises annual and perennial, prostrate, twinning and trailing herbs. Habit, phenology and frequency of occurrence of the taxa investigated along with their updated nomenclature are presented.

**Keywords:** Census, *Ipomoea*, Convolvulaceae, Jalgaon District.

## Introduction

Jalgaon district is a district of Maharashtra, India. It was formerly known as East Khandesh district. It is Located at Latitude-21°05'N, Longitude-75°40'E. Jalgaon District is sharing border with Aurangabad District to the South, Buldhana District to the East, Dhule District to the west and it shares Border with Madhya Pradesh State to the North. Jalgaon District occupies an area of approximately 11765 km<sup>2</sup>. It's in the 352 meters to 188 meters elevation range. This District belongs to Western India.

Politically district is divided into 15 talukas (tehsils). These are Jalgaon, Jamner, Erandol, Dharangaon, Bhusaval, Bodwad, Yawal, Raver, Muktainagar, Amalner, Chopda, Pachora, Chalisgaon and Bhadgaon.

Several visits were made in the district for the floristic survey during whole year. The identification and authentication has been done with the standard literatures; different floras, research papers and reports viz., Flora of Jalgaon District, Maharashtra<sup>1</sup>, the Flora of Maharashtra state<sup>2</sup>, Taxonomic and morphologic studies in family Convolvulaceae of southern peninsular India, Ph.D. thesis<sup>3</sup>, Flora of Marathwada<sup>4</sup>, Flora of the Indian desert<sup>5</sup>. The voucher specimens of the collection have been deposited at the Herbarium, of the Department of Botany B.P. Arts, S.M.A. Sci. & K. K. C. Com. College, Chalisgaon, Dist. Jalgaon, Maharashtra.

A total of 25 species under genera *Ipomoea* of family Convolvulaceae have been collected from various localities of Jalgaon District on the collections made between 2013- 2016.

## Materials and methods

The plant specimens were collected from the different parts of the district like Chalisgaon, Bhadgaon, Pachora, Erandol, Amalner, Chopda, Raver and Jalgaon. The required data pertaining to scientific name, the flowering and fruiting seasons, habits and the localities in the district of the plants also cited in the text. The identification and authentication has been done with the standard literatures; different floras, research papers and reports viz., The Flora of Presidency of Bombay<sup>6</sup>, Flora of Jalgaon District, Maharashtra<sup>2</sup>, the Flora of Maharashtra state<sup>1</sup>, Taxonomic and morphologic studies in family Convolvulaceae of southern peninsular India Ph.D. thesis<sup>3,7</sup>, Flora of Marathwada<sup>4</sup>, Flora of the Indian desert<sup>5</sup>.

## Results and discussion

While exploring the study area a total of 25 species of *Ipomoea* have been collected from various localities of Jalgaon District on the collections made between 2013- 2016.

Authors collected some interesting species belonging to Genus *Ipomoea*. Some of the species collected are very common to the study area ie. *Ipomoea tiloba*, *I. indica*, *I. sepiaria*, *I. carnea*, *I. pestigridis*, *I. palmata*- as hedge plant for its showy flowers. *I. batatas* (sweet potato) cultivated for its starchy tubers. *I. quamoclit* and *I. cairica* are cultivated in gardens for its beautiful red colored flowers. Some species were moderate in its distribution in district like *I. alba*, *I. hederacea*, *I. turpethum*, *I. obscura*. Few taxa reported are rare and observed that are particular to specific area only like *I. capillacea* (formerly *I. muricata*) reported only in Raver- Chopda belt. *I. Parasitica* was collected from Junone, Tahsil-Chalisgaon. Few species

were cultivated only for their aesthetic value ie. *I. tricolor*, *I. horsifallae*. The genus *Ipomoea* got fair attention in anatomical characters<sup>8</sup> as well the morphology character<sup>2,9,10</sup> and the available data is meager and yet it needs further investigation in aspects that have received comparatively little attention so author tried to explore the genus in study area. It is therefore, thought worthwhile to undertake comprehensive morphological study on genus *Ipomoea* of family Convolvulaceae.

## Conclusion

The significant findings are summarized and important conclusions are drawn from the study of genera *Ipomoea* and species belonging to it in the family convolvulaceae. Out of collected species few are very common; few are moderate in

their distribution while some are very rare to the region. *Ipomoea batatas* the only species is cultivated for its food value.

While dealing with the genus author come to conclusion that in the collected species about 7 species are cultivated for their aesthetic and ornamental value and rest of found wild in their distribution in District.

## Acknowledgement

Authors are grateful to Principal to Dr. P.S. Baviskar, Head Department of Botany for their valuable support during this work. Authors are very grateful to Mr. Vishwanath U. Pawar for helping us to locate the species in rural areas in district.

**Table-1:** List of the species of Genus –*Ipomoea* reported from study area.

Scientific Name	Wild/ Cultivated	Habit	Flowering period	frequency
<i>Ipomoea alba</i> , L.	Wild	Twinning or Prostrate herb	Sep- Nov.	Occasional near to water sources
<i>Ipomoea aquatica</i> , Forsk.	Wild	Twinning or Prostrate herb	Most period of Year	Occasional on margins of ponds, ditches
<i>Ipomoea batatas</i> , Lamk.	Cultivated	Creeping or twining herb	Aug. – Oct.	Cultivated for food
<i>Ipomoea biflora</i> , L.	Wild	Trailing, Hirsute herb	Aug. – Dec.	Common in open forest, along road sides
<i>Ipomoea carnea</i> , Jacq. Sp. <i>Fistulosa</i> , (Choisy) D. Austin.	Wild	Straggling or scandant shrub	throughout the year	Common in muds, lakes, ditches
<i>Ipomoea cairica</i> , (L) Sweet.	Cultivated	Twinning herb	throughout the year	Cultivated as ornamental
<i>Ipomoea cairica</i> , (L) Sweet. (extra petals)	Wild	Twinning herb	throughout the year	Wild and rare
<i>Ipomoea capillacea</i> (Kunth)G. Don.	Wild	Twinning herb	Aug- Nov.	Occasional in open forest
<i>Ipomoea dissecta</i> , Jacq.	Wild/ Cultivated	Twinning herb	Aug. – Dec.	Found on hedges, along road, on waste places.
<i>Ipomoea eriocarpa</i> , R. Brown	Wild	Hispid twinning herb	Sept. – Dec.	found in open forest
<i>Ipomoea hederacea</i> , Jacq.	Wild	Twinning herb	Aug. – Dec.	Common in hedges
<i>Ipomoea hederifolia</i> , L.	Wild	Glabrous twinning herb	Sept. – Dec.	Occasional along road sides, stream.
<i>Ipomoea horsfalliae</i> Hook.	Cultivated	Twinning herb	More or less throughout year	Cultivated as ornamental
<i>Ipomoea indica</i> , (BurmJ.)Merr.	Wild	Twinning herb	Aug- Jan.	Common in hedges, along road sides
<i>Ipomoea obscura</i> , (L.) Ker-Gawler	Wild	Twinning herb	Aug. – Dec.	Common in hedges, along road sides
<i>Ipomoea ochracea</i> , (Lindl.) G. Don.	Wild	Twinning herb	Aug. – Dec.	Common in hedges along road sides
<i>Ipomoea parasitica</i> , (Kunth) G. Don.	Wild	Twinning herb	Sep.- Nov.	Rare in district

Scientific Name	Wild/ Cultivated	Habit	Flowering period	frequency
<i>Ipomoea pestigritis</i> , L.	Wild	Twinning or trailing herb	Aug. – Dec.	On hedges, among Crops, grasses.
<i>Ipomoea purpuria</i> , (L.) Roth.	Cultivated	Twinning herb	Aug- Dec.	Cultivated as ornamental
<i>Ipomoea quamoclit</i> , L.	Wild/ Cultivated	Twinning herb	Aug. – Oct.	Planted in houses for ornamentation.
<i>Ipomoea quinquefolia</i> , L.	Wild	Glabrous twinning herb	Sep- Dec.	Naturally occurs along rail- lines
<i>Ipomoea sepiaria</i> , Koen. Ex. Rox.	Wild	Twinning herb	Aug. – Dec.	Occasional on hedges or among bushes
<i>Ipomoea triloba</i> , L.	Wild	Twinning herb	Aug. – Nov.	Common along the roads, on hedges
<i>Ipomoea turpethum</i> , L.	Wild	Twinning herb	Feb. – Apr.	Rare, found along road sides.
<i>Ipomoea tricolor</i> Cav.	Cultivated	Twinning herb	Aug- Dec.	Cultivated as ornamental

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