



RESEARCH ARTICLE

Begonia crenata Dryand. does not occur in Gujarat

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Abstract

To date, two species of the genus *Begonia* L. have been recorded in Gujarat, namely *B. crenata* Dryand. and *B. picta* Sm. Through a comprehensive analysis of literature, field surveys, and examination of specimens housed in relevant herbaria, it has been determined that the previous report of *B. crenata* in Gujarat was incorrect. *B. crenata* is exclusively found in the Western Ghats. Therefore, *B. picta* is the sole species that occur in the state of Gujarat.

Keywords: *Begonia*, Endemic, Gujarat, Mistaken identity.

Introduction

The genus *Begonia* L. is recognized as the sixth largest genus (Frodin, 2004) among flowering plants, encompassing a total of 2044 accepted species (Hughes *et al.* 2015, POWO 2003). These species are further categorized into 70 sections according to the classification proposed by Moonlight *et al.* (2018). A total of 94 species have been evaluated and included in the IUCN Red List. Among these species, one is classified as Extinct, nine are categorized as Critically Endangered, thirty are considered Endangered, thirty-eight are classified as Vulnerable, six are categorized as Near Threatened, seven are classified as Least Concern, and three are labelled as Data Deficient (Rao *et al.* 2003, IUCN 2023). The species under consideration are extensively dispersed across the tropical and subtropical regions of the globe. In Africa, there are approximately 150 species, while Central and South America boast over 600 species. Similarly, Asia is home to more than 600 species as well, as documented by Gu *et al.* in 2007. In the Indian region, the genus *Begonia*

comprises a total of 56 species, as documented by Uddin (2007), Camfield and Hughes (2018), and Odyuo *et al.* (2018). Among these species, seven are exclusively represented by the type collections housed at the Kew and Central National Herbarium, as reported by Uddin (2007).

In Gujarat, *B. crenata* Dryand. was reported from the Dangas by Tadvī (2013), but without any locality or details. Prior to that, it was reported from central Gujarat by Desai (2002), based on the following description “10-15 cm tall herb with slender glabrous stem” without any voucher specimen. Pradeepkumar (1993) reported the species with brief description and a photograph, collected from Ninai waterfalls in Shoolpaneshwar wildlife sanctuary in Narmada district. The species was mentioned in the Flora of Gujarat by Shah (1978) on the authority of Karetala. Karetala (1973) had reported the species *B. crenata*. for the first time in Gujarat with a brief description and precise locality.

In the course of our investigation of the wild populations of *Begonia* species in Gujarat, we had chanced upon a novel observation of *Begonia* species for Gujarat state, specifically *B. picta* Sm. (Vanzara *et al.* 2016), which is extensively dispersed in other states and neighbouring countries as well. Moreover, the specimen was obtained from the precise geographic location (Ninai waterfall) referenced by Pradeepkumar (1993). However, authors could trace the specimens of Pradeepkumar and Karetala housed at Prof. G. L. Shah Herbarium of Sardar Patel University, Gujarat (*Gpk 1545*, *Gpk 1546* and *Mo1734*) and critical examination revealed it to be *B. picta* (Figures 1 and 2).

Flowering and Fruiting

September – October

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How to cite this article: Rana, K., Nagar, P. 2024. *Begonia crenata* Dryand. does not occur in Gujarat. J. Indian bot. Soc., Doi: [10.61289/jibs2024.08.25.1206](https://doi.org/10.61289/jibs2024.08.25.1206)

Source of support: Nil

Conflict of interest: None.



Figure 1: *Begonia picta* Sm. collected from Gujarat

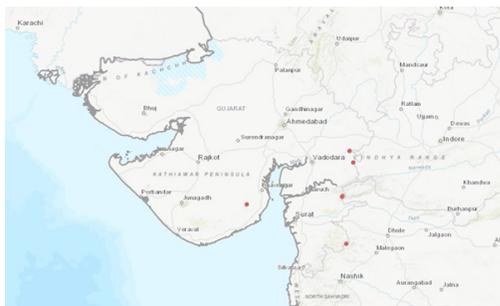


Figure 2: Distribution Map of *Begonia picta* Sm. in Gujarat

Habitat

The species thrives in habitats characterized by lateritic rocks and a surrounding environment of moist deciduous forest. The subterranean stem modifications of the aforementioned species are found lodged within fissures and depressions of laterite formations.

Acknowledgement

The authors are thankful to Prof. A. S. Reddy, Department of Biosciences, Sardar Patel University, Gujarat for his insightful comments and assistance with specimen collection and literature.

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