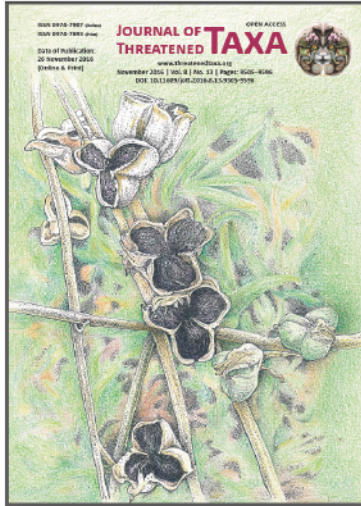


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### NOTE

**EXTENDED DISTRIBUTION OF *DIPCADI CONCANENSE* (DALZELL) BAKER - A HIGHLY THREATENED PLANT TAXON OF THE FAMILY ASPARAGACEAE**

Anup S. Deshpande, Amit Mirgal, S. Krishnan, Satish Narkhede & Malapati K. Janarthanam

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The genus *Dipcadi* Medik. (Asparagaceae) is distributed from Africa, and the Mediterranean region to India (Mabberley 1997) and comprises 41 species worldwide (The Plant List 2013). Manning et al. (2004) considered it under *Ornithogalum* L., but in his revised classification (Manning et al. 2009), treated it as a distinct genus, which was supported by Martínez-Azorín et al. (2011). In India it is represented by 11 species (Rao et al. 2016).

*Dipcadi concanense* (Dalzell) Baker, one of the long flowered species, is endemic to the Konkan region in Sindhudurg and Ratnagiri districts of Maharashtra State (Deb & Dasgupta 1981; Karthikeyan et al. 1989; Lakshminarasimhan, 1996; Deshpande et al. 2015a,b; Patil 2015). This was considered as “possibly extinct in the wild” and was known from only two gatherings by Stocks & Law (Dasgupta & Deb 1987) until Mistry & Almeida (1988) recollected the species from Shivaji Nagar in Ratnagiri, Maharashtra after a gap of 123 years. Mishra & Singh (2001) assessed it as critically endangered.

In the present study, it is reported from the Mopa Plateau, Goa, thus extending its distribution further south. A total of 10 patches have been observed, which are part of the larger population. The area of occupancy of each patch was calculated using Garmin Montana 650 handheld receiver. The total area of occupancy was calculated by adding the areas of all the sub-populations. The extent of occupancy (EOO) of all the populations has been calculated.

## EXTENDED DISTRIBUTION OF *DIPCADI CONCANENSE* (DALZELL) BAKER - A HIGHLY THREATENED PLANT TAXON OF THE FAMILY ASPARAGACEAE

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Satish Narkhede<sup>4</sup> & Malapiti K. Janarthanam<sup>5</sup>

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### *Dipcadi concanense* (Dalzell) Baker.

in J. Linn. Soc. 11: 399. 1871; Hook. f., Fl. Brit. India 6: 346. 1892; Cooke, Fl. Bombay 2: 769. 1907; Deb & Dasgupta in J. Bombay Nat. Hist. Soc. 75: 69. 1978 & Fasc. Fl. India 7: 3, f. 1-2. 1981; Kulkarni, Fl. Sindhudurg 452. 1988; Lakshminarasimhan in Singh et al. Fl. Maharashtra 3: 130. 1996. *Uropetalon concanense* Dalzell in Hooker Kew J. Bot. 2: 143. 1850 as *Uropetalum concanense*.

Habitat: The species is found growing on an open plateau of Mopa. It is about 53km (aerial distance) away from the earlier recorded southernmost locality near Malvan, Maharashtra. It grows along streams and near ditches, also sparsely distributed on the plateau. A total of 10 patches were identified (Table 1, Image 1, Fig. 1) in the new locality. About 8,000 individuals have been estimated from these patches. The total area of occupancy is about 14,400sq.m. The extent of occurrence including all the populations including Maharashtra was

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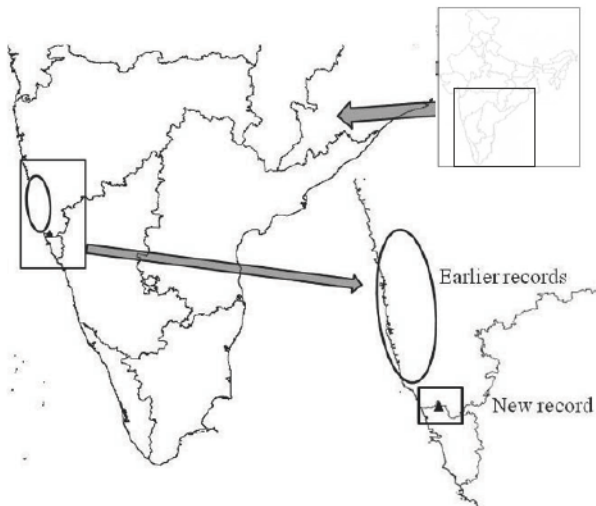


Figure 1. Distribution of *Dipcadi concanense* (Dalzell) Baker.

Table 1. Distribution of *Dipcadi concanense* at Mopa Plateau, Goa

Patch	GPS Co-ordinates	Area (m <sup>2</sup> )
1	15°43'57.0"N & 073°51'49.8"E	1257.4
2	15°43' 59.2"N & 073°51' 53.3"E	66.15
3	15°43'59.5"N & 073°51'59.3"E	1387.2
4	15°44'02.1"N & 073°52'09.3"E	7048.9
5	15°44'04.4"N & 073°52'13.6"E	445.32
6	15°44'19.7"N & 073°52'23.7"E	760.54
7	15°44'29.4"N & 073°52'40.5"E	248.47
8	15°44'22.1"N & 073°52'02.8"E	2731.80
9	15°44'24.9"N & 073°52'01.2"E	195.71
10	15°44'28.4"N & 073°51'59.8"E	260.15
Total area of occupancy		14401.64

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Image 1. *Dipcadi concanense* (Dalzell) Baker. a & b - habitat at Mopa plateau; c - populations at Mopa; d - *D. concanense* flowers

observed to be 6,732km<sup>2</sup> approximately. This plateau has been marked for the construction of a new airport (Anonymous 2014).

Distribution: Earlier records—Ratnagiri and

Sindhudurg districts, Maharashtra State. New record—Mopa Plateau, Pernem Taluka, Goa State.

Note: The average length of scape and perianth are lesser than the individuals found in other localities from

Maharashtra, though it is within the recorded range.

**Conclusion:** The new locality extends the distribution of species further south considering the earlier records. Though, about 8,000 individuals have been estimated from the new locality, the population is under threat as the habitat is a proposed site for a new airport.

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