

Original Research Article

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## *Gnaphalium pulvinatum* Delile (Asteraceae): A new record for the flora of Kachchh district, Gujarat, India

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### Article Info

### Abstract

#### Keywords:

Bhuj  
*Gnaphalium pulvinatum*  
Gujarat  
Kachchh  
Kundh

*Gnaphalium pulvinatum* Delile (Asteraceae) has been reported first time as a new record to the flora of Kachchh district from 'Kundh' pond of Ratiya forest of Bhuj taluka. A description, distribution and detail photographs of the species are provided to easy identification.

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### Introduction

Asteraceae family is one of the largest plant families of angiosperms with over 25,000 species and 1600 genera distributed throughout the world. In India, the family is represented by 1052 species under 161 genera (Kanchan Lata, 2017). The genus *Gnaphalium* L. an herb distributed worldwide comprises approximately 200 species of the Asteraceae family that belongs to the tribe Gnaphalieae (Zheng, et al., 2013). Total 14 species were reported in Indian Himalayan region (Singh at al., 2019). For Gujarat state, 4 species are reported by different authors (Shah, 1978; Kumar 2011; Solanki 2015; Shah at al., 2015; Parmar 2012; Patel at al., 2021).

During the floristic explorations in January 2021, the author collected a specimen of the family Asteraceae from forest area of Ratiya village, of Bhuj taluka in Kachchh district (Fig. 1). After preliminary laboratory studies it has been identified as a species of *Gnaphalium*. The identity of the specimen was further confirmed by referring to the published flora (Bhandari, 1990). This confirmed that the species as *Gnaphalium pulvinatum*. This species has not been reported in earlier literatures of kachchh flora (Blatter, 1908; Shah, 1978; Pandey et al., 2009; Patel et al., 2011). Therefore, *Gnaphalium pulvinatum* Delile is a new addition to the flora of Kachchh and also additional distribution record to the flora of Gujarat. The voucher specimens were deposited at Government Science College, Mandvi-Kachchh, Gujarat, India.

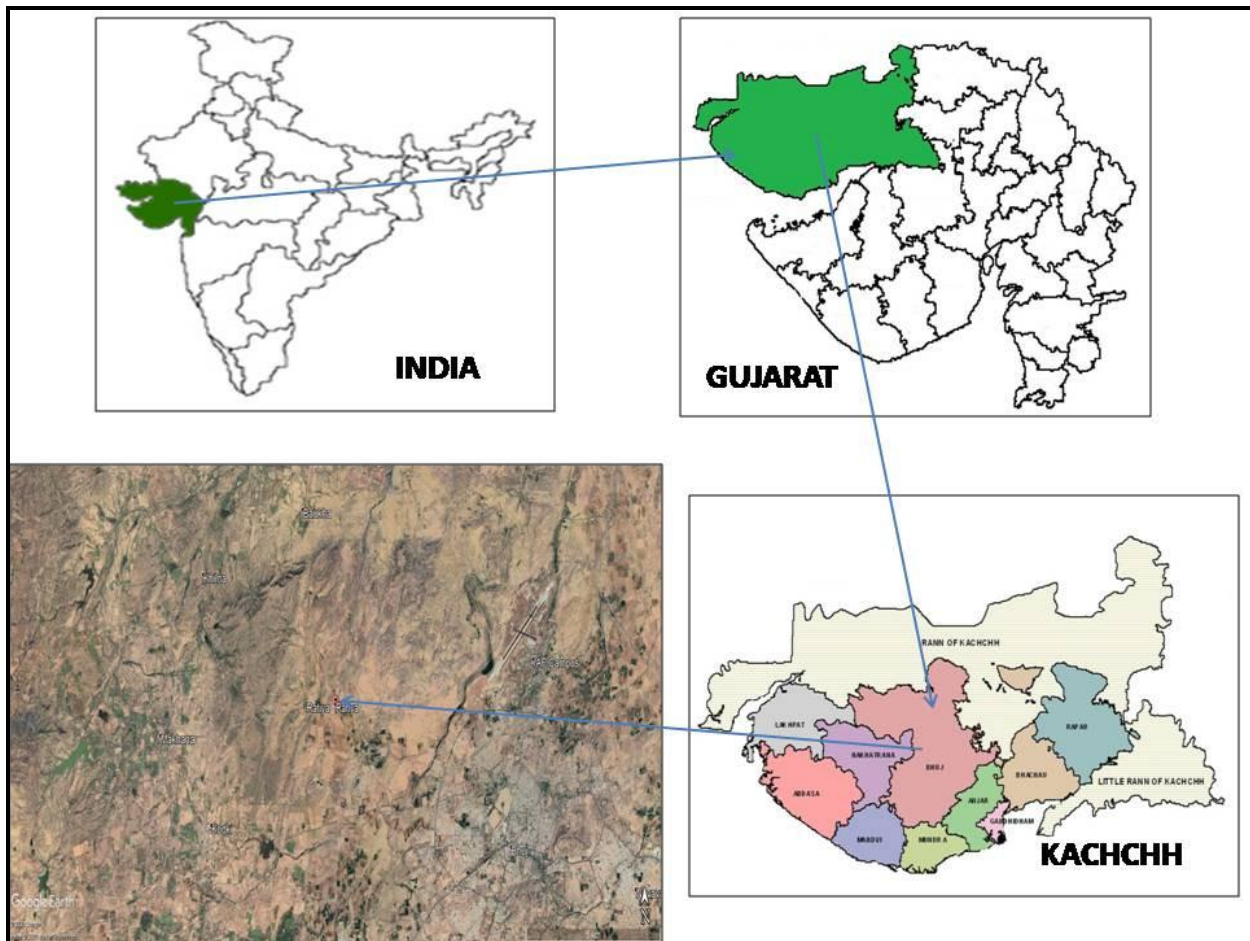


Fig. 1: Location map of *Gnaphalium pulvinatum* Delile in Bhuj, Kachchh district, Gujarat, India.

### Taxonomic description

*Gnaphalium pulvinatum* Delile, Bhandari, Fl. Ind. Des. 180.1990, Blatter. FK, 776. 1908, Hook. F. FBI. 3: 289.1881 Cook. FPB. 2:31.1904, Shah.FGS.1:383.1978.

Small, prostrate, wooly, annual herb, numerous, branched, spreading, 5 cm -16 cm long; leaves 0.3-1.5cm×0.2-0.5 cm, spatulate, more or less obovate, sessile or sometimes attached at a based with short petiole, hairy, heads 0.4 cm-0.8 cm, terminal, immersed with wool, in leafy clusters, pale to brown colour, achiness minutes, oblong, papillose.

### Flowering and fruiting

January-March.

### Specimen examined

India, Gujarat, Kachchh, Bhuj, Ratiya, Kundh pond,

23017'31.4"N 69036'33.9"E, KKJ005, Dt. 26/01/2021; KKJ006 Dt. 07/02/2021, KKJ007 Dt.11/03/2021 (Fig. 2).

### Distribution

**World:** Egypt, India, Myanmar, Pakistan, Saudi Arabia, Sinai, Sudan, China, etc.

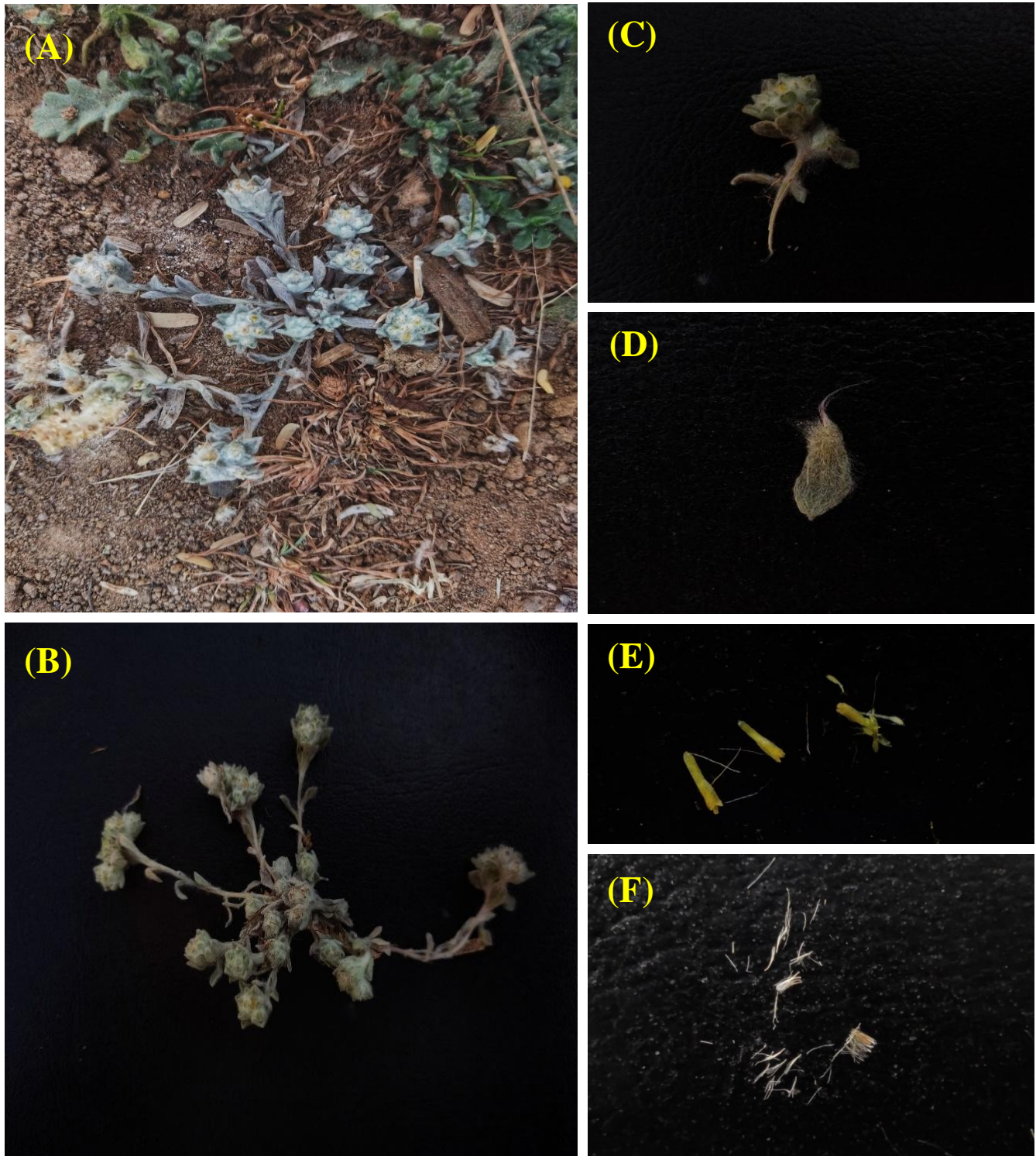
**India:** Uttar Pradesh, Andhra Pradesh, Gujarat, Bihar, Himalayan Region, Maharashtra, Rajasthan, Kerala, Assam, Karnataka etc. Gujarat: Vadodara, Sabarkantha, Bharuch, Ahmadabad, Gandhinagar, Tapi, etc.

### Filed notes

It is growing on wet soils around the margin of pond during winter season. It is strongly associated with *Gnaphalium polycaulon* Pers. and *Grangea maderaspatana* (L.) Poir. Also associated with *Coldenia procumbens* L., *Heliotropium ovalifolium* Forsk.;

*Polygonum plebeium* R. Br. var. *indica* (Heyne exRoth) Hook.; *Alternanthera sessilis* (L.) DC.; grasses and sedges (several species of *Cyperus*, *Fimbristylis* and *Scirpus* genera); while *Typha angustifolia* L. and

*Cyperus* sp. growing on the margin of the pond. The population of this *Gnaphalium* L. species is about 35-40 individuals of this species were found from the current locality.



**Fig. 2:** *Gnaphalium pulvinatum* Delile. (A) and (B) Plant habit and association; (C) Separate wholl; (D) Leaf; (E) Separate florets; (F) Echinuss.

## Conservation recommendation

During the field, it was observed by authors that this species has only expanded to an area of 8×8 meter of the present area at the edges of the pond therefore conservation of this species is essential. Many threats in this area were found to water pollution, spread of *Prosopis juliflora* (Sw) DC., excessive grazing pressure, habitat fragmentation; any other these all factors may reduce the number of the species in their natural habitat in the future. So, if there is to be an increase in the distribution and conservation of the species, there is an urgent need to control all these harmful activities.

## Conflict of interest statement

Authors declare that they have no conflict of interest.

## Acknowledgement

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