

# *Calligonum comosum* L'Her. - a new record for India from Indian Desert

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## Abstract

*Calligonum comosum* L'Her. – a member of family Polygonaceae, is reported here for the first time from India on the basis of a recent collection from Indian desert (Rajasthan). A brief taxonomic description along with photo illustration is given for its easier identification.

## Keywords

*Calligonum comosum*, Polygonaceae, new record, India.

## Introduction

Thar desert of western India is most densely populated hot desert in the world, which spread over nearly 12% of the land, mostly located in the state of Rajasthan with forest coverage of c. 2 million km<sup>2</sup> consists of diverse and distinctive plants. Khan *et al.* (2003) listed 682 plant species including 107 grasses. Amongst them 44 plant species are considered to be rare and threatened (Kumar & Purohit, 2015). Majority of the species found here are xerophytic in nature. The region harbors a less known genus *Calligonum* L., which is represented by only one species, *C. polygonoides* L. in India and c. 158 species in the world (The Plant List, 2016).

During field exploration tour to Indian desert, Rajasthan in March 2016, an interesting specimen of *Calligonum* were collected. Careful study of the collected specimens and scrutiny of literature reveal its identity as *Calligonum comosum* L'Her. – an undescribed species in Indian flora, the same is reported here for the first time and the taxonomic description and other relevant details are provided.

## Description

*Calligonum comosum* L'Her., Trans. Linn. Soc. London. 1:80. 1791; R.R. Stewart, Ann. Cat. Vasc. Pl. W. Pak. Kashm. 201. 1972. *Calligonum polygonoides* subsp. *comosus* (L'Hér.) Soskov, Novosti Sist. Vyssh. Rast. 12:

153. 1975. (Figure 1&2).

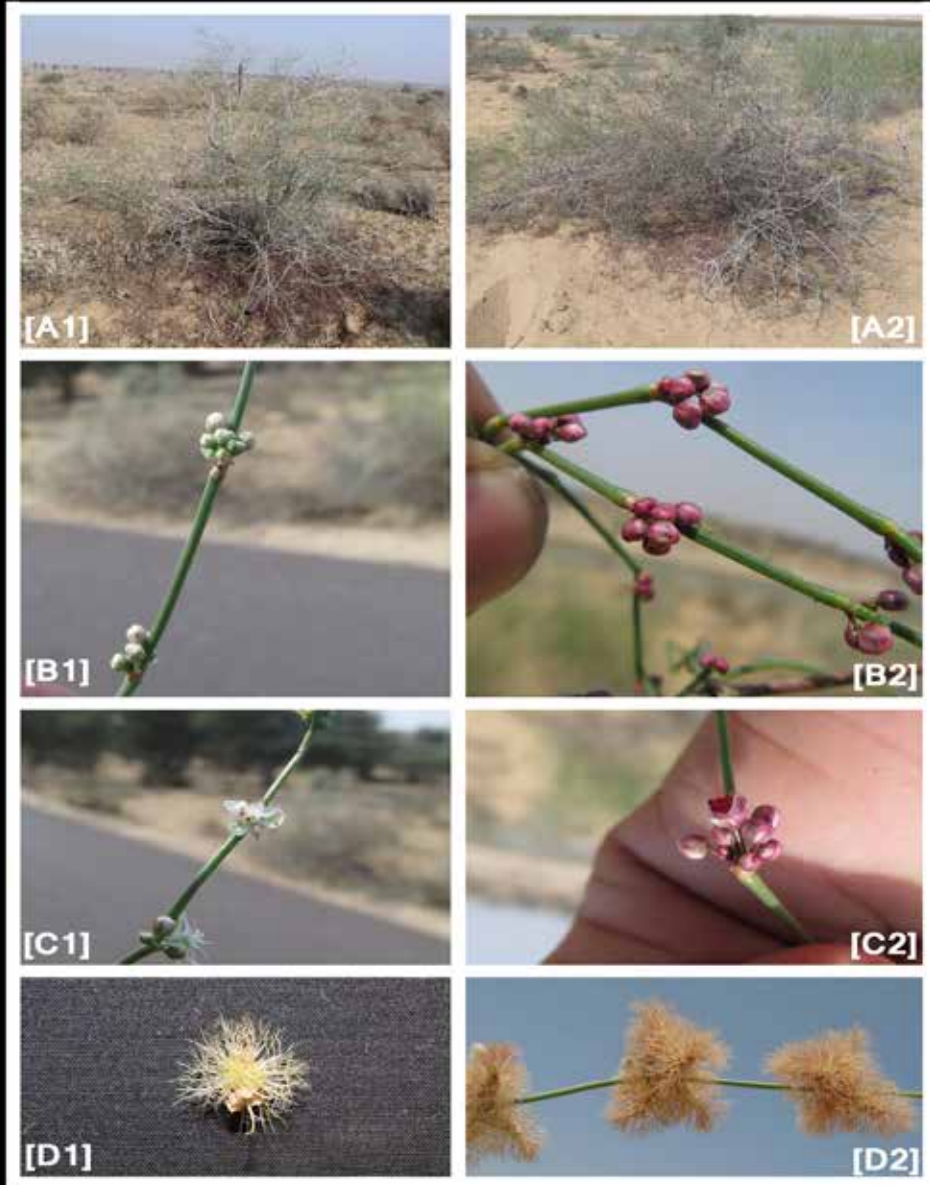
Large perennial, evergreen bushy shrub, up to 3 m tall stem with rigid lignified white branches; branches woody, hard, glaucous, white to greyish-white, with swollen nodes and long internodes. Leaves subulate, small, 1 – 5 mm long. Inflorescence in long clusters; pedicel as long as or shorter than the perianth; flowers small, silvery-white, sweet smelling; perianth segments 5, 3 – 4 × 2 – 3 mm. Fruit 12 – 13 mm across. Nut fusiform, somewhat twisted, 7 – 8 × 3 mm, 4-ribbed, ribs setose, setae seriate, 3 – 5 times branched, dilated and more or less connate at the base, soft or little fragile.

*Phenology: Fl. & Fr.:* February – April.

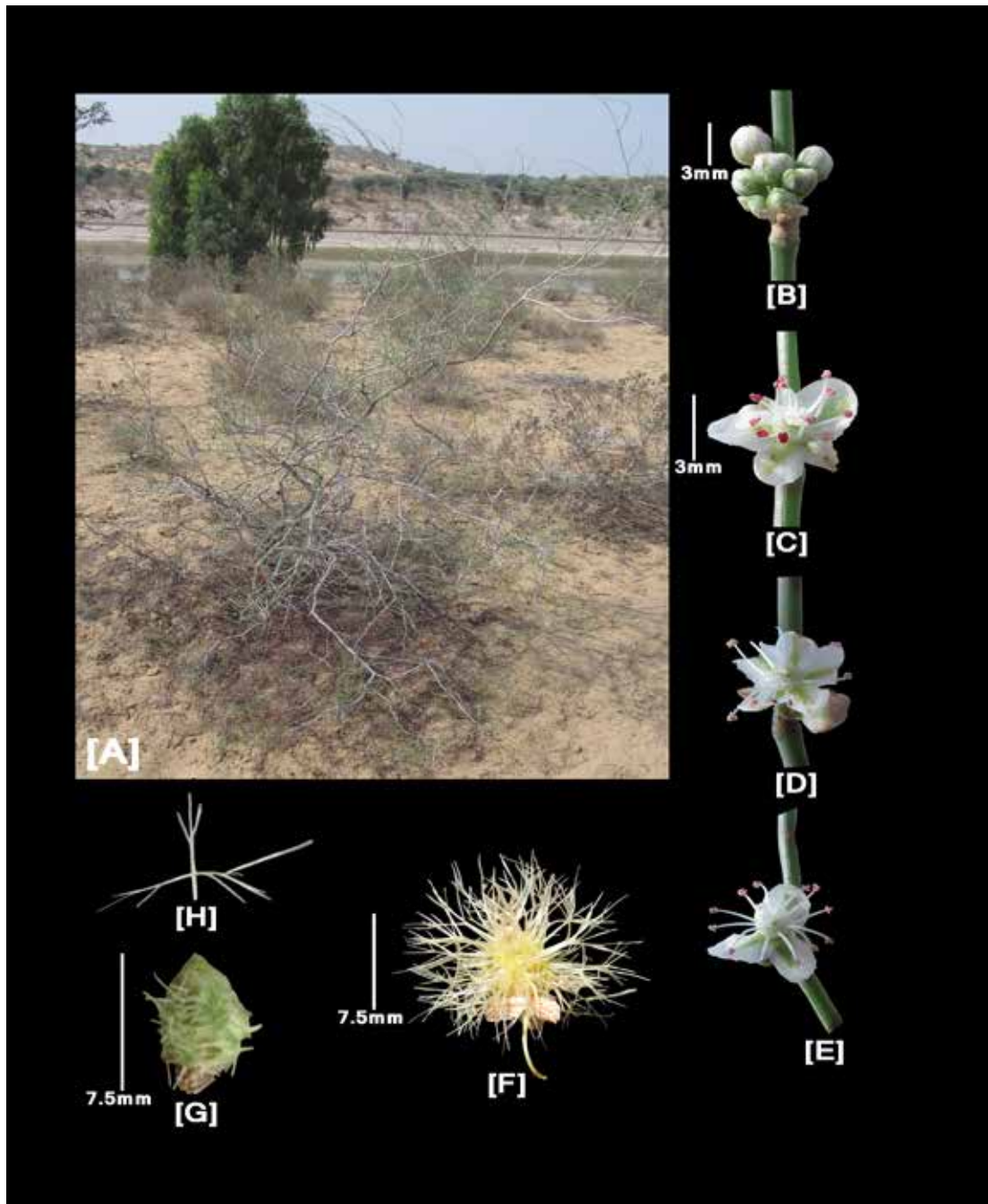
*Distribution:* India (Rajasthan, Bikaner, Sattasar & Chattargarh –present study), Pakistan, other part of Western Asia and Africa.

*Specimen examined:* India: Rajasthan, Bikaner district, Sattasar, 02.03.2016, Kumar & Purohit 31773 (BSJO). Rare in the study area.

*Notes:* *Calligonum comosum* is sometimes treated as a subspecies of *C. polygonoides* L., however, it is clearly distinct from the latter in having smaller leaves, white



**Fig. 1.** *Calligonum comosum* **A1.** Natural occurrence of plant; **B1.** Buds with shorter pedicel; **C1.** Flower with shorter pedicel, **D1.**- Fruit; *Calligonum polygonoides* **A2.** Natural occurrence of plants; **B2.** Buds with longer pedicel; **C2.** Flower with longer pedicel; **D2.** Fruit.



**Fig. 2.** *Calligonum comosum* **A.** Natural occurrence of Plant; **B.** budding with shorter pedicel; **C-E.** Flowers; **F.** Fruit with setae; **G.** Fruit after removing setae; **H.** Setae.

flowers, larger nuts and pedicel mostly shorter or sometimes equaling the perianth lobes (Figure 1).

### References

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