

**Universal Impact Factor**

2012:0.9285;

2013:1.2210

**Index Copernicus Value**

2011:5.09, 2012:6.42,

2013:15.8, 2014:89.16,

2015:78.30, 2016:91

**NAAS Rating**

2012:1.3; 2013-16: 2.69

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2012: 3.947, 2013:4.802

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## A NEW SPECIES OF *GERANIUM* L.(GERANIACEAE)FROM MOUNT ABU, RAJASTHAN, INDIA

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**ABSTRACT:**

A field excursion in the Aravalli hill region of Mount Abu, Rajasthan has revealed the occurrence of an interesting species of *Geranium* L. which after detailed study has been recorded as a new species for Mount Abu, Rajasthan, India. A detailed description, photograph and illustration is provided to facilitate its identification.

**KEY WORDS:** *Geranium abuensis* (sp. nov.), Mt. Abu, Rajasthan, India.

**INTRODUCTION:**

The genus *Geranium* L., is distributed throughout the world, found chiefly in the cold temperate regions in the northern Hemisphere, as also in some Tropical and Sub-Tropical Regions. Carlos Aedo, Felix Munoz Garmendia & Francisco Pando in *Anales Jardin Botanico De Madrid*, 56(2) 1998, suggest that there are 423 species of *Geranium* in the world. In India and the Indian Sub-continent, 43 species have been found (Aedo et al, 1998). However, Flora of British India confirms 18 species of *Geranium* restricted to the Northern region of the country. However, the newly described species is found in small patches on the way to Mount Abu, Rajasthan (Sub-Tropical Region).

## **MATERIAL AND METHODS:**

During the Botanical study tours to Mount Abu, the plant specimens were carefully collected, pressed and poisoned and mounted specimens were deposited in Blatter Herbarium, St. Xavier's College, Mumbai. Morphological characters of stem, leaves, flowers and fruits were studied. The collected species was identified with the help of regional floras, research papers and the study specimen was deposited in the herbarium.

## **RESULT AND DISCUSSION:**

### **Taxonomy/ Description:**

*Geranium abuensis* Lancelot D'Cruz and Santosh Yadav(sp. nov.). (Fig.1)

**Etymology:** *Geranium* refers to Greek 'geranion' for the plant stork's-bill, from Greek *geranos* 'a crane', referring to the mericarp and species epithet '*abuensis*' is named after the distribution of the species from Mount Abu located in Rajasthan, India, where it is recorded for the first time.

Annual herbs, 20-30 cm. high, erect or decumbent, tufted to small clump-forming, rooting at nodes. Leaves simple, palmately divided, scarcely pubescent, lamina reniform to orbicular or broadly ovate, 1-3 cmx 1.5-5 cm, deeply 4-5 lobed, thus causing 5-6 segments. Each segment is two deeply lobed, thus causing three sub-segments, each toothed; petioles 3-15 cm long, hairy- small hairs covers petiole throughout, long hairs, slender, covers  $\frac{3}{4}$  part of the petiole, 20-30 petioles culminate at the base, just above the ground. Inflorescence from the base, cymose, bracteate. Flowers usually paired or occasionally solitary, actinomorphic. Sepals 5, 2-4 mm in size, imbricate, apex obtuse to caudate. Petals 5, distinct, 2-3 mm, white, sometimes clawed, apex rounded, retuse, or emarginate. Stamens 10, in 2 whorls, outer ones opposite to petals, inner ones alternating with petals. Ovary 5-locular, with 2 superposed ovules per locule; style distinctly 5-cleft. Fruit a schizocarp, long beaked, splitting into 5, 1-seeded mericarps, dark brown to black coloured, pointed at tips, elastically coiling upwards from the base to the apex of the axis.

**Locality:** Usrot and along small pits along the road near the hill at Mount Abu, Rajasthan.

**Flowers & Fruits:** August-November.

**Habitat & Ecology:** Found in Semi-evergreen forests at altitude of 1000m, in small pit along the road.

**Note:** The described species is different from other *Geranium* species described so far in having the flowers in pairs arising right from the base of the plant.

**Holotype:** As there is already a collection of the same plant from the same locality by E. Blatter and deposited in Blatter's Herbarium, we designate Blatter's collection number 18656, Accession number: 08034, collected by E. Blatter, from Usrot, Mount Abu, on 26<sup>th</sup> October 1916 as Holotype.

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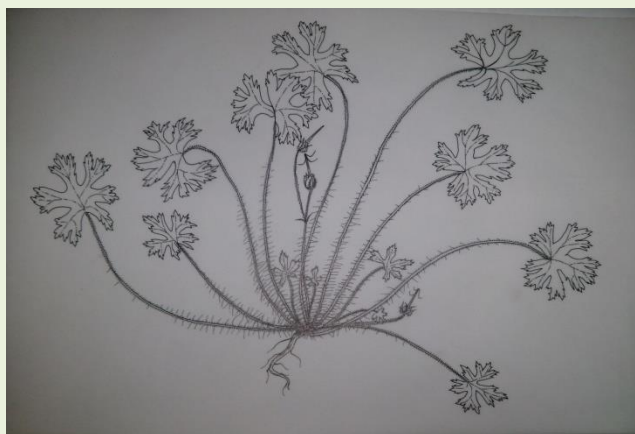


Fig. 1. *Geranium abuensis* (sp. nov.)



Photo A. Plant with habitat



Photo B. Whole Plant



Photo C. Flowers



Photo D. Fruits