Stapelia gigantea N.E. Br. (Asclepiadaceae) - A New Angiospermic Record for Pakistan

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INTRODUCTION

Pakistan (87.98 Million hectares; 23° to 37° N and 61° to 76° E) is a developing country of South Asia and has diverse conditions from an ecological and geological point of view [1]. It is gifted with a variety of herbs, medicinal and aromatic plant resources due to its varied ecological conditions [2].

Dera Ismail Khan District (area 7,326 sq km; 31°15’ to 32°32’N and 70°11’ to 71°20’ E) is located in the extreme south of the North West Frontier Province (NWFP), Pakistan. The area is gifted with diverse and unique flora, as it is adjacent to the South Waziristan Agency and Sulaiman Range in the West, Koh Sheikh Buddin in the north and Indus River in the east [3].

Stapelia L. is a genus of the family Asclepiadaceae and is represented by about 44 species, which are distributed in tropical region and South Africa [4]. The family Asclepiadaceae is so far represented by 23 genera in Pakistan [5–7]. The genus Stapelia was not reported before from Pakistan in the relevant literature of this region, viz. Jafri [8], Stewart [5, 6], and Nasir and Ali [7]. Taxonomic account consists of botanical name, synonym name, description, flowering period, ecological condition, specimen citation, origin and geographical distribution. The photographs were presented in Plates 1 and 2.

RESULTS

Stapelia gigantea of family Asclepiadaceae was reported for the first time from Pakistan. It was not recorded earlier from the territory of Pakistan in the relevant literature of this region, viz. Jafri [8], Stewart [5, 6], and Nasir and Ali [7]. Taxonomic account consists of botanical name, synonym name, description, flowering period, ecological condition, specimen citation, origin and geographical distribution. The photographs were presented in Plates 1 and 2.

MATERIALS AND METHODS

The study was conducted during 2006–2007 in different parts of D.I.Khan District. A specimen of Stapelia was collected from Dera Ismail Khan in the month of November, 2007. After critical study the plant was identified as Stapelia gigantea N. E. Br. following the description and illustration given by Bester [9] and Edited Guide Entry [10].

The flower is starfish-shaped, background...
Plate 1: *Stapelia gigantea* N.E.Br. (vegetative part bearing no flower)

Plate 2: *Stapelia gigantea* N.E.Br. (vegetative part bearing star shaped flower)

colour of the flower ranges from pale yellowish to cream. Calyx deeply 5 or 6-lobed, much smaller than the corolla, fused at the base, 8-10 × 2-3 mm, pointed. Corolla with five petals, divided about halfway into five lobes, 11-12 cm long, the lower surfaces of the petals are greenish, with longitudinal ridges stretching along their backs towards the tips, lobes 6-10 veined, margins of the lobes densely hairy, hairs 5-8 mm long, much longer than the central hairs. The upper surface of the flower is pale yellow with crimson transverse lines and purple hairs, foul smelling. The hairs are reddish to purplish and increase in length and density towards the centre of the flower. Corona purplish brown. The corona holds the pollen-packs of the flower, as well as the ovaries where the seeds develop. Fruit a pair of follicles 10-20 cm long, containing numerous silky-tufted seeds.

*Flowering period*: October-November.

*Ecological condition*: Cultivated in Gardens.

*Specimen studied*: Dera Ismail Khan: WENSAM College, 08.09.2007, Sarfaraz Khan Marwat, 415, (ISL).
Distribution in world: Originated in South Africa, the Giant Carrion Flower is one of the most widely distributed carrion flower species. It is scattered throughout Zimbabwe and Mozambique and also Eastern Botswana. It has also been recorded in Zambia and Malawi [10]. For Pakistan it is a new record and found in Dera Ismail Khan, Peshawar and Islamabad.

DISCUSSION

This species was named and described by NE Brown in 1877. The genus name *Stapelia* was created by the great Swedish naturalist Carl von Linné in or Linnaeus in 1737, after the Dutchman Johannes Bodaeus À Stapel, who had found related species in the old Cape Colony. The species name, *gigantea*, simply means 'gigantic' and refers to the big size of flowers rather than the plant itself. The giant carrion flower is only one of a large variety of carrion flower species, or Stapeliads. It grows in Southern Africa. It has the largest flowers in the group which makes it the largest-flowered succulent plant species in the world [11]. Carrion flowers make interesting novelty plants amongst the subtropical succulents or rock garden or on a sunny window sill in cooler climates. It is very typical of the group because of its flowers which emit a foul odour reminiscent of rotting meat and thereby attract flies and bluebottles which collect pollen and transport it to the next plant, thereby ensuring the successful pollination of this species [10].

REFERENCES