



Phenology of *Ornithogalum caudatum* Syn. *O. longibracteatum* (Hyacinthaceae)

*C S Bewli

36 A Sector, Chandigarh-160036, India

e-mail: csbewli@yahoo.com

Ornithogalum is a genus of perennial plants mostly native to southern Europe and southern Africa. It belongs to the family Liliaceae but some taxonomists have placed it under Asparagaceae or Hyacinthaceae. There are about 180 species of which the best known are *O. umbellatum*, *O. saundersiae*, *O. arabicum*, *O. thyrosides* and *O. caudatum*. Some of the plants in the genus are poisonous and have been known to kill grazing animals.

Ornithogalum caudatum Syn. *O. longibracteatum* is a caudex forming succulent plant commonly known as false sea onion or pregnant onion. It has a swollen base that resembles a spring onion but unlike onion, the bulb is exposed above the ground (Fig. 1). The beauty of its ornamental caudex which grows to the size of 8-10 centimetres is enhanced with its paper-thin epidermis. This is an excellent ornamental plant species that remains beautiful throughout the year and can sustain over or under watering.

It is hardy and easy to grow but needs re-potting once in 2-3 years. At the time of re-potting, the caudex should be placed above the soil and roots under the soil. For good growth it requires well drained compost and filtered bright as well as some direct sunlight, but with excess of direct sunlight it is likely to get sun scorched. The leaves are strap shaped and grow upto 70 centimetres in length. The leaves emerging from the apex spread outwards and normally turn brown at the tips which should be cut to give the leaf a natural tip. The plant flowers from March to September and the inflorescence, the spike emerging from the center of the plant reaches up to 90 cm in height. Each inflorescence bears 50 to 100 small star-like white flowers having green central stripes and the flowers last for about four weeks. Flowers are bisexual, actinomorphic, trimerous and hypogynous. There are six white sepaloid tepals with central green stripes, six

* Maj. General (Retd.) President, Indian Cacti Association

stamens and tricarpeal, syncarpous gynoecium. Ovary tri-locular with two ovules in each locule on axile placenta. Style terminal and hollow and stigma is trilobed, dry and papillate (Heslop-Harrison & Shivanna 1977, Tilton & Horner 1980, Ismailoglu & Ünal 2012). Ovule development in *Ornithogalum caudatum* has been studied by Tilton (1981) and Tilton & Lersten (1981). Fruits are loculicidal capsule with black seeds. Propagation is through seeds or small bulblets which are formed under the skin of the main caudex and fall after growing larger and then sprout (Fig.2).



Fig. 1. Bulb exposed above ground. **Fig. 2.** Bulblets on main caudex.

LITERATURE CITED

- Heslop-Harrison JR & Shivanna KR 1977 The receptive surface of the angiosperm stigma. *Ann. Bot.* **41** 1233–1258.
- Ismailoglu I & Ünal M 2012 Structure and cytochemical features of stigma and style of *Ornithogalum sigmoideum* Freyn & Sint, Unpollinated and pollinated pistil. *Acta Biologica Cracoviensia Series Botanica* **54**(1) 65–75.
- Tilton VR 1981 Ovule development in *Ornithogalum caudatum* (Liliaceae) with a review of selected papers on angiosperm reproduction ovule development in *Ornithogalum caudatum* (Liliaceae) with a review of selected papers on angiosperm reproduction. IV. Egg apparatus structure and function. *New Phytologist* **88** (3) 505–531.
- Tilton VR & Horner HT 1980. Stigma, style and obturator of *Ornithogalum caudatum* (Liliaceae) and their function in the reproductive process. *Am. J. Bot.* **67** (7) 1113–1131.
- Tilton VR & Lersten NR 1981 Ovule development in *Ornithogalum caudatum* (Liliaceae) with a review of selected papers on angiosperm reproduction ovule development in *Ornithogalum caudatum* (Liliaceae) with a review of selected papers on angiosperm reproduction. III. Nucellus and Megagametophyte. *New Phytologist* **88** (3) 477-504.

***Bowiea volubilis* (Liliaceae) a leafless wonder**

C S Bewli*

36 A Sector, Chandigarh-160036, India

e-mail: csbewli@yahoo.com

Received : 26.03.2014

Bowiea volubilis (Liliaceae/Hyacinthaceae) commonly known as the climbing onion is an unusual bulbous house plant with a tight swollen spherical base made up of many overlapping scales (Fig. 1). It is a very slow growing. At maturity of 5-6 years some bulbs tend to split and produce smaller bulbs to form clumps. During winters when in dormancy, the outer scales shrivel and turn brown and assume paper-like epidermis as that of an onion.

It is easy to grow this species and it can be maintained as it is adapted to drought as well as in floods environment and can tolerate severe winters and summers. Propagation is through seeds and can also be done by separating and potting bulbs when in dormancy. It is grown in well drained compost and fertilised with half spoonful of NPK once during the month of February. Placed on a sunny window sill or any other suitable location away from direct sunlight so as the vines appear fresh. Some trellises are provided for the vines to entwine around to exude its beauty. It should remain dry during winter and the compost should be allowed to dry between watering. For the plant to exude beauty, some sort of vertical frame should be provided for it to gracefully coil around it. It is an ideal plant to be vertically displayed in a hanging basket during summers.

A clump of this species is capable of giving a different dimension to the garden. The plant should be kept by every house-hold as it is a difficult to kill plant and it can easily in the same small pot for 5-6 years and it grows up to 10 cm in diameter without even repotting.

This species is uniquely distinguished from other caudiciforms due to almost complete absence of foliage and this feature makes it a collectable curiosity amongst bulb enthusiasts world-wide. The plants burst into

* Maj. General (Retd.) President, Indian Cacti Association

growth in early February producing one or more very fast-growing entwining vines reaching about 4 metres in length. Without tendrils, these bright green vines either climb or scramble on the ground.

Being leaf-less, these vines are the flower stems which produce profusion of star shaped tiny flowers with greenish to greenish-white petals during April. The flower with six petals is about half a centimetre in diameter.



Fig. 1. *Bowiea volubilis* plants with swollen spherical base.

