

**Information about the Environment and for travellers in Crete:**

**Narrowleaf bugloss – *Echium angustifolium***



Bugloss is a plant genus in the family of the borage family (Boraginaceae). The generic name is derived from the remarkable pistils, which are split such as snake tongues at the end. *Echium angustifolium* was described and designated 1768 by PHILIP MILLER.



Mediterranean and Central European *Echium* species are annual - or biennial - , perennial herbaceous plants, which can, depending upon kind, reach growth heights up to a meter. The aerial plant parts are usually hirsute. The leaves are arranged alternate, lance-shaped and have a smooth edge. The funnel-shaped blooms, arranged in spikes, appear usually from June to August; the terminal inflorescences are cincinnus' with bracts. The usually petiolate blossoms are pentamerous. The five basally connate sepals become somewhat larger until the maturity and lean then together.

The unequal stamens possess long, thin filaments and relatively small, oblong anther. Two carpels are grown together to a quad upper ovary. The thin pistil is biramous on top with in each case a small, cerebral stigma. The fruits are schizocarps; they decompose into four mericarps, those can be tubercular or smooth (a schizocarp is a special form of the “decay fruit”, which occurs particularly at the plant families of the mint family (Lamiaceae) and borage family (Boraginaceae). It moulders at maturity by splitting genuine and wrong phragma into single seed mericarp, the schizocarp; therefore the number of schizocarp always amounts to a multiple of the carpel number).

The species originates from Greece, Crete, Turkey, the eastern Mediterranean area and from northwest Africa and prefers sunny locations on stony loamy soils; it stands temperatures to -12° C.



**Contents** of the bugloss are among other things: allantoin, about 0.20 to 0.25 per cent Pyrrolizidinal alkaloids (are considered to be carcinogenic) like heliosupin and the liver toxically affecting consolidin.

However the bugloss is as welfare plant, similarly as comfrey or borage, today still in the naturopathy of importance. From the bugloss used are the dried root and the dried herb. Thus it works among other things Urine floating, is used at coughs, fever and headache, applies superficial also with pulled muscles, distortions, bruises, unify skin diseases, boil and whitlow.

Also in the **mythology** the bugloss is well-known, therefore some examples at a glance:

„The John bed “- a mattress filled with bugloss herb is said to keep mice away from the bed. The bugloss had the reputation to protect from snake bites and to heal it. Flowering bugloss’ were sacred to the lightning hurling Gods (Zeus) and should protect against thunderbolt.