



Fig. 1: *Euphorbia capitulata* is a beautiful delicate alpine plant for the rockery, but might get lost in bigger borders.

## Best hardy euphorbias for northern gardens (part 4)

by Detlef H. Schnabel

In this article of the series I shall tell you about a *Euphorbia* growing in my rock garden, which goes largely unnoticed by many human visitors. The species was described and named as *Euphorbia capitulata* by the German botanist Heinrich Gottlieb Ludwig Reichenbach (1793-1879) in 1832. It is reputedly the smallest of all hardy perennial euphorbias – and this might be the reason why it gets sometimes (in fact quite often) overlooked. I think it deserves better. *E. capitulata* is a dainty, charming, procumbent evergreen plant with creeping stems that rarely reach more than 10 cm tall. The axes bear small obovate (inversely egg-shaped), grey-green leaves. The cyathia occur singly and are born at the apex of the

stems in spring. They usually have eight greenish-yellow nectar glands that later become orange-red.

The specific epithet *capitulata* is derived from the Latin *capitulatus* meaning “having a small head” – referring to the cyathium which is less than 1 cm across.

### A resident of alpine mountains

Despite its relatively tiny size, the small-headed spurge is a gorgeous species which should be very much more widely grown in gardens. It is endemic to the alpine

Fig. 2 (opposit page): The cyathium of *Euphorbia capitulata* is unusual by having 8 rather than 5 nectar glands like most euphorbias.





Fig. 3: *Euphorbia capitulata* growing in close association with *Sempervivum* (*Crassulaceae*) species in a small trough.

mountains of the Balkan Peninsula (Greece, Albania, Bulgaria and the former Yugoslavia) where it inhabits barren terrain above the treeline at high altitudes up to 2,800 m. *E. capitulata* thrives on limestone screes and rock fields in sunny or partially shaded positions with low or moderate fertility and very well drained soils.

One of the perhaps most spectacular habitats of *Euphorbia capitulata* is the mythical home of twelve ancient gods and goddesses: Mount Olympus in northern Greece. Here the species can be encountered on the slopes of the Agios Antonios (Saint Anthony) summit – the third highest peak of Mount Olympus –

**Tab. 1: Quick cultivation facts about *Euphorbia capitulata* Rchb.**

(Synonyms: *Diplocyathium capitulatum* (Rchb.) Heinr.Schmidt, *Euphorbia soliflora* Vis. ex Boiss., *Tithymalus capitulatus* (Rchb.) Sojak)

Cold hardiness	Down to approximately -20 °C; in cold climates without reliable snow cover it is recommended to place mulch around the base of the plant to protect the roots from frost ('black frost'). A good drainage is important, because being an alpine plant it dislikes winter wet.
Light exposure	Full sun to partial shade
Water requirement	Once settled, average to dry; it does not like damp positions.
Soil type	Well-drained, dry calcareous (lime) soil
Flowering period	April to May, observed in the author's garden; according to Turner (1995), the species flowers from May to July.
Garden uses	Suitable for rock gardens, extensive roof greening and small troughs. Perfect with other reasonably vigorous alpines.
Pruning	Annual pruning is not required, damaged growth should be removed when seen. Watch out for the irritating white latex sap!
Propagation	<i>Euphorbia capitulata</i> can be propagated from seeds, by division or from cuttings.

where it occurs at an altitude of about 2,000 to 2,800 m above sea level.

The 2,918 m high Mount Olympus will serve as a striking example of the average weather over long periods of time, that *E. capitulata* is exposed to. This locality has a Mediterranean climate that is characterised by hot, dry summers and cool, wet winters. For approximately seven months of the year, from November to May, Olympus is covered in snow. The annual precipitation is between 1,100 and 1,800 mm, about half as snow in winter, and half as rain and hail in summer. The average winter temperature ranges from -20 °C to +10 °C, in summer from 0 °C to 20 °C. Intense winds, sometimes with speeds over 100 km/h, are a common natural phenomenon on Mount Olympus (Management Agency of Olympus National Park, 2018).

## Perfect for rock gardens

Due to its adaptation to harsh mountainous habitats in extreme altitudes, the delicate *E. capitulata* is a most suitable plant for alpine rockeries or even an extensive roof greening – which perhaps can contribute greatly to enhancing biodiversity and to reducing the impact of climate change. What is more, this evergreen dwarf alpine ground-cover,

unlike so many other cool-season euphorbias, is non-invasive, though it is inclined to run underground.

So if you have a rock garden, or if you plan to build one, this charming diminutive little thing is for you.

## References and further readings

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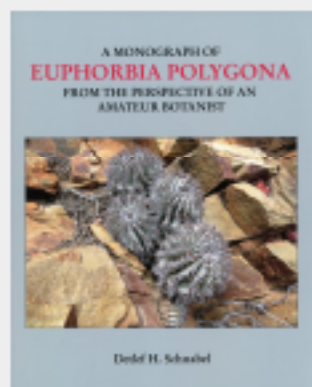
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Book details: Hardcover with dust jacket, 134 pages (20 x 25 cm), over 220 col. photographs, 3 watercolours, 1 map and 1 diagram, English, ISBN 978-3-00-058957-7, 67.00 € + postage.

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