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# Onosma sangiasense spec. nova (Boraginaceae) from Peloponnisos (Greece)

By

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With 2 Figures

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### Summary

TEPPNER H. & IATROÚ G. 1987. Onosma sangiasense spec. nova (Boraginaceae) from Peloponnisos (Greece). – Phyton (Austria) 27 (2): 285–288, 2 figures. – English with German summary.

Onosma sangiasense Teppner & Iatroú from Sangias Mountain in S Peloponnisos is described as a new species. It is asterotrichous and has procumbent, a little elongated vegetative shoots and pedicelled flowers.

# Zusammenfassung

TEPPNER H. & IATROÚ G. 1987. Onosma sangiasense spec. nova (Boraginaceae) vom Peloponnes (Griechenland). – Phyton (Austria) 27 (2): 285–288, 2 Abbildungen. – Englisch mit deutscher Zusammenfassung.

Onosma sangiasense Teppner & Iatroú vom Berg Sangias im S-Peloponnes wird als neue Art beschrieben. Sie ist asterotrich behaart, hat niederliegende Wuchsform, etwas verlängerte sterile Triebe und gestielte Blüten.

One of us (IATROÚ) has collected comprehensive plant material for his thesis (IATROÚ 1986) on endemics of Peloponnisos. Sangias Mountain in the South of the Taygetos in S Peloponnisos was one of the localities under investigation where an *Onosma* species was found to grow. During a visit in Patras in 1980 the other author (TEPPNER) was allowed to look over the *Onosma*-material and he believed, that the *Onosma* from Sangias could be a new species. This was confirmed by new work.

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# Onosma sangiasense TEPPNER & IATROÚ, spec. nova

Diagnosis: Perenne, basi suffrutescens; caules steriles procumbentes, elongati; folia basalia anguste obovata, obovata vel spathulata, indumento e setis tuberculo stellato-piloso insidentibus obtecta. Caules floriferi erecti vel adscendentes, simplices vel bifurcati. Pedicelli 3–5 mm longi. Calyx 13–14 mm longus. Corolla 18–20 mm longa, lutea. Antherae ca. 7 mm longae, basi connexae. Nuculae ignotae.

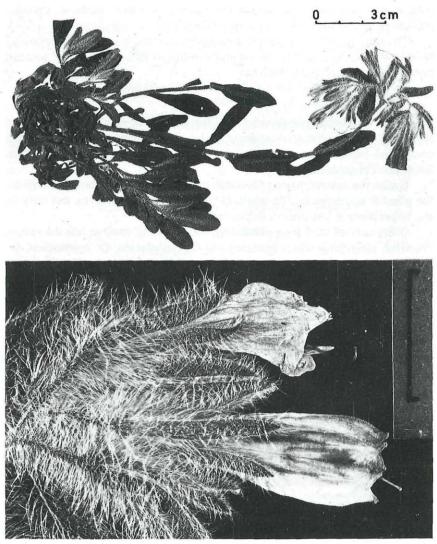
Holotypus: Peloponnisos, Prov. Lakonia, in declivibus meridionalibus montis Sangias, in saxosis calcareis; 9. 5. 1979; leg. IATROÚ & TZANOUDAKIS 5640 (UPA).

Icones: h. l. Fig. 1-2.

Description: Perennial with lignified base and with a loose and procumbent growth habit. Sterile shoots (emerging from the axils of the previous years leaf rosettes) elongated with terminal leaf rosette, internodes below the rosette 0.5-1 cm long. Leaves  $1-3.5\times0.2-0.8$  cm, narrow obovate, obovate or spathulate, apex rounded, gradually narrowed toward the petiole like basal part which measures 1/4-1/3 of the leaf length; leaf edges flat to distinctly revolute. Indumentum on the upper side dense to moderately dense, patent, stellate hairs with 5-30 rays arranged around the central seta, rays usually less than half as long as the seta; often there are small stellate hairs and simple hairs as long as the rays intermixed. Beneath the indumentum is similar but more patent.

Flowering stems (emerging from the center of the previous years leaf rosettes) erect or ascendent, 5-16 cm high, with leaves 3-10 mm wide, rounded at the tip and narrowed at the base; one or two cincinni. Cincinni with 4-6 flowers each and bracts usually shorter than calvx and rounded at the base. Pedicels 3-5 mm long and 0,5-08 mm thick, densely covered with very patent hairs, c. 3 mm long. Calyx 13-14 mm long, calyx leaves narrow lanceolate to lineal, 0.7-1.7 mm wide, densely covered with patent, few rayed, stellate hairs and short simple hairs outside, with dense, long, silky, simple hairs and short hairs inside. Corolla 18-20 mm long, yellow, tips and back of the corolla lobes and adjoining narrow, 3-4 mm long stripes on the corolla tube with short hairs outside, otherwise glabrous. Corolla lobes c. 0,8-1 mm long. Anthers ca. 7 mm, included in the corolla, connected only at the very base. Pollen grains largely well developed, content normal, with the 3 nuclei, pearshaped as usual in Onosma,  $16-19.5 \times 13.5-16 \,\mu m$ (mean value  $18 \times 15 \mu m$ ). C. 12% of the pollen grains degenerated at a very early stage of development, small, hyaline, shrunked. Fruiting material not known.

Habitat: The locality lies on the western side of Mt. Sangias in a shallow ravine between the villages of Hag. Nikon and Oitilon at an altitude between 150–350 m above sea level. It is a rocky limestone slope. In the



Figs 1–2. Onosma sangiasense, holotype. – Fig. 1 (top).

One of the two plants composing the holotype. – Fig 2 (below) Part of a cincinnus with flowers at the anthesis and after. Scale bar equals 1 cm.

vegetation the following plants predominate: Ceratonia siliqua L., Genista acanthoclada DC., Salvia officinalis L., Phlomis fruticosa L., Ballota acetabulosa (L.) Bentham, Thymus capitatus (L.) Hoffmans & Link, Pistacia lentiscus L., Centaurea raphanina Sibth. & Sm. subsp. mixta (DC.) Runemark, Onosma graecum Boiss., Ceterach officinarum DC., Micromeria

juliana (L.) BENTHAM ex REICHENB., Stachys candida BORY & CHANB., Parietaria sp., Galium sp., Inula sp., Alyssum sp., Campanula sp.

The area around this station belongs to the sub-humid Mediterranean bioclimatic zone, with a mean annual rainfall of 600–800 mm and a mean annual sunshine of 2600–2800 hrs.

## Discussion

From this new species only the type collection exists. Therefore our knowledge is very insufficient and the description needs to be revised and completed from additional material. The species is certainly endemic in Southern Peloponnisos.

Under the asterotrichous Onosmas of Greece and neighbouring regions the plant is apparent by it's relatively long pedicelled flowers, not only in the basal flowers but also in the upper ones.

Other species with long pedicels (relatively thin, more or less 0,5 mm in diameter, stretching when fruiting) are O. stellulatum, O. pygmaeum, O. leptanthum (for these three see Teppner 1981) and O. mite. The first two differ apparently from O. sangiasense by a less dense indumentum, especially in the inflorescence, and the usually smaller flowers (calyx 5–9 mm, exceptionally up to 11 mm, corolla 13–17 mm, only exceptionally up to 20 mm). O. leptanthum has the same dense and patent indumentum on pedicels and calyces but differs mainly by smaller corollas (only 14–17 mm long), subexsert anthers connected side by side along their whole lenght, and by longer rays in the indumentum of the narrower leaves. All the three species usually do not have elongated internodes in the sterile shoots (the more or less subterranean innovation shoots of O. stellulatum excepted). O. mite of Cyprus and S. W. Anatolia is very different by its dense cushions, the extremely dense indumentum of the leaves, the small flowers (corollas 13–14 mm only) and the nearly completely exsert anthers.

In Onosmas with more or less subsessile flowers usually the pedicels from the longest ones (3–5 mm) in the basal flowers diminish gradually to the top of the cincinni to 1 mm length or less. In these cases the pedicels measure 0,5–1 mm in diameter and do not stretch so markedly in fruiting. But in those species, which might be comparable with *O. sangiasense*, the corollas are puberulent in the whole anterior half and the indumentum of pedicels and calyx outsides is not so dense and not patent so long; further, the calyx lobes are mostly narrow triangular with nearly subulate tips and not linear or lanceolate as in *O. sangiasense*.

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