

Phyton (Horn, Austria)	Vol. 38	Fasc. 1	143–147	14. 8. 1998
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## ***Limonium cornarianum (Plumbaginaceae), a New Species from Crete (Aegean Area, Greece)***

By

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With 3 Figures

Received December 4, 1997

**Key words:** *Limonium cornarianum* spec. nova, *Plumbaginaceae*. – Taxonomy. – Flora of Greece.

### **Summary**

KYPRIOTAKIS Z. & ARTELARI R. 1998. *Limonium cornarianum (Plumbaginaceae)*, a new species from Crete (Aegean Area, Greece). – Phyton (Horn, Austria) 38 (1): 143–147, 3 figures. – English with German summary.

*Limonium cornarianum* KYPRIOTAKIS & ARTELARI a new species from the SE coast of Kriti island (Crete) is described and illustrated. Its affinities with *L. hierapetrae* and other related species are briefly discussed.

### **Zusammenfassung**

KYPRIOTAKIS Z. & ARTELARI R. 1998. *Limonium cornarianum (Plumbaginaceae)* eine neue Art von Kreta (Ägäis, Griechenland). – Phyton (Horn, Austria 38 (1): 143–147, 3 Abbildungen. – Englisch mit deutscher Zusammenfassung.

*Limonium cornarianum* KYPRIOTAKIS & ARTELARI, eine neue Art von der südöstlichen Küste der Insel Kriti (Kreta), wird beschrieben und illustriert. Die Beziehungen zwischen *L. cornarianum* und *L. hierapetrae* sowie anderen Verwandten werden kurz diskutiert.

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*Limonium cornarianum* KYPRIOTAKIS & ARTELARI, spec. nova

**Descriptio:** Planta perennis, glabra, usque 60 cm alta. Folia (2.7–) 3.5–9.0 × 1.0–1.9 cm, oblanceolata-spathulata, 1–3-nervia, acuta ad acutiuscula, mucronata, in dimidio laminae latissima, plana, angustissime cartilagineo-marginata, margine ca 0.1 mm lata, in petiolum lamina longiore abrupte attenuata, pallide viridia. Caules floriferi flexuosi, in partibus  $\frac{2}{3}$  superioribus ramosi, ramis sterilibus nullis vel subnullis. Inflorescentia paniculata, forma rhombica ad trullata. Spicae 1.2–2.5(–3.0) cm longae. Spiculae 4.0–4.5 mm longae (calyx inclusus), plerumque distichae, ad (3–) 4–6 in 1 cm dispositae. Bractea exterior 1.3–1.7 mm longa, triangulari-ovata, acuta. Bractea media 1.6–1.9 mm longa, oblonga-elliptica. Bractea interior (2.8–) 3.0–3.5 (–3.8) × 2.7–3.0 mm, obovata, obtusa ad rotundata, margine membranaceo 0.5–0.8 mm lata, parte centrali herbacea, acuminate, acumine 0.4–0.5 mm longo, marginem non contingente. Calyx 3.2–3.8 mm longus, tubo limbo subaequilongo, basi et costae imprimis unilateraliter dense piloso; lobii calycis 0.3–0.4 mm longi, semi-elliptici, obtusi. Corolla c. 5.0 mm longa, violacea.

Affine *Limonium hierapetrae*, RECH. fil., sed foliis oblongo lanceolatis, inflorescentia rhombica ad trullata, spicis brevioribus et densioribus, spiculis brevioribus plerumque distichis, bracteis exterioribus brevioribus, bracteis interioribus brevioribus et obovatis, et calycibus brevioribus densiore pilosis, manifeste differt.

**Holotypus:** Flora Hellenica: Kriti island, Nomos Lasithiou, Ep. Sitias: Moni Kapsa, on calcareous maritime rocks ( $35^{\circ} 01'N$   $26^{\circ} 03'E$ ), 20. 9. 1994, leg. KYPRIOTAKIS 8534 (UPA). – For the location see Fig. 3.

**Eponymy:** This taxon is named in the honor of the Cretan poet Vitsenzos KORNAROS whose homeland was the area of Sitia.

**Description:** Perennial, glabrous, up to 60 cm high. Leaves (2.7–) 3.5–9.0 × 1.0–2.0 cm, oblanceolate-spathulate, 1(–3) veined, acute to slightly acute, mucronate, broader at the middle of the lamina, plane, with narrow cartilaginous margin about 0.1 mm wide, abruptly tapering into the petiole which is longer than the lamina, pale green. Flowering stems flexuose, branched in the upper  $\frac{2}{3}$ ; non-flowering branches absent or rarely 2–3 at the lower part. Inflorescence paniculate, rhombic to trullate. Spikes 1.2–2.5(–3.0) cm long. Spikelets 4.0–4.5 mm long (including calyx), mainly distichous, (3–) 4–6 per cm. Outer bract 1.3–1.7 mm long, triangular-ovate, acute. Middle bract 1.6–1.9 mm long, oblong-elliptic. Inner bract (2.8–) 3.0–3.5(–3.8) × 2.7–3.0 mm, obovate, obtuse to rounded with membranous margin 0.5–0.8 mm wide; herbaceous part of the bract forming a point 0.4–0.5 mm long, not reaching to the apex. Calyx 3.2–3.8 mm long, mainly unilaterally densely pilose, with long hairs (about 0.5 mm long); lobes 0.3–0.4 mm long, semi-elliptic, obtuse. Corolla c. 5.0 mm long, violet.

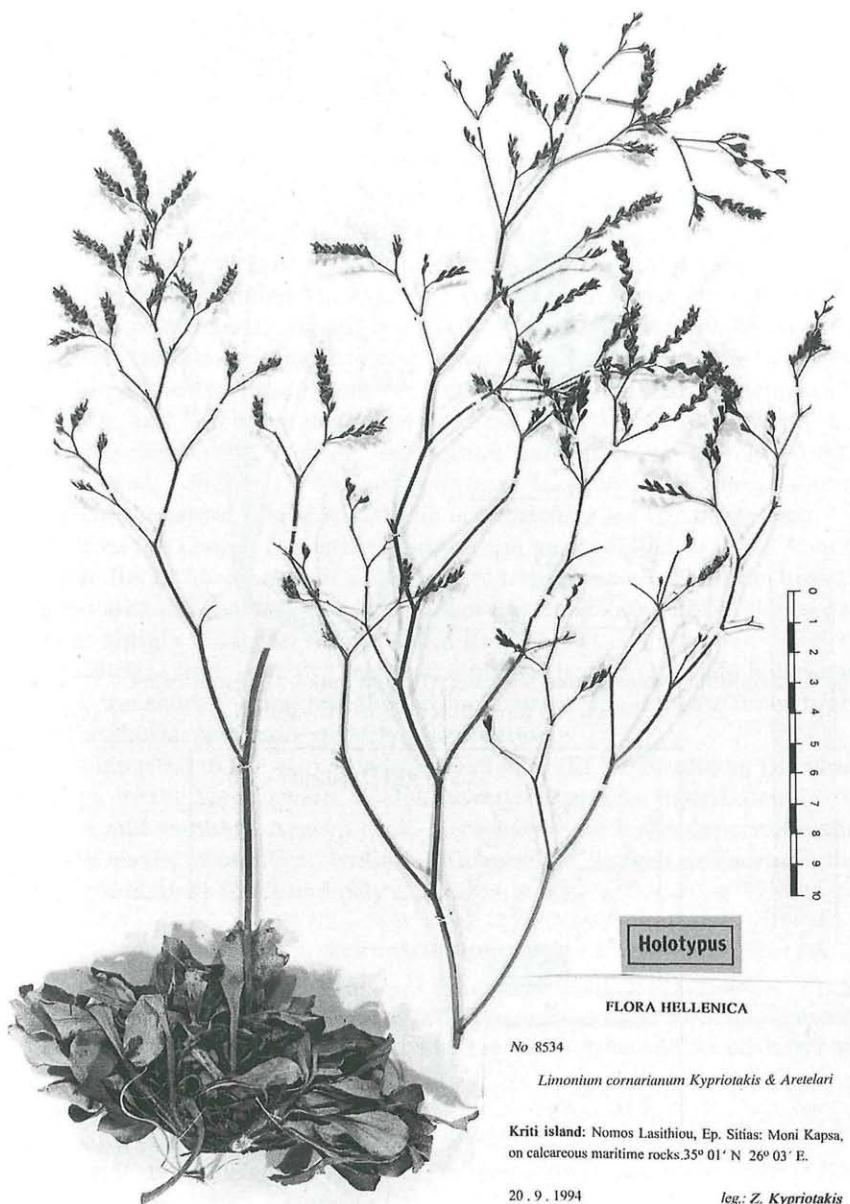


Fig. 1. *Limonium cornarianum*, Holotypus (UPA).

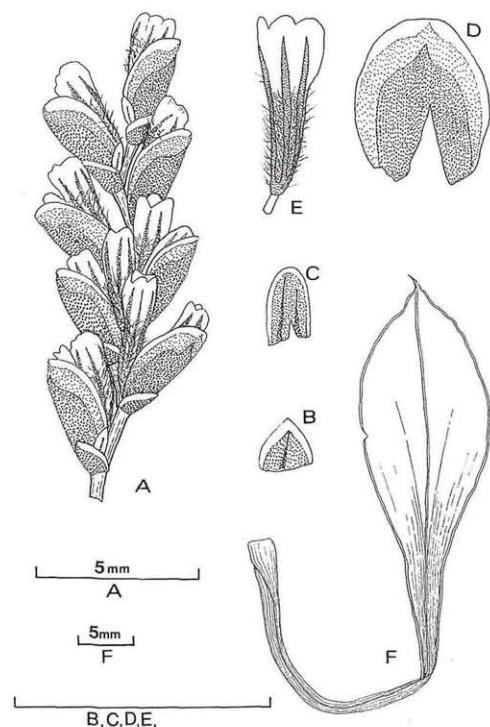


Fig. 2. *Limonium cornarianum*, Isotypus (UPA): A spike. – B outer bract. – C middle bract. – D inner bract – E calyx – F leaf.

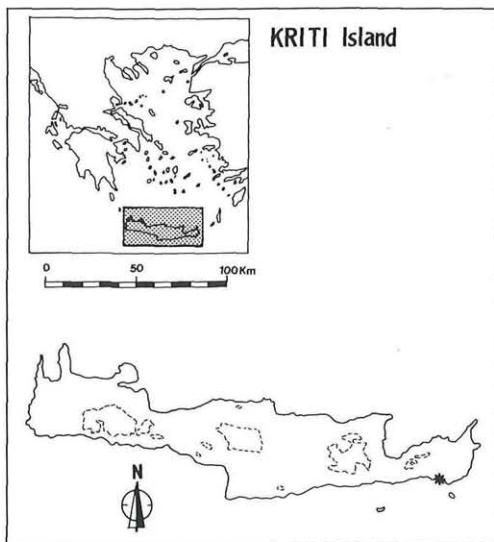


Fig. 3. The occurrence of *Limonium cornarianum* in Kriti.

Specimina visa: Kriti island, Nomos Lasithiou, ep. Sitias: Moni Kapsa, on calcareous maritime rocks ( $35^{\circ} 01'N 26^{\circ} 03'E$ ), 20. 9. 1994, leg. KYPRIOTAKIS 8534 (UPA, holotype). – Moni Kapsa gorge, calcareous cliffs in a distance 1500 m from the shore ( $35^{\circ} 02'N 26^{\circ} 03'E$ ), 25. 5. 1989, leg. KYPRIOTAKIS 8124 (UPA). – Sitia 3 km SSW of Kato Perivolakia, lower part of Moni Kapsas gorge, alt. 15 m, crevice of E-facing calcareous cliff, 26. 6. 1994, leg. TURLAND 777 (BM, UPA).

### Discussion

*L. cornarianum* occurs on the coastal calcareous rocks under Moni Kapsa as well as in crevices of calcareous cliffs into the homonymous gorge in a distance up to 1500 m from the shore. In the gorge it grows together with the Cretan endemics *Thymbra calostachya* (RECH. fil.) RECH. fil., *Dianthus fruticosus* L. subsp. *sitiacus* RUNEMARK, *Campanula pelviformis* LAM. and *Galium graecum* L. subsp. *pseudocanum* EHREND., the S. Aegean endemic *Melica rectiflora* BOISS. & HELDR., as well as with *Parietaria cretica* LAM. and *Trachynia distachya* (L.) LINK. On the coastal rocks the surrounding vegetation consists of *Salsola aegaea* RECH fil., *Reichardia picroides* (L.) ROTH., *Cichorium spinosum* L., *Lolium rigidum* GAUDIN, *Dactylis glomerata* L. and *Eurohorbia acanthothamnos* HELDR. & SART.

From the Cretan *Limonium* species, the most related to it are *L. hierapetrae* RECH. fil., also from SE Kriti, occurring westwards in the broader coastal area of Ierapetra and *L. creticum* ARTELARI known from the coastal area of Matala village in central south Kriti (ARTELARI 1989).

It differs from both of them in the distinctly and intensely mucronate leaves, the shorter outer, middle and inner bract, the obovate inner bract, and the shorter and more densely pilose calyx.

Comparing to the also allied *L. pigadiense* (RECH. fil.) RECH. fil. which belongs to the same group of closely related species distributed in the central and southern Aegean area, *L. cornarianum* has oblanceolate-spatulate leaves, rhombic to trullate inflorescence, as well as shorter outer, middle and inner bract and calyx.

### Acknowledgements

We are grateful to the Directors and Curators of the Botanical Museum of Lund (LD) and Naturhistorisches Museum of Wien (W) for the loan of herbarium material.

We also thank Mr. P. LAMBROPOULOS for the line drawing and the photograph of the type specimen.

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Zeitschrift/Journal: [Phyton, Annales Rei Botanicae, Horn](#)

Jahr/Year: 1998

Band/Volume: [38\\_1](#)

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Artikel/Article: [Limonium cornarianum \(Plumbaginaceae\), a New Species from Crete \(Aegean Area, Greece\). 143-147](#)