

***Heliotropium curassavicum* L. (*Boraginaceae*), a new alien species collected in Cyprus**

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Abstract. – *Heliotropium curassavicum* is an alien species, recorded from Cyprus for the first time. A short description and information on its distribution and habitat are provided.

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Introduction

The genus *Heliotropium* comprises about 250 species (Tison & de Foucault 2014), with cosmopolitan distribution. In Cyprus it is represented by four indigenous species, namely *H. europaeum*, *H. dolosum*, *H. hirsutissimum* and *H. supinum* (Meikle 1985, Hand & al. 2011–). In addition to the above cited taxa, *H. curassavicum* has been recently found on the coast, adjacent to Dekeleia Power Station (phytogeographical division 4, sensu Meikle 1977). In contrast with the hairy Cypriot native taxa, the new species is glabrous and fleshy.

Description

Glabrous, glaucous **perennial**, fleshy throughout. **Stems and branches** decumbent, up to 70 cm long. **Leaves** 15–40 × 4–10 mm, glabrous, oblanceolate or linear-lanceolate, obtuse, nerves faint. **Inflorescence** terminal and lateral, simple or branched, scorpioid, 3–6 cm long; **sepals** 1–2 mm long, persistent, ovate-lanceolate; **corolla** 1.0–2.5 mm, long, limb about 2 mm in diameter, white, usually mauve internally, lobes 0.5–1.0 mm long, obtuse-undulate; stigma conical, about 0.5 mm long, sessile. **Nutlets** 4, 1.5–2.0 mm long, glabrous, brown.

Flowering period: March–August.

Geographical distribution

It is native to North and South America, widely distributed and naturalised in Portugal and many Mediterranean countries (Spain, France, Italy, Albania, Greece, Turkey, Algeria, Tunisia, Libya, Egypt, Israel) and eastwards to Pakistan, India, and Australia (see, e. g., Brummit 1972, Riedl 1978, Greuter & al. 1984, El-Hadidy & Boulos 2000, Nasir 2011, Juan & Talavera 2012, Dimopoulos & al. 2013). The population discovered in Cyprus is very small (about 50 plants), but seems to be well established. In this respect, it may be characterised as naturalised alien species. Although investigations have been carried out along coastal areas, east and west of the collection locality (up to Ormidea Beach and Pyla Beach respectively), no other colonies have been discovered.



Fig. 1: *Heliotropium curassavicum*, Cyprus, Ormideia, Dekelia Power Station, typical habit (above) 31.7.2018 and inflorescence (below), 4.8.2018. – Pantelis Charilaou.

Habitat

Generally, it is a plant of sandy and saline places near or not far from the sea. Since it is naturalised in the surrounding countries, it is likely to occur in other coastal places and saline ground in Cyprus. Therefore, it is recommended to search for this species in similar habitats in other parts of the island. It is easily distinguished by its glabrous, fleshy stems and leaves and the terminal, scorpioid cymes.



Fig. 2: *Heliotropium curassavicum*, Cyprus, Ormidea, Dekeleia Power Station, typical habitat, 31.7.2018.
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Specimens collected

Division 4: east of Dekeleia Power Station, sandy coast and saline ground, 1.8.2018,
P. Charilaou in *Hadjikyriakou* 7623 (herb. Hadjikyriakou); ibid., 8.8.2018, *G. Hadjikyriakou* 7624 (herb. Hadjikyriakou).

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References

- Brummit R. K. 1972: 2. *Heliotropium* L. Pp. 84–86. – In: Tutin T. G., Heywood V. H., Burgess N. A., Moore D. M., Valentine D. H., Walters S. M. & Webb D. A. (ed.), Flora Europaea 3. – Cambridge & al.
- Dimopoulos P., Raus T., Bergmeier E., Constantinidis T., Iatrou G., Kokkini S., Strid A. & Tzanoudakis D. 2013: Vascular Plants of Greece. An annotated checklist. – Englera 31.
- El-Hadidy A. & Boulos L. 2000: *Boraginaceae*. Pp. 268–309. – In: Boulos L. (ed.), Flora of Egypt 2. – Cairo.
- Greuter W., Burdet H. M. & Long G. 1984: Med-Checklist 1. – Geneve & Berlin.
- Hand R., Hadjikyriakou G. N. & Christodoulou C. S. (ed.) 2011– (continuously updated): Flora of Cyprus – a dynamic checklist. Published at <http://www.flora-of-cyprus.eu/>; accessed 20.11.2018.
- Juan R. & Talavera S. 2012: *Heliotropium* L. Pp. 527–532. – In: Talavera S., Andrés C., Arista M., Fernández Piedra M. P., Gallego M. J., Ortiz P. L., Romero Zarco C., Salgueiro F. J., Silvestre S. & Quintanar A. (ed.), Flora Iberica 11. – Madrid.
- Meikle R. D. 1977, 1985: Flora of Cyprus 1–2 . – Kew.
- Nasir Y. J. 2011: *Heliotropium*. – In: Flora of Pakistan. Published at <http://www.tropicos.org/Name/4000125?projectid=32>; accessed 20.11.2018.
- Riedl H. 1978: *Heliotropium*. Pp. 248–255. – In: Davis P. H. (ed.), Flora of Turkey and the East Aegean Islands 6. – Edinburgh.
- Tison J.-M. & de Foucault B. 2014: Flora Gallica. Flore de France. – Mèze.