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## Althenia filiformis Petit (Zannichelliaceae) in Greece

By

L. KOUMPLI-SOVANTZI\*)

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#### Summary

KOUMPLI-SOVANTZI L. 1995. Althenia filiformis Petit (Zannichelliaceae) in Greece. – Phyton (Horn, Austria) 35 (2): 243–245. – English with German summary.

Althenia filiformis Petit has been found in two coastal aquatic stands on the Aegean island of Naxos and in a coastal pool on the mainland of Greece (Attiki). These findings are new records for the Greek flora, the three habitats are shortly described.

### Zusammenfassung

Koumpli-Sovantzi L. 1995. *Althenia filiformis* Petit (Zannichelliaceae) in Griechenland. – Phyton (Horn, Austria) 35 (2): 243–245. – Englisch mit deutscher Zusammenfassung.

Althenia filiformis Petit wurde in zwei Brackwasser-Lagunen auf der ägäischen Insel Naxos und in einem ebenfalls brackischen Tümpel auf dem griechischen Festland bei Oropos (Attika) gefunden. Die Funde sind Erstnachweise für die griechische Flora, die drei Standorte werden kurz beschrieben.

Althenia filiformis was described from the Etang de Vaccarès in the Camargue (Bouches du Rhône, France) by Petit 1829 (see Ascherson & Graebner 1897: 365). It belongs to the family Zannichelliaceae (sensu Dumortier) which has also been treated as a subunit (Zannichelliaee or Zannichellioideae) within the larger family Potamogetonaceae. The genera Althenia, Lepilaena, Zannichellia and Pseudalthenia (also known as Vlei-

<sup>\*)</sup> Dr. L. Koumpli-Sovantzi, Institute of Systematic Botany, Section of Ecology and Systematics, Department of Biology, University of Athens, GR-15784 Athens, Greece.

sia) have been accepted by Tomlinson & Posluszny 1976 for the family Zannichelliaceae, representing only plants of fresh and brackish waters, separated from those of the marine Cymodoceaceae. Althenia and Lepilaena are closely related and were originally treated by Ascherson & Graebner 1907 as two sections of the genus Althenia.

The genus *Althenia* has been found in typical brackish-water situations near the sea, but also occurs in continental salt and even fresh waters (Cook 1974, Den Hartog 1981). According to the distribution map compiled by Onnis 1967 the genus was thought to be restricted to the western mediterranean coastal lagoons. But, since then, new published records have shown that it has quite a wider distribution: North West Africa, West and South Europe from France to Jugoslavia, Turkey, S. Russia (Rostov), Transcaspia and South Iran (Fars, Neyriz) (see Uotila 1984). Two species of this genus have been described, *A. filiformis* Petit and *A. barrandonii* Duval-Jouve. But Ascherson & Graebner 1897, 1907 distinguished them as subspecies, whereas other authors treated both taxa as one species (e.g. Dandy 1980). The monotypic view of the genus is accepted in this work.

Up to now, Zannichelliaceae is known to occur in Greece, represented only by the genus Zannichellia; there are several records of Z. palustris L. (without a subspecies definition) and some of Z. palustris subsp. pedicellata (Wahlenberg & Rosen) Arcangell. In this work the presence of a second genus is indicated for Greece, that is Althenia.

Althenia filiformis was found in the following localities:

- 1. Island of Naxos, Ayios Prokopios, coastal aquatic halobiotope, 10.7.1984, L. Koumpli-Sovantzi no. 2075 (ATHU and herb. L. Koumpli-Sovantzi). This N.W. S.E. directioned hydrobiotope is 150 m long, 50 m wide and 25–30 cm deep; it is partly dried up during the summer. Here, Ruppia maritima L. and Lamprothamnium papulosum (Walle.) J. Groves were also found. This biotope was lacking of aquatic macrophytes during the next visits: 15–17. 5. 1985, 30. 8. 1985, 20. 4. 1990, 25. 7. 1991. In April 1990, a water temperature = 18° C, pH = 7.7, salinity = >40% and conductivity = >50,000  $\mu$ mhos, were measured.
- 2. Island of Naxos, Ayios Yeoryios lagoon, 10. 7. 1984, L. Koumpli-Sovantzi no. 2084; 25. 7. 1991, L. Koumpli-Sovantzi no. 4438 (ATHU and herb. L. Koumpli-Sovantzi). The lagoon had a surface of about 0.5 km² and a depth of 35–40 cm during the first visit (10. 7. 1984), while it lacked water and aquatic macrophytes during the next summer (28. 8. 1985). This situation was due to the considerable dryness of this year and also to the fact that a large part of this aquatic ecosystem was dried up in order to serve as airport grounds. But six years later (25. 7. 1991), Althenia filiformis was collected again from the remained part of the lagoon; it was living in a depth of c. 20 cm, together with Ruppia maritima L., R. cirrhosa

(Petagna) Grande, Lamprothamnium papulosum (Wallr.) J. Groves and Chara sp. The water had a temperature of  $29^{\circ}$  C, a salinity of 27% and a conductivity of 45,000 µmhos.

The flora of the area around the aquatic halobiotope of Ayios Prokopios and Ayios Yeoryios lagoon is given by Koumpli-Sovantzi & Yannit-Saros 1993.

3. Sterea Ellas, Attiki, vernal coastal pool at the neighbourhood of the village Oropos, 15. 5. 1994, L. Koumpli-Sovantzi no. 4749 (ATHU and herb. L. Koumpli-Sovantzi), pH = 7, salinity = 15‰, conductivity = 18,000 μmhos. Here, *Althenia filiformis* coexists with *Ruppia maritima* L. and a charophyte species. The flora of the area around this vernal pool is given by Koumpli-Sovantzi & Vallianatou 1994.

It must be noted that the first two collections (no. 2075 and no. 2084) were presented at the 12th Congress of the Hellenic Society of Biological Sciences, Mitilini, April 1990 (KOUMPLI-SOVANTZI 1992).

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