**Solanum pseudocapsicum** L., an adventive species new for the flora of the Republic of Macedonia

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**Abstract:** In this paper *Solanum pseudocapsicum* is reported for the first time for the flora of the Republic of Macedonia. This adventive plant species was found in Ohrid, on walls near the Monastery of St. Jovan Kaneo.

**Keywords:** *Solanum pseudocapsicum*, alien plant species, flora, Republic of Macedonia

**Introduction**


**Material and Methods**

Collected herbarium specimens were deposited in the herbarium of the Institute of Biology (MKNH), Faculty of Natural Sciences and Mathematics, Saints Cyril and Methodius University, Skopje. Original photographs were made from the locality where the plant was discovered. The plant’s morphological characteristics were compared with data from the literature (Hawkes & Edmonds 1972; Webb et al. 1988; and others). For distribution of the species *Solanum psudocapsicum* on European territory, data from the Euro+Med Plantbase (Valdés 2012) were used. Data about habitats of the species are based on the authors’ personal observations. Plant nomenclature and taxonomy are consistent with the Euro+Med Plantbase (Valdés 2012).

**Results and Discussion**

*Solanum pseudocapsicum* L., Sp. Pl. 184 (1753)

Annual or perennial; stems 30–120 (200) cm, erect, branched, glabrous or sometimes with few-branched hairs on very young shoots. Leaves 2-14 cm x 0.5-2 cm, linear-lanceolate, lanceolate or elliptical-lanceolate, entire to somewhat sinuate, alternate or in unequal pairs, with prominent mid-rib, bright green, hairless glossy above, cuneate at base or narrowly attenuate, apex obtuse or acute, petiole 0.2-2 cm. Flowers appear from leaf axils, cymes 1-3-flowered, solitary, extra-axillary to leaf opposed, sessile. Calyx 4–5 mm long, deeply incised; teeth linear-lanceolate to ovate-lanceolate, slightly accrescent. Corolla 10-15 mm in diameter, white, glabrous; lobes oblong-ovate to ± triangular, with central core of orange-yellow stamens. Anthers 2.5–3 mm long, orange. Berry 10–15 (20) mm in diameter, globose, glossy, red, orange to scarlet, shining, solitary, long-persistent. The bracts remain green, but the shiny berries gradually turn orange-red as they ripen and they remain attractive through most of the winter months.

Seeds c. 3 mm diameter, suborbicular to reniform or obovoid, rather asymmetric; margin thickened. The flowers bloom in the late spring and during the summer. Chromosome number 2n = 24 (Figs. 1, 2).

**General Distribution:** *Solanum pseudocapsicum* is native to Mexico, Central America, the Caribbean, and South America and has become naturalised in southern Africa, Europe, North America, Hawaii, New Zealand, and Australia (http://www.plantsrescue.com/solanum-pseudocapsicum/).

**Distribution in Europe:** Azores (Faial, Graciosa, São Jorge, Flores, São Miguel, Pico, Santa Maria, Terceira), Canary Islands (Gran Canaria, Gomera, Hierro, La Palmas, Tenerife), Corsica, Greece, France, Germany, Spain, Portugal, Madeira, Slovakia, Turkey (Asiatic Turkey) (Valdès 2012) (Fig. 3).

**Distribution on the Balkan Peninsula:** Greece - Athos Peninsula (Turrill 1949), Patras (Chronopoulos & Christodoulakis 1996); Crete, Nomos of Rethimno, Eparchia of Agios Vasiliou: Dimos Lappas, Spili, between Rethimno and Ag. Galini (Greuter & Raus 2006); in the prefecture of Ioannina (Chitos 2009); Aegean area: Limnos: Myrina (Biel & Tan 2015); Kriti with Karpathos, Kasos & Gavdhos (Valdès 2012). Sources in Greece based on herbarium material: Lesvos: Hansen & Nielsen 6163 (C); Mt. Saitas: Mermigkas S-46 (ATH); Achaias: S of Lakka, Willing 196120(B) (herbarium data from Greece submitted by Kit Tan).

**Distribution in the Republic of Macedonia:** Ohrid; St. Jovan Kaneo, between the monastery and the old town, on walls near the road, 31.05.2007, leg. et det. V. Matevski Voucher number 170300 (MKNH).

Analysis of data on the adventive flora of the Republic of Macedonia shows that in the past 15 years, adventive species of the genus *Solanum* are the most common new alien species. This is the case with the following invasive species of the genus *Solanum*—*S. cornutum*, *S. elaeagnifolium*, and *S. sisymbriifolium*, which were discovered at various localities on the republic’s territory (Matevski 2000, 2002-2003). *Solanum pseudocapsicum* is a new adventive species in the Republic of Macedonia, one which is registered in the old town of Ohrid, near the Monastery of St. Jovan Kaneo. It grows in cracks of the retaining walls beside the cobbled path near the Monastery of St. Jovan Kaneo. The population of this adventive plant species consists of about 20 specimens, so there is no tendency for it to spread into the surrounding area. We could not reliably identify the reasons for the presence of this species at this locality and they are still unknown (Fig. 4).

*Solanum pseudocapsicum* (winter cherry) is a toxic plant. It is often cultivated as an indoor ornamental plant due to its beautiful but poisonous berries. According to Hawkes & Edmonds (1972) in the edition Flora Europaea, *S. pseudocapsicum* is widely cultivated for an ornament and is locally naturalised in S.W. Europe.
Greuter & Raus (2006) cite this alien plant species for the first time in Greece (Crete) and note that it is unknown whether the plant arose from seeds or spread vegetatively from previous cultivation.

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REFERENCES


Ključne reči: Solanum pseudocapsicum, strana biljna vrsta, flora, Republika Makedonija

Solanum pseudocapsicum L., nova adventivna vrsta u flori Republike Makedonije

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