

Solanum elaeagnifolium Cavara, a new invasive species in the Caucasus

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Summary: *Solanum elaeagnifolium*, a native species of South America, which was not previously observed in Caucasus, is herewith newly recorded from Absheron Peninsula, Republic of Azerbaijan.

Keywords: *Solanum elaeagnifolium*, Solanaceae, Republic of Azerbaijan, Absheron Peninsula, Caucasus, neophyte, invasive species

During floristic investigations, the authors collected some specimens of invasive plants from Absheron Peninsula (Republic of Azerbaijan). Among them was a specimen that could not be identified using the ‘Keybook for the Caucasian plants’ (GROSSHEIM 1949), ‘Flora of Absheron’ (KARJAGIN 1952), ‘Flora of Azerbaijan’ (AGAJanov 1957), ‘Flora of Caucasus’ (KUTATELADZE 1967) and ‘Flora of Turkey’ (BAYTOP 1978). Following ‘Flora Iranica’ (SCHÖNBECK-TEMESY 1972), ‘Flora Europaea’ (HAWKES & EDMONDS 1972) and ‘Flowers of Turkey’ (PILS 2006), the specimens could be identified as *Solanum elaeagnifolium* Cavara (Fig. 1 A–D). Geographically closest earlier recordings were made from Turkey (PILS 2006; ILÇİM & BEHÇET 2007).

Solanum elaeagnifolium Cavara, 1795, Icon. Descr. 3:22, tab. 243.

Multi-stemmed, perennial herbaceous or semi-shrub plant with dense, whitish, stellate indumentum, usually with scattered, conspicuous, usually reddish spikes on stem, mature leaves and calyx; stem 50–80 cm or higher, erect, sparingly branched. The leaves are 4–10(16) cm × 1–2.5(4) cm, linear to oblong lanceolate, obtuse, acute, with rounded or truncate base, with wavy edges, silvery-green with a paler undersurface, petiole 5–20 mm long. Cyme 1–5-flowered, solitary, extra-axillary; peduncle 5–20 mm. Calyx 5–7 mm, slightly accrescent, patent in fruit; lobes 2–4 mm, linear. Corolla 25–35 mm in diameter with five purple petals. Anthers 7–9 mm long, yellow. Berry 10–13 mm in diameter, globose, black or yellow. Fl. VII–X.

Roots can penetrate to depths of at least two metres. Each plant is usually part of a colony with inter-connecting root systems which gives *S. elaeagnifolium* its tremendous competitive ability and persistence.

Location in the Caucasus: Republic of Azerbaijan, Absheron Peninsula, Mashtaga village, along roadsides. 01 VIII 2014. A.S. Zernov & Sh.N. Mirzayeva. No. 8294 [MW and BAK].

Distribution and ecology

Solanum elaeagnifolium is a South American native which sometimes occurs as an alien in parts of Croatia, Cyprus, France, Greece, Italy, Macedonia, Serbia, Spain, Turkey and it is already naturalized in some of these countries. It invades cultivated fields (maize, sorghum, vegetables), disturbed habitats (roadsides) and some semi-natural habitats (pastures). Widely distributed in Africa (Algeria, Egypt, Lesotho, Morocco, South Africa, Tunisia, Zimbabwe) and America (Argentina, Chile, Cuba, Guatemala, Honduras, Mexico, Paraguay, Puerto Rico, USA, Uruguay),



Figure 1. *Solanum elaeagnifolium*. A – Habitat; B – Habitus; C – Flower; D – Calyx and peduncle with spikes.

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it is also known from Asia (India, Israel, Lebanon, Pakistan, Syria, Taiwan) and Australia. This species has accidentally been introduced to several countries via contaminated fodder crops and packing material (DATILES & ACEVEDO-RODRÍGUEZ 2014; EPPO 2015; LADY BIRD JOHNSON WILDFLOWER CENTER 2016).

Absheron Peninsula is drastically anthropogenically altered. That's why many invasive plant species can be found here.

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