Mini data sheet on Alternanthera sessilis

Added to the EPPO Alert List in 2019 - Deleted in 2020

Reasons for deletion: *Alternanthera sessilis* was transferred in 2020 to the EPPO Observation List.

Why

Alternanthera sessilis (Amaranthaceae) is an invasive plant species that can grow in a variety of habitats. The species is native to Brazil. Throughout its non-native range it has been shown to grow within a number of crop systems and the species has the potential to block irrigation channels and drainage systems. The species is present in a number of EPPO countries, but the extent of these non-native populations is not clear.

Geographical distribution

EPPO Region: Algeria, Belgium, Israel, Italy, Jordan, Russia, Spain, Turkey.

Africa: Algeria, Botswana, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Egypt, Ghana, Guinea, Kenya, Mauritania, Mauritius, Mozambique, Nigeria, Senegal, South Africa, Sudan, Tanzania, Uganda, Zambia, Zimbabwe.

Asia: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Iran, Iraq, Israel, Japan, Jordan, Korea (DPR), Korea (Republic of), Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Turkey, Vietnam.

North America: Canada, USA (Alabama, Arkansas, Florida, Georgia, Louisiana, Maryland, Mississippi, South Carolina, Texas).

South America: Argentina, Brazil (native), Colombia, Equator, French Guiana, Guyana, Peru, Suriname, Venezuela.

Oceania: Australia, Papua New Guinea, Pitcairn.

Morphology

A. sessilis is a perennial herb with prostrate stems, often rooting at the nodes, 10 to 100 cm long. Leaves are obovate, occasionally linear-lanceolate, 1-15 cm long, 0.3-3 cm wide, and petioles are 1-5 mm long. Flowers in sessile spikes, 0.7-1.5 mm long. Fruits are utricles 1.8-3 mm long and 1.3-2 mm wide. Seeds are lenticular 0.9-1.5 mm long and 0.8-1 mm wide.

Biology and ecology

A. sessilis prefers areas with constant or periodically high humidity, but can tolerate extremely dry conditions. It often grows in mixed association with several other aquatic species. The plant spreads by seeds, which are wind-and water-dispersed, and by rooting at stem nodes. Seedlings appear in April, and fruits appear during August-October in the Northern Hemisphere.

Habitats

A. sessilis typically grows in disturbed wetland habitats, riparian zones, estuarine habitats, open fields and plantations. The species can also grow in dry conditions and can grow along roadsides, pathways and fallow ground. In Africa and Asia, the species has been recorded as growing within fields of a number of cultivated crops (e.g. rice, maize, cotton).

Pathways for movement

A. sessilis is occasionally traded as an ornamental plant for aquariums or as a water plant for outside ponds. The species does not perform well when submersed and is more adapted to a paludarium application. The species has also been traded as a food or medicinal plant. Furthermore, it is a common contaminant in potted plants from Asia and Central America.

Impacts

In aquatic systems, *A. sessilis* can block irrigation pipes and water channels. In Africa and Asia, the species has been recorded to cause negative impacts in agricultural systems where it can reduce yields in crops such as maize, rice, soybeans and vegetables. There is potential for the species to have negative impacts on native biodiversity.

Control

There is little information on control measures for *A. sessilis*. Plants can be dug up or hand pulled but the whole tap root should be removed to avoid resprouting. Chemical control in or around waterbodies is often not feasible due to national regulations.

Source: INTERNET Weeds in imported potplants in Europe. http://keys.lucidcentral.org/keys/v3/bonsai/

Güzel Y (2017) Türkiye için yeni bir istilacı yabancı bitki kaydı: Alternanthera sessilis (Amaranthaceae) Bitki Koruma Bülteni **57**, 65-72.

Sanz-Elorza M, González Bernardo F, Gavilán Iglesias LP, (2008) The alien flora of Castilia and León (Spain). *Botanica Complutensis* **32**, 117-137.