

Aster squamatus (annual saltmarsh aster)



Erect herb, up to 1 m, frail looking, with tiny white-greenish flowers.

Scientific name: *Aster squamatus* (Spreng.) Hieron.

Common name: annual saltmarsh aster

Family: *Asteraceae* (*Compositae*)

Status in Portugal: invasive species

Risk Assessment score: (in development)

Synonymy: *Symphotrichum subulatum* (Michx.) G. L. Nesom var. *squamatum* (Spreng.) S. D. Sundb.

Last update: 09/07/2014

How to recognise it

Annual or biennial herb up to 1 m, erect, frail looking, lateral ascending branches.

Leaves: dark green, linear or linear-lanceolate, entire and sessile, with 4-18 x 0,5-1,5 cm.

Flowers: arranged in tiny capitula (7-9 x 2-3 mm), distributed along the lateral branches resembling a not very dense panicle; involucre bracts in several series, green with a violet and scarious margin; ligulate marginal flowers, greenish-white; tubular centre flowers, greenish.

Fruits: brown cypselas with 2-3 mm, with a hairy pappus.

Flowering: May to November.



Linear-lanceolate leaves

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Characteristics that aid invasion

It propagates by seed, producing many seeds, of which are efficiently dispersed by wind.
Strong invasive behaviour, able to expand and colonize new habitats in a short period of time.

ORIGIN AND DISTRIBUTION

Native distribution area

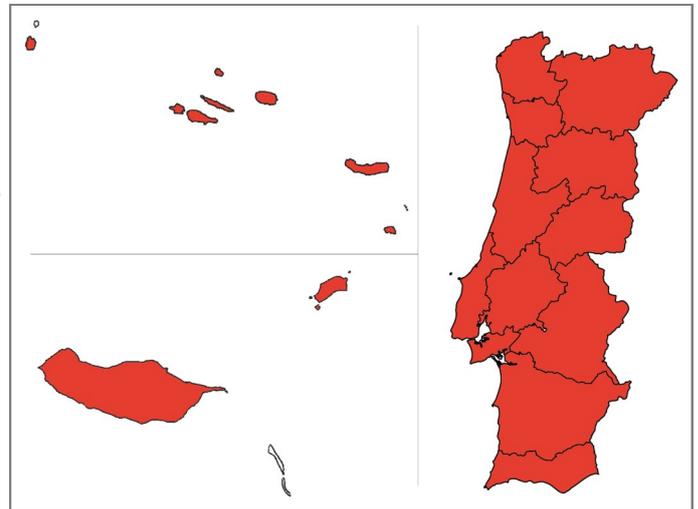
Central and South America.

Distribution in Portugal

Mainland Portugal (all provinces), Azores archipelago (islands of São Miguel, Santa Maria, Terceira, Graciosa, São Jorge, Pico, Faial, Flores), Madeira archipelago (islands of Madeira and Porto Santo).

Other places where the species is invasive

Europe (Spain, Greece, Italy, France), Northern Africa (Algeria, Egypt, South Africa), Australia.



Introduction reasons

Probably accidental.

Preferential invasion environments

It presents great ecological resilience, adapting to different conditions as long as soil humidity is assured.
Environments that are subject to human intervention (wet crops, roadsides, abandoned gardens, ruins, harbours, rice fields, heaps, etc.) and semi-natural (halophyte communities, marshlands, degraded streams, etc.).

It prefers soft climates along the sea surface or over lowlands, or else in sheltered environments.

IMPACTS

Impacts on ecosystems

It forms monospecific mats, preventing the development of native vegetation.

Economic impacts

Potentially high costs in applying control methodologies in crop areas.

Other impacts

Due to the high production of pollen, it is considered an allergenic plant.

CONTROL

Controlling an invasive species demands a well-planned management, which includes the determination of the invaded area, identifying the causes of invasion, assessing the impacts, defining the intervention priorities, selecting the adequate control methodologies and their application. Afterwards it is

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fundamental to monitor the efficiency of the methodologies and recuperation of the intervened area as to perform, whenever necessary, the follow-up control.

The control methodologies used for *Aster squamatus* include:

Physical control (preferential methodology)

Hand pulling: to be applied to plants of every size. It is convenient to perform the action before fructification. On more compact substrates, hand pulling should be made during the rainy season as to facilitate the removal of the root system.

Chemical control

Foliar application of herbicide. Spray with herbicide (active substance: glyphosate) limiting as much as possible its application to the target species .

For additional information, visit the webpage www.invasoras.pt and/or contact us at invader@uc.pt.

REFERENCES

Carvalho JA, Silva L, Land EO (2008) *Symphytotrichum subulatum* (Michx.) G. L. Nesom var. *squamatum* (Spreng.) S. D. Sundb. In: Silva L, Land EO, Luengo JLR (eds) Flora e fauna terrestre invasora na Macaronésia. Top 100 nos Açores. Madeira e Canárias, Arena, Ponta Delgada, pp. 315-317.

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