

Senegal tea

Invasive Species Unit

Introduction

Senegal tea (*Gymnocoronis spilanthoides*) is a highly invasive and destructive aquatic weed occurring in scattered infestations in NSW. It is a hardy plant with a rapid growth rate, growing on the banks of watercourses and in shallow water.

Distribution

Senegal tea is native to tropical and subtropical America (from Mexico to Argentina). It is an invasive aquatic weed in New Zealand, India and China. It was introduced to Australia from India for the aquarium trade in the 1970s, and was first recorded as naturalised in the Manning River near Taree in 1980. Infestations have also occurred at Dapto, Byron Bay and Gloucester and these have since been controlled. The current distribution in NSW is made up of isolated infestations on the Central Coast, the Hunter and Sydney regions including Royal National Park and the Hawkesbury River.

Habitat

Senegal tea prefers tropical, subtropical and warm temperate regions, and will grow in damp floodplain soils, on the margins of creeks and dams, in wetlands and in still or slow-flowing fresh water. Plants can grow when fully submerged, but growth is slower and plants are smaller. In some infestations plants have been found growing on the floodplain up to 150 m from the water body.

Impact

Senegal tea can form dense erect stands, or extend mats of stems from the banks across the water surface. This impedes flow, ecosystem function, navigation, and recreational activities.



Figure 1. Senegal tea infestation.

Senegal tea is one of 28 weeds on the Australian Government's National Environmental Alert List. These weeds are in the early stages of establishment and could seriously threaten biodiversity if not managed.

Description

Senegal tea is a perennial plant that can grow in dense stands or as clumped bushes up to 1 m high.

Leaves and stems

Stems are ribbed, pale green and erect, becoming prostrate as they lengthen and age. They are hollow between the nodes and buoyant, able to form tangled floating mats. Stems branch at nodes and are 1 – 1.5 m long and 5 – 10 mm in diameter, increasing to 1 – 2 cm with age. Fine, fibrous roots form at stem nodes.



Figure 2. Young, erect stems.



Figure 3. Fine fibrous roots form at nodes.

The tapered leaves are dark green, 5 – 20 cm long, 2.5 – 5 cm wide, grow on short stalks and have serrated, slightly wavy margins. They occur in opposite pairs along the stems.



Figure 4. Opposite leaves with serrated margins.

Flowers and seeds

White, pom-pom-like flowers 1.5 – 2 cm in diameter occur in groups at the ends of stems. Flowering starts in late spring or early summer and continues until temperatures fall. Flowers have a strong fragrance. Seeds are yellow-brown, 5 mm in diameter, and ribbed.



Figure 5. Senegal tea has white pom-pom-like flowers.



Figure 6. Flowers occur at the ends of stems.



Figure 7. Senegal tea is an aggressive invader of waterways.

Lifecycle and spread

Senegal tea reproduces by plant fragments and by seed. Plant fragments develop roots and new stems when they come into contact with soil.

Most new infestations in Australia occur as a result of plant fragments. While Senegal tea produces prolific amounts of seed, seed germination appears to be a minor form of spread in Australia.



Figure 8. New plants form from fragments.

Light is required for seed germination and most seeds germinate in spring (some continue to germinate through summer). Seedlings develop

quickly as temperatures increase. Seeds can germinate in shallow water, and most fall close to the parent plant. Seeds can be moved in faster flowing water or in mud on vehicles or animals. Plant fragments can be moved in flowing water or in flood waters.

Plants are dormant during winter, reshooting from the crown and from protected buds at stem nodes the following spring.

Control and management

Control should not be attempted by individuals as Senegal tea can spread very easily from plant fragments. If you suspect you have Senegal tea seek advice from your local Council Weeds Officer. Senegal tea is a Class 1 notifiable weed in NSW that must be reported to the Council or Local Control Authority. This plant can be eradicated if detected early in its establishment.

Chemical control

Metsulfuron-methyl and glyphosate herbicides are registered for use against Senegal tea under the Australian Pesticide & Veterinary Medicines Authority (APVMA) permit PER11567. This permit expires in June 2014.

Check www.apvma.gov.au for current permits or refer to the *Noxious & Environmental Weed Control*

Handbook (copies are available from the Industry & Investment NSW Bookshop, phone 1800 028 374 or online at www.dpi.nsw.gov.au/weeds).

Only persons described in current permits may carry out herbicide treatments on Senegal tea.

Local Control Authorities in NSW have achieved complete control of small infestations of Senegal tea with repeated applications of herbicide.

Physical removal

Mechanical and manual removal can be carried out in small accessible infestations. Issues associated with disposal of the removed plant material and soil and the risk of spreading stem fragments are major concerns. Again it is recommended that control not be attempted by individuals. Qualified personnel should treat infestations with herbicide prior to removing plant material to reduce the risk of spreading viable stem fragments. Removed plant material should be dried and incinerated wherever possible as any plant material and soil that remains damp has the ability to spread viable plant fragments and seeds.

Report suspected Senegal tea

If you have seen this plant report it to your Local Council Weeds Officer or Industry & Investment NSW for positive identification.

For more information contact your Local Council Weeds Officer or District Agronomist, or telephone the Industry & Investment NSW Hotline on 1800 680 244

Legislation

Senegal tea is a Class 1 Notifiable Noxious Weed throughout NSW under the *NSW Noxious Weeds Act 1993*. The plant must be eradicated from the land and the land must be kept free of the plant. The plant must not be sold, propagated or knowingly distributed. As a notifiable weed all outbreaks of Senegal tea must be reported to the Local Control Authority within three days.

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Publications available

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