Alligator weed

Alternanthera philoxeroides

www.weedbusters.org.nz

Family
Amaranthaceae (amaranth)

Where is it originally from?
South America

What does it look like?
Perennial aquatic or terrestrial herb with long, fibrous roots. Pink, soft, hollow stems (<10 m long) root at nodes, creep along ground, or float on water with tips standing upright and forming dense stands or rafts. Dark green, waxy leaves (3-13 x 1-4 cm) are opposite. Clusters (1-2 cm diameter) of white clover-like flowers appear from December to February but no seed is produced in New Zealand.

Photo: Trevor James

Are there any similar species?
Mukunu-wenna (*Alternanthera sessilis*), nahui (*Alternanthera denticulate*), *Ludwigia* species, and willow weed and watercress all look similar.

Why is it weedy?
Rapidly forms dense mats over water and margins, with roots down to 2 m deep. Stem sections break and root readily. Tolerant of 30% sea water, high temperatures, high pollutant levels, grazing, and other damage, but intolerant of frost. Difficult to eradicate with herbicides.

Photo: Trevor James

How does it spread?
Reproduces from stem sections only. Water flow, contaminated diggers, soil movement, dumped vegetation, machinery, eel nets, livestock, boats and trailers all spread fragments into new catchments, pastures, cropping land, waste places and drains. Also potentially spread by ethnic groups mistaking alligator weed for mukunu-wenna (*Alternanthera sessilis*), which they use as a vegetable.

What damage does it do?
Replaces most other herbaceous species on water and dry land, causes silt accumulation, obstructs water usage, and causes flooding. Rotting vegetation degrades habitats for aquatic fauna and flora.

Which habitats is it likely to invade?
Freshwater and moderately brackish sites, estuaries, damp habitats, dune lakes and hollows and wetlands, and can also grow in dry pastures, crops and urban areas.

What can I do to get rid of it?
Report all sites to your regional council. Do no attempt to spray aquatic infestations as herbicide use over water requires resource consent and special permissions. For further information regarding the rules in your area, or for control advice for terrestrial (land-based) infestations, contact your regional council.
Biocontrol - For information regarding biocontrol agents for alligator weed, please visit:
https://www.landcareresearch.co.nz/discover-our-research/managing-invasive-species/weed-biocontrol/projects-agents/biocontrol-projects/alligator-weed

Photo: Trevor James

What can I do to stop it coming back?
Excluding stock from infested areas, lowering the light levels and nutrient runoff by planting along waterways can help in the ongoing management of alligator weed sites. As stems potentially resprout at every node, regular checking of sites after control efforts is essential. There are biocontrol agents available for alligator weed growing over water - contact your regional council to see if this option is suitable for your site.