Alligator weed

Alternanthera philoxeroides

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.

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.

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.

- 1. Dig out small patches: either dispose of all pieces at a refuse transfer station, or dry them out and burn them don't leave pieces of alligator weed on the top of soil or attempt to compost them as each piece can regrow.
- 2. Spray terrestrial sites (spring to autumn): glyphosate (20ml/L) or metsulfuron-methyl 600g/kg (5g/10L). Use penetrant in all herbicide mixes.
- 3. Spray aquatic sites (spring to autumn): glyphosate (20ml/L + penetrant).
- 4. Weedmat: cover site for 6-12 months to keep out light, checking edges for creeping stems.

CAUTION: When using any herbicide or pesticide, PLEASE READ THE LABEL THOROUGHLY to ensure that all instructions and directions for the purchase, use and storage of the product, are followed and adhered to.

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



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Photo: Trevor James



Photo: Carolyn Lewis



Photo: Carolyn Lewis

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.