Mistflower, also known as ‘creeping crofton weed’, is an introduced weed of south-east Queensland. Originally introduced as an ornamental plant, mistflower quickly invades disturbed areas and reduces pasture production.

An aggressive weed in south-eastern Queensland, mistflower spreads into pastures, reducing the carrying capacity significantly. It will also spread into bushland displacing native vegetation. It will quickly invade disturbed areas on frost-free slopes and dominate riverine groundcover habitats, excluding many native species and the native animals that rely on those plants.

There is no field evidence to support claims that the plant is toxic to stock.

Well-managed pastures combined with timely herbicide use will control mistflower before it becomes thickly established. Early prevention is best to avoid costly problems at a later date.

**Legal requirements**

Mistflower is not a prohibited or restricted invasive plant under the *Biosecurity Act 2014*. However, by law, everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control.
Local governments must have a biosecurity plan that covers invasive plants and animals in their area. This plan may include actions to be taken on certain species. Some of these actions may be required under local laws. Contact your local government for more information.

**Description**

Mistflower is a low-growing, sprawling perennial herb 40–60 cm high. It has numerous branching stems that produce roots at the joints where they touch the ground. Leaves are opposite, mostly 7.5 cm long and 2.5 cm wide, toothed along the edges and tapered at each end.

White flowers, similar to those of crofton weed, are produced in winter, in small, dense heads at the ends of the branches.

Seeds are slender, angular, 2 mm long, black, with fine white hairs at the tip.

**Life cycle**

Seeds germinate in late spring–summer. Budding occurs around July–August, with full flowering occurring in the period August–October. After flowering, the top of the plant dies off and reshoots from the base. Seeds (achenes) are wind-borne but would normally not travel great distances. They are also carried by running water.

**Habitat and distribution**

A native of Central and South America, mistflower is restricted to the south-eastern corner of Queensland. It is common on damp hillsides among rocks, along shaded, damp creek banks and in other sheltered, moist places. There is considerable invasion of steep hillsides and roadsides in wetter plateau areas, with the plant favouring south-facing slopes.

**Management strategies**

Seeds are transported by wind and running water so, where possible, plants should be treated before flowering or certainly before hard seed is formed.

**Control**

**Biological control**

A stem gall fly was introduced from Hawaii and released in the field in 1987. Unfortunately, the gall fly has had little impact on mistflower plants as a result of attack by native parasites; it is therefore not a suitable option for controlling mistflower.

**Mechanical control**

Pull out small plants and ensure proper disposal by burning them or putting them into plastic bags to rot down.

Cultivation, grubbing, hoeing and burning where appropriate followed by planting of competitive pastures, or replanting with native vegetation, will control mistflower. However, mechanical methods other than hand pulling may not be feasible in steep, rocky hillsides or over large areas.

**Herbicide control**

Table 1 details the herbicides registered for the control of mistflower. Before using any herbicide, always read the label carefully. All herbicides must be applied strictly in accordance with the directions on the label.

**Pasture management**

To provide competition for mistflower seedlings, ensure you manage stocking rates and fertilise pastures.

Do not overgraze pasture. Aerial application of fertiliser in steep country produces thick pasture, which will provide strong competition for mistflower. Re-establishment of pasture, where necessary, after herbicidal control is recommended to restrict seedling regeneration and prevent erosion. Newly established pastures preferably should not be grazed until they have seeded.

Any regrowth of mistflower should be spot sprayed with any of the herbicides listed.

**Further information**

Further information is available from your local government office, or by contacting Biosecurity Queensland on 13 25 23 or visit www.biosecurity.qld.gov.au.
<table>
<thead>
<tr>
<th>Situation</th>
<th>Herbicide active ingredient</th>
<th>Rate</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-agricultural&lt;br&gt;Commercial and industrial land&lt;br&gt;Rights-of-way</td>
<td>dicamba 200 g/L (e.g. Banvel 200&lt;sup&gt;®&lt;/sup&gt;)</td>
<td>30 L/ha</td>
<td>Add wetting agent and use 1000–2000 L water/ha</td>
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<td></td>
<td></td>
<td>2 L/100 L</td>
<td>High volume</td>
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<td></td>
<td></td>
<td>450 mL/15 L/150 m&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Knapsack</td>
</tr>
<tr>
<td>Pastures&lt;br&gt;Non-agricultural, commercial&lt;br&gt;and industrial land&lt;br&gt;Rights-of-way</td>
<td>glyphosate 360 g/L (e.g. glyphosate 360)</td>
<td>0.5 L/100 L</td>
<td>Handgun</td>
</tr>
<tr>
<td></td>
<td></td>
<td>75 mL/15 L</td>
<td>Knapsack</td>
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<tr>
<td></td>
<td></td>
<td>3 mL of 1:9 (10%) solution per m&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Sprinkler sprayer</td>
</tr>
<tr>
<td>Pastures&lt;br&gt;Commercial and industrial land&lt;br&gt;Rights-of-way</td>
<td>metsulfuron methyl 600 g/kg (e.g. Brush-Off&lt;sup&gt;®&lt;/sup&gt;)</td>
<td>5 g/100 L</td>
<td>Apply at any time of the year but preferably when plants are actively growing. Avoid the post-flowering senescent period</td>
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<tr>
<td>Pastures&lt;br&gt;Commercial and industrial land&lt;br&gt;Rights-of-way</td>
<td>fluroxypyr 200 g/L&lt;sup&gt;4&lt;/sup&gt; (e.g. Starane&lt;sup&gt;®&lt;/sup&gt;)</td>
<td>0.5 L/100 L</td>
<td>Pasture legumes may be damaged</td>
</tr>
<tr>
<td></td>
<td></td>
<td>75 mL/15 L</td>
<td>Knapsack; pasture legumes may be damaged</td>
</tr>
<tr>
<td>Pastures&lt;br&gt;Commercial and industrial land&lt;br&gt;Rights-of-way</td>
<td>picloram 75 g/L + 2,4-D 300 g/L&lt;sup&gt;3,4&lt;/sup&gt; (e.g. Tordon 75-D&lt;sup&gt;®&lt;/sup&gt;)</td>
<td>1 L/100 L</td>
<td>Pasture legumes may be damaged</td>
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<tr>
<td></td>
<td></td>
<td>0.65 L/100 L</td>
<td>Spot spray</td>
</tr>
<tr>
<td>Pastures&lt;br&gt;Commercial and industrial land&lt;br&gt;Rights-of-way</td>
<td>picloram&lt;sup&gt;2,4&lt;/sup&gt; + trichlopyr (e.g. Grazon DS&lt;sup&gt;®&lt;/sup&gt;)</td>
<td>0.35 L/100 L</td>
<td>Pasture legumes may be damaged</td>
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<tr>
<td></td>
<td></td>
<td>2.5 L/100 L</td>
<td>Misting</td>
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</table>

Notes:
1 The optimum time for spraying is at the budding stage of growth.
2 Products containing picloram should not be used in Hazardous Area No. 1 (Moreton Bay Regional Council and Sunshine Coast Regional Council).
3 Must not be used in hazardous areas without a Biosecurity Queensland permit.
4 Products containing fluroxypyr or picloram plus 2,4–D have a 7–day withholding period in agricultural situations before grazing or cutting for stockfeed.

Read the label carefully before use. Always use the herbicide in accordance with the directions on the label.