# Cumbungi

*Typha* species



Cumbungi is the most widespread water weed in north Queensland. Infestations of cumbungi interfere with water flow to form swamps, shorten bore drains, reduce water quality, provide breeding places for vermin and mosquitoes, and reduce stock access to water.

# **Legal requirements**

Cumbungi 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 measures to minimise the biosecurity risks associated with invasive plants under their control.

Local governments must have a biosecurity plan that covers invasive plants in their area. This plan may include actions to be taken on cumbungi. Some of these actions may be required under local laws. Contact your local government for more information.



# **Description**

There are three species of Cumbungi in Australia. Narrow-leaf cumbungi (*Typha domingensis*) and broad-leaf cumbungi (*Typha orientalis*) are native species, while bulrush (*Typha latifolia*) is an introduced plant native to Europe.

Generally the leaves of the introduced cumbungi are about 1 m long, compared to 2–3 m long for the native species. All species grow in permanent fresh or brackish water. Leaves grow in bunches from below water level, are flat or slightly rounded and are sometimes springy.

Flowering stems grow erect from the middle of the leaf cluster, are round and stiff, and near the top bear two oblong-brown compact masses of small furry flowers. The masses of flowers are sometimes separated by a short length of stem. On maturity, the upper mass disperses first, leaving a 10–20 cm dark brown velvety spike.

## **Habitat and distribution**

Cumbungi is found throughout Queensland in stationary or slow-flowing water up to 2 m deep.

## **Control**

## **Mechanical control**

If accessible, slashing while the seed head is still green provides some control. Repeated slashing is necessary to maintain control as slashing alone will not kill cumbungi.

#### Herbicide control

Cumbungi should be sprayed when actively growing and before seed is set.

Various herbicides are recommended for different situations (see table for rates and methods).

It is important to consider the intended use of the water before deciding which treatment to use:

#### Water for household or recreational use

The safest control method, and the only alternative where water is for household or recreational use, is to spray with glyphosate using either low volume or high volume methods. Glyphosate formulations registered for use in aquatic situations should be used where water is present.

As long as care is taken to avoid spraying non-target plants, these methods are safe in any situation. There is no need to withhold stock or change methods of water usage.

The treatment should be repeated annually to ensure that the bullrushes do not reinfest to any great degree. To avoid loss of water quality caused by the dead plants collapsing into the water, it is best to burn the plant above the water surface six weeks after spraying.

#### Waterways, channels and drains

In waterways, channels and drains where water is not used for household, gardening or recreational purposes, 2,2-DPA (a soluble powder) can be used. This product, however, is not always readily available.

Amitrole-T is also effective and economical for spot spraying in irrigation channels, and can be used when channels are full.

#### Bore drains and dams

In bore drains and dams, again, where water is not used for household, gardening, or recreational purposes, glyphosate/roundup or diurex WG can be used.

## **Pasture**

Glyphosate or roundup can be used to control cumbungi in pasture situations, however care must be taken as these herbicides will kill pasture grasses and legumes. Use of wiper equipment is recommended.

# **More information**

More information is available from your local government or visit biosecurity.qld.gov.au.



Table 1. Herbicides for the control of cumbungi

Situation	Herbicide	Rate	Comments
Waterways, channels and drains	Glyphosate 360 g/L (e.g. Weedmaster Duo, Roundup Biactive) and other formulations registered for use in aquatic situations	1.3 L/100L 200 mL/15L 9 L/ ha Consult labels for correct rate for other formulations	High volume spray (hand gun/ knapsack/boom) Consult label for details
		1 part glyphosate 360 to 2 parts water Consult labels for correct rate for other formulations	Weed wiper Consult label for details
	2,2-DPA 740 g/kg (e.g. Dalapon SP Systemic Grasskiller)	2 kg/100 L 20 kg/ha	High volume spray (use 2000 L/ha). Channels and drains should be dry or have at most 5–8 cm of water.
Irrigation channels: only supply channels and tail drains that are lockable or that lead to recirculation dams or settling ponds	Imazapyr 250 g/L (e.g. Unimaz 250 SL, Warrant 250)	3 L/ha	Restrictions apply Read label carefully
	Imazapyr 150 g/L + glyphosate 150 g/L (e.g. Arsenal Express)	5 L/ha	
Bore drains	Glyphosate 360 g/L (e.g. Weedmaster Duo, Roundup Biactive) and other formulations registered for use in aquatic situations	1.3 L/100L 200 mL/15L 9 L/ ha Consult label for correct rate for other formulations	High volume spray (hand gun/knapsack/boom) Consult label for details Easier to use. Can use for household and recreational water.
		1 part glyphosate 360 to 2 parts water Consult labels for correct rate for other formulations	Weed wiper Consult label for details
Irrigation channels	Amitrole 250 g/L+ Ammonium Thiocyanate 220 g/L (e.g. Amitrole-T)	2.3 L/100 L	Apply during flowering period between January and May. Effective and economical for spot spraying.
Pasture	Glyphosate 360 g/L (e.g. Roundup) and other formulations	1.3 L/100 L 200 mL/15L 9 L/ha Consult label for correct rate for other formulations	High volume spray (hand gun/knapsack/boom). Consult label for details. Will kill pasture grasses and legumes. Use of wiper application recommended for direct application to plant.
		1 part glyphosate 360 to 2 parts water Consult labels for correct rate for other formulations	Weed wiper Consult label for details

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

