

Olive Hymenachne

Hymenachne amplexicaulis

Olive Hymenachne was introduced into Australia from South America as a ponded pasture but has since become a declared weed of national significance. If left unchecked, this weed can clog waterways, causing localised flooding as well as threatening native wetland habitats.



Above: Dense Olive Hymenachne covering entire wetlands. (Photo J. Clarkson, Newsletter of the Weed Society of Queensland, Issue 47, 2011.)

Description

This weed is a robust, rhizomatous, perennial grass that can grow from 1.5 to 2.5 m high. Stems will float on water or spread over moist soil with the end portion growing erect, often stoloniferous at the base with roots seen at the nodes. The leaf blades can range from 3 to 6 cm wide and 35 to 45 cm long; the base of leaf blade has a prominent membranous rim (ligule) that looks as though it clasps against the stem. The seed heads are cylindrical in shape and are about 8 mm wide by 40 cm long and flower in summer and autumn.



Above: Olive Hymenachne flower.

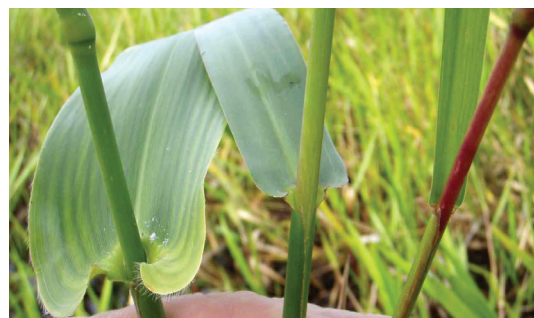
As this weed is often used as stockfeed, cattle as well as a number of water dwelling birds, in wetland areas are known to disperse this weed quite easily. Flood water will also break parts of the Olive Hymenachne off where it will vegetatively take root if it is deposited in a favourable position. This weed can grow in deeper water than any other ponded pasture and will quite happily grow in water up to 2 m deep.

Olive Hymenachne, or 'Olive' as it is commonly known, should not be confused with the native Hymenachne (*Hymenachne acutigluma*) species. Native Hymenachne is a tropical species and does not grow south of Mackay. This species is not considered invasive or a threat to agriculture or other areas, and can be distinguished by its lack of stem clasping leaf base seen on Olive Hymenachne.



Above: Olive Hymenachne in a cane field.

In 2011, it was confirmed that Olive Hymenachne and the native species has hybridised resulting in a new species *Hymenachne x calamitosa*.



Above: Leaf blade bases of *Hymenachne* spp. Left to right: *H. amplexicaulis*, *H. x calamitosa* and *H. acutigluma*. (Photo J. Clarkson, Newsletter of the Weed Society of Queensland, Issue 47, 2011.)

Control measures

Post-Emergent / Recovery control

To control this weed in waterways a temporary permit has been obtained so those that are 'trained and experienced in the use of Agricultural pesticides' can use either:

Haloxypop (520 g/L) (**Verdict 520®**) at 770 mL/ ha + 1-2 L/ha of **Bonus®** adjuvant

Or

Glyphosate Isopropylamine salt (360 g/L) (**Roundup Biactive®**) at 14 L/ha + 1-2 L/ha of **Bonus®** adjuvant

Once a waterway or water body has dried up, Glyphosate 360 at 14 L/ha can be used to control the weed.

Hymenachne is incredibly difficult and costly to control. If the main source of infection is not from your farm, it can become even harder. The above control measures should adequately control out-of-control infestations of this weed. If this weed is present in a water body that dries out annually a good control strategy would be to:

- > Spray the initial weed infection with Glyphosate at the recommended rate.
- > Wait until Olive Hymenachne has browned off and dried out.
- > Burn the remaining biomass; as if the fire is hot enough it will also kill the seeds that are close to the surface.
- > Monitor treated area and control any emerging seedling using Glyphosate.

For more information about controlling Olive Hymenachne on your farm contact your local BSES Extension Officer.

Further reading

The Queensland government has a number of information sheets and a control strategy for Olive Hymenachne at dpi.qld.gov.au/4790_8068.htm.



Above: Olive Hymenachne leaf sheath.