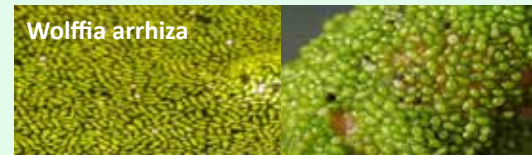


DUCKWEED QUICK TREATMENT REFERENCE GUIDE



There are three major species of duckweed present in Australia; Lemna minor, Spirodela polyrhiza and Wolffia arrhiza. Duckweed is a native, fast-growing weed which can form dense mats that can cover the entire surface of a water body.



Lemna minor
A common tiny native plant which floats freely on the water's surface. The leaves of the plant are green above and red below. They have three (rarely five) veins and small air spaces to assist flotation.

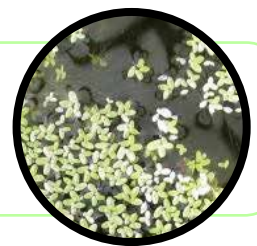
Spirodela polyrhiza
A free floating aquatic plant that is typically larger than other species of Duckweed. It usually has two to three oval leaves which are 5 to 10 mm long with several veins, 7 to 16 on each leaf.

Wolffia arrhiza
A native plant typically smaller than the other species of Duckweed. The green part of the plant, the frond, is a sphere measuring about 1 mm wide, but with a flat top that floats at the water's surface.

Primary Growth Stage

0-30% of the water body is covered in Duckweed

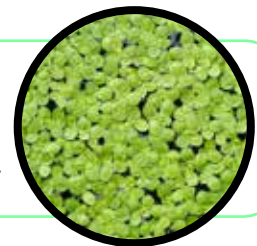
Primary growth occurs in the early stages of an infestation, when plants are not crowded.



Secondary Growth Stage

30-60% of the water body is covered in Duckweed

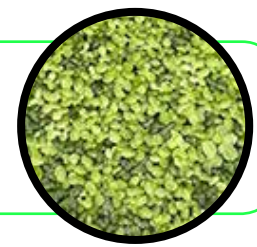
Secondary growth occurs when the water surface is barely visible but the Duckweed is still only a single layer.



Tertiary Growth Stage

60-100% of the water body is covered in Duckweed

Tertiary growth occurs when the plants become crowded and mature in infestation. Overlapping is common.



Multilayered Growth Stage

100%+ of the water body is covered in Duckweed (mature & overlapping growth)

Tertiary weed mats become multilayered, displaying ridge-like thickenings as layers overlap and build up.



Once you have categorised your Duckweed bloom, you can then choose your treatment. Use the table below to help you:

Growth Stage	Treatment Options		
	AQ200 Herbicide	Orange Oil Herbicide	Duckweed Skimmer
Primary	✓	✓	✓
Secondary	✓	✓	✓
Tertiary	✓	✓	✓
Multilayered	✓		

TREATMENTS AQUATIC TECHNOLOGIES OFFER

What you use your water body for will also play a role in the type of treatment most suitable for you. For example if you are unable to withhold using the water for 10-days, then a traditional herbicide may not be suitable.

There are different treatment methods available to suit most types of water bodies. Continue reading to find out which treatment is most suitable for your waterbody.

Chemical Herbicide Treatment: AQ200 + Wetting Agent

1L of AQ200 + 500mL Wetting Agent will treat between 250m² – 500m² of surface area depending on how dense the Duckweed growth is.



Tips for treatment:

- If Duckweed is greater than 60% surface coverage and/or is multilayered, AQ200 is the only treatment method that will work.
- AQ200 is a 1-hit application that requires no follow up. Spot treat any new Duckweed with AQ200 as needed.
- Using a gentle shower spray, spray the AQ200 + Wetting Agent evenly to make contact with the Duckweed. When multilayered, make sure to well wet the Duckweed with AQ200 to get good coverage.
- AQ200 is a non-residual herbicide that has a strict 10-day withholding period after use. DO NOT use the water for human consumption, irrigation, livestock watering, etc. for 10 days after application.

Orange Oils: Natural Treatments

1L of Orange Oil will treat between 250² - 500m² of surface area depending on the Duckweed coverage.



Tips for treatment:

- Suitable for lower level infestations up to 60% surface coverage. For large infestations greater than 60% coverage, consider AQ200 or physical removal.
- Orange Oil is a natural herbicide that won't alter the water and has no withholding period. The water can be used immediately after application.
- Orange Oil requires a minimum of 3 separate applications, on day 1, day 2, and day 4. It's advised to do several light applications, instead of a single heavy dose.

Physical Removal: Duckweed Skimmers



Tips for treatment:

Physically removing Duckweed from the water's surface with an Duckweed Skimmer will reduce the likelihood of future blooms by decreasing the total amount of nutrients in your waterbody. Nutrient-rich water lets aquatic vegetation thrive, meaning you may experience repeat infestations of unwanted Duckweed or other aquatic weeds.

Easily remove Duckweed from your water body in 4 steps:

1. Toss the skimmer in the water
2. Slowly pull it back in using the string attached
3. Dump the Duckweed out onto the bank or into a container for easy transport
4. Repeat
5. Follow-up spot spraying with either AQ200 or Orange Oil herbicide is recommended.