

Peruvian primrose (Ludwigia peruviana)

Weed management guide



February 2023

www.lls.nsw.gov.au/regions/central-west



In NSW, weeds are regulated by the NSW Biosecurity Act, 2015. All land managers have a General Biosecurity Duty to contain the spread of weeds.

"General Biosecurity Duty means that any person dealing with plant matter must take measures to prevent, minimise or eliminate the biosecurity risk (as far as is reasonably practicable)."

The Regional priority for Peruvian primrose is Prevention. In order to achieve this, Land Managers are asked to: Mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.

For further information, contact your local Biosecurity (Weeds) Officer via Central West Local Land Services or visit NSW WeedWise.





Habit and description

Peruvian primrose is a shrub that can grow up to 3 m high. Branching stems of this plant are hairy when young and mature to dark green to brownish green. The leaves are arranged alternately along the stem and are sessile/stalkless. Leaves can grow 5-10 cm long and 1-3 cm wide and are oval-shaped with a pointed tip. Flowers last a day and are bright yellow 2-4cm across, with 4 petals (sometimes 5-6), growing in fork of upper leaves. It has a reddish-brown capsule-type fruit containing numerous seeds.

Two other Ludwigia species can be confused with this plant. The native *L. peploides* ssp. *montividensis* has a long narrow fruit, floating stems which root at the nodes, and longer leaf petiole. Meanwhile, the introduced *L. longifolia* (Long-leaf water primrose) does not have hairs on its stems, leaves or fruits.

It generally thrives on the margins of waterways and wetlands and is known to exist in Sydney, and to a lesser extent, Hornsby, Gosford, and Port Stephens. It prefers to grow in humid warm-temperate to tropical regions.



Photo: © Graham Prichard | NSW DPI



Photo: © Graham Prichard | NSW DPI



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Photo: © Steve Gallagher | iNaturalist

Reproduction and spread

Peruvian primrose spread by seeds or vegetatively by plant parts. Because of its proximity to water, this is the main vector for seed dispersal. However, it can also be spread by animal vectors such as birds as they travel to other wetlands. The seeds have an 80% viability rate and can germinate as quickly as four days, in water, while floating or on top of mud. Root and stem fragments of this plant can spread and take root elsewhere. Even whole plants can be swept by floods and form floating living islands until it reaches land.

Impacts

Agriculture

• When a dense infestation of Peruvian primrose has developed, it can potentially interfere with access of animals to drinking water.

Native vegetation



- As Peruvian primrose grow mainly on the fringes of waterways, it can impede the flow of streams and increase sedimentation.
- The prolific growth of this plant also results in more organic material than what a wetland ecosystem can support leading to deoxygenation of the water.
- Once established, it intercepts almost all light, crowding other native water plants and affecting the wildlife that depend on these.

Management

Chemical



- Herbicides can be applied by foliar spraying or by cut stump method. Apply these when the plants are actively growing.
- Seek the guidance of an experienced Weeds Officer for expert advice on herbicide use.
- Visit <u>www.apvma.gov.au</u> for a list of registered products, product labels and permit requirements.
- NSW DPI (2018) provides a list of recommended herbicides for the control of Peruvian primrose at https://weeds.dpi.nsw.gov.au/Weeds/Ludwigia

Non-chemical



- Dense planting of native vegetation can help prevent the establishment of Peruvian primrose as its seeds require high light levels to germinate.
- Once there is evidence of seedlings in the area they must be physically removed immediately making sure to take out as much root as possible.
- This plant does not produce seeds for the first 18 months, and this is the best time to eradicate.
- Larger infestations can be slashed and burned but follow-up herbicide application may be required.

Weed type Shrub

Management calendar

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
	Life cy	cle										
Ì.	Flowerin	g						()	<u> </u>			
				200	Seed disp	persal						
									Cermination			
	Vegetati	ve growth ·	— Rapid du	iring summ	er							
ŝ	Manag	ement to	ols									
	using sla	al removal sh and burr or to seed c	of large in technique lispersal.	festations s should								
										oval can oc hen plants a		ring to
									Foliar spra are activel summer	ying should y growing d	l occur whe luring sprin	en plants g and
Basal bark and cut stump method can be applied to larger plants throughout the year												
	Avoid applying herbicides during wet conditions to minimise chance of herbicide runoff. Apply during active growing period to maximize effectiveness of herbicide.											

Optimal control options may vary depending on your location and climate. Consult an experienced Weeds Officer based in your local government area for control methods suited to your conditions.

All herbicides must be used in accordance with the herbicide label and permit requirements.

Further information

For more information on your general biosecurity duties, visit www.dpi.nsw.gov.au/biosecurity.

For the best guidance on how to meet this duty on your property, contact your expert Weeds Officer at your local council or via Local Land Services www.lls.nsw.gov.au/regions/central-west.

NSW WeedWise



References

NSW DPI. (2021). NSW WeedWise. https://weeds.dpi.nsw.gov.au/ Weeds/Ludwigia Damian Wray Biosecurity & Weeds Officer

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