Rice weeds

Pocket guide





Introduction

Effective weed control in rice crops is a vital part of successful and profitable rice production. Early or timely control of weeds will help avoid future weed issues. Yield loss from weeds varies enormously from very little impact to a complete loss. Weed infestations lower crop yields by competing for nutrients, space and light. This competition can also affect grain quality, impede harvesting efficiency and result in paddy contamination at delivery with increased penalties for the grower.

Growers should aim to reduce weed numbers and keep them low with an ongoing program. An integrated weed management system, which combines all available methods, is the key to successful weed control.

This guide aims to aid growers and agronomists to accurately identify weeds in rice crops. For information on herbicide options to manage weeds in rice see 'NSW DPI Rice crop protection guide.'

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Rice (Oryza sativa)

Key features







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Collar region of silvertop showing absence of auricles Collar region of rice showing hairy auricles

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Barnyard grass (Echinochloa spp.)

Semi aquatic annual





Seed: round, 1–7 mm Seedling leaves: hairless, no ligules or auricles present unlike rice.

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Leaf colour: bright green to blueish green, often with distinctive red markings.

Growing habit: erect or prostrate depending on species.













Silvertop grass (*Leptochloa fusca syn. Diplachne fusca*)

Semi aquatic annual or short lived perennial



Seed: enclosed in a light buoyant husk.

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Seedling leaves: hairless, narrow and droopy membranous ligules, no auricles present at leaf stem junction.

Leaf colour: dull green with a pronounced white mid-vein.

Growing habit: erect.

Control: by cultivation or heavy grazing before the rice crop and applying a selective herbicide early in growth stage will avoid yield loss.





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Arrowhead (Sagittaria montevi)

Aquatic perennial





Seed: small wing shaped, about 20 per flower. Seedling leaves: narrow straplike, similar to starfruit. Leaf/stem colour: bright green.

Growing habit: erect.

Control: by drill sowing if there are dry periods between flushes to help avoid weed establishment; rotate herbicides to avoid resistance.













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Dirty dora (Cyperus difformis)

Semi aquatic annual





Seed: extremely small, less than 1 mm.

Seedling leaves: linear leaves growing from base.

Leaf/stem colour: stems are bright green and triangular.

Growing habit: erect; seeds germinate quickly but require moist or wet conditions to survive.

Control: by using herbicides with different modes of action for the best effect; drill sowing will help if there are dry periods between flushes to desiccate germinating seedlings.







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Jerry jerry (*Ammannia multiflora*)

Semi aquatic annual





Seed: very small round brown seed 0.4 mm long, 0.4 mm wide.

Seedling leaves: narrow oblong to lanceolate, arranged opposite along the stem. Leaf colour: light green. Growing habit: erect, rigidly branched. Control: by crop rotation.









Water plantain (Alisma plantago-aquatica)

Aquatic perennial









Seed: extremely small and buoyant to aid dispersal; corms also reproduce.

Seedling leaves: 100–250 mm long, 70–100 mm wide, with seven prominent parallel veins connected by numerous transverse veins; leaves are attached to a long stem; ovate to lanceolate shaped.

Leaf/stem colour: green; stems can be pink.

Growing habit: erect; seeds germinate quickly but require moist or wet conditions to survive; plants from corms are quicker to establish.

Control: by cultivation and long fallow to help control corms.







Starfruit (Damasonium minus)

Aquatic annual or biennial









Seed: small black capsule 1–2 mm long.

Seedling leaves:

narrow and strap like, radiating from the centre of the plant.

Leaf/stem colour: bright green.

Growing habit: erect; seeds will germinate after several days of continuous flooding.

Control: by drill sowing if there are dry periods between flushes to avoid seed germination.





Seedlings Rice compared with weeds







Identify weeds early for effective in-crop control.

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