

ADAMA

Marathon®

Always a great mix.
Tank-mixes Technote

About Marathon

Marathon herbicide from ADAMA is an ideal tank-mix partner for early season control of challenging and herbicide resistant weeds in wheat and barley. This unique formulation contains 230 g/L pyrasulfotole (Group 27) with the convenience and peace of mind of an in-built crop safener. Marathon provides the flexibility to customise the pyrasulfotole rate with an extensive range of ADAMA tank-mix partners, including Bronco® 400, Colt®, Legacy® MA, LVE MCPA 570, Triathlon®, Quadrant®, Priority® and Picoflex®. It provides robust control of challenging and herbicide-resistant weeds, including Wild Radish, Sowthistle, Indian Hedge Mustard, Climbing Buckwheat, Bifora, Deadnettle and Prickly Lettuce, whilst patented formulation technology ensures the formulation remains robust under diverse environmental conditions.

Tank-mixing with Marathon

Emerging resistance to many herbicidal modes of action means it is increasingly difficult for grain producers to achieve effective weed control in cereal crops. While rotating between different modes of action remains a key component of managing herbicide resistance, combining effective herbicides with different modes of action can improve control of targeted weeds in a single application and help to delay the onset of resistance. Rotating buys you time – but tank-mixing buys you shots.

Common tank-mix options

Quadrant is widely used throughout the winter cropping regions of Western Australia and South Australia to target Wild Radish, Capeweed, Doublegee and 58 other broadleaf weeds. It contains four active ingredients (bromoxynil, MCPA, picolinafen and diflufenican) and three modes of action (Group 4, 6 and 12) in a convenient co-formulation.

The addition of Marathon to Quadrant creates a five-way tank-mix for improved control of an extensive range of problematic weeds, such as Wild Radish. This tank-mix allows Quadrant to be applied at a lower application rate (800 mL/ha vs 1000 mL/ha) and delivers four modes of action compared with the two applied in the Marathon + Bronco 400 (bromoxynil) tank-mix (Figure 1).

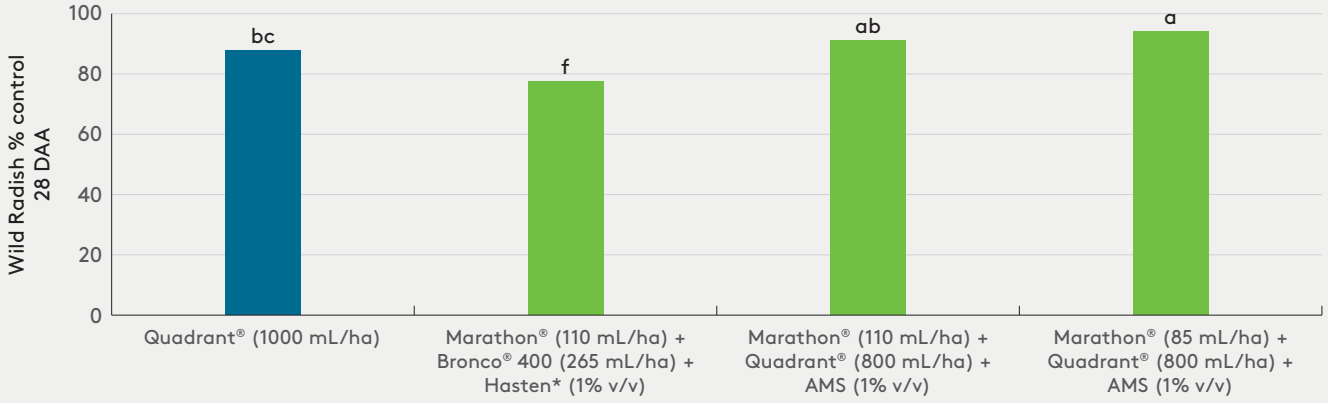


Figure 1: Wild radish % control in wheat 28 DAA (AD-AU-26-H20-01).

HERBICIDE

Marathon®

This trial demonstrates the addition of Marathon at a higher rate (110 mL/ha) may not be required when targeting small, actively-growing weeds under good conditions when robust tank-mix partners are also applied.

ADAMA recommends the inclusion of AMS in tank-mixes with Marathon, as pyrasulfotole responds very well to AMS addition.

Triathlon, containing bromoxynil, MCPA and diflufenican, is another convenient tank-mix partner for Marathon, more commonly used in the southern winter cropping regions.

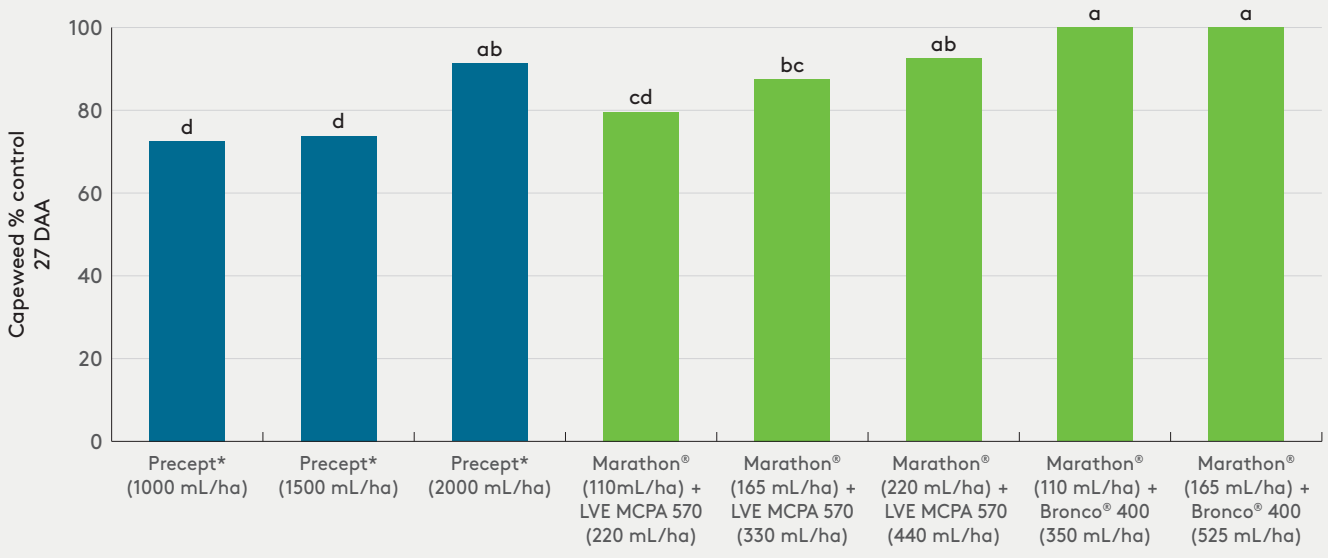
Bronco 400, a solo bromoxynil formulation, is also a suitable tank-mix partner for Marathon where less complex tank-mixes are required, such as when targeting Capeweed. This tank-mix provides superior efficacy compared with Marathon + LVE MCPA or Precept*, given known synergies between pyrasulfotole and bromoxynil (Figure 2).

Marathon is also commonly applied with **LVE MCPA 570** (Group 4), **Picoflex®** (picloram, Group 4), **Priority®** (florasulam, Group 2) or **Grindstone®** (aminopyralid, Group 4) in northern NSW and Queensland to target Fleabane, Sowthistle, Turnip Weed and volunteer pulses.

Summary

- Highly efficacious tank-mix partner
- Compatible with an extensive range of ADAMA herbicides
- Flexibility to tailor the pyrasulfotole rate and the ability to customise tank-mixes
- Synergistic activity between pyrasulfotole and bromoxynil
- Customise knockdown herbicide requirements with the added benefit of residual protection via inclusion of Group 12 (e.g. diflufenican or picolinafen) or Group 4 (e.g. picloram or aminopyralid) chemistry
- In-built crop safener for peace of mind





All mixes applied with Hasten @ 1% v/v.

Figure 2: Capeweed % control in wheat (27 DAA) (AD-AU-22-HS07-6, Vic, 2022).

Scan here for more information

Refer to label for specific application recommendations.
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