Herbicide resistant wild radish

Spray small weeds and make sure you hit them

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In 2012, the northern Regional Cropping Solutions Network (RCSN) group led by Cameron Weeks, Planfarm, invested their time and money into some wild radish herbicide trials in the Geraldton area. The group could have invested their small trial budget into any grain cropping related issue and they chose wild radish. This gives some indication of the challenge facing growers.

The trials were co-ordinated by Andrew Sandison, Planfarm and sprayed / rated by myself and Dave Nicholson, DAFWA. Four trials were conducted in all. The sites were chosen by local agronomists who aimed to find some nasty, resistant radish! The very simple agenda for this work was to come up with an alternative to spraying pyrasulfotole (Precept / Velocity) twice in a single wheat crop. These herbicides are known as being the last truly reliable option for wild radish control. Over reliance on these herbicides will lead to their demise.

Smart 2012 - surviving wild radish per plot - Nil first spray - treatments are second spray applied 8 Aug - rated 16 October

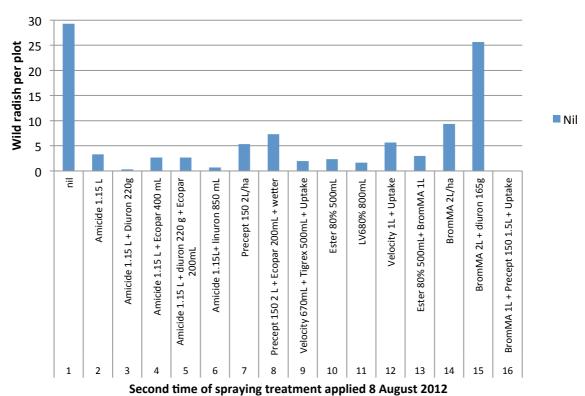


Figure 1. Surviving wild radish per plot counted on 16 October 2012 where there was Nil first spray. Wild radish were 8 weeks old at spraying (10 to 30cm) LSD 3.04.

Smart 2012 - surviving wild radish per plot (18m2) rated 16 October

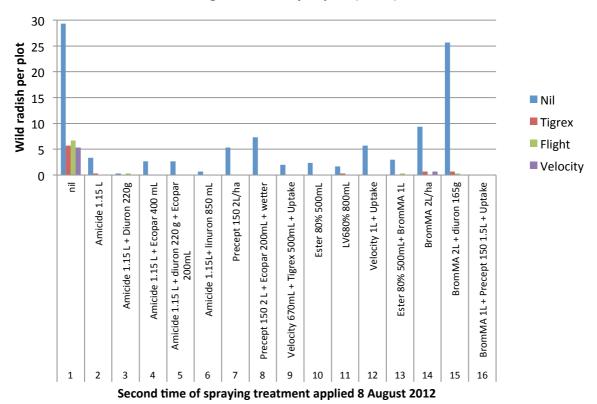


Figure 2: All data. Surviving wild radish per plot for a range of first spray treatments. First spray (Nil, Tigrex, Flight, Velocity) applied to 3 leaf wheat on 26 June. Second spray applied 8 August 2012.

Figure 2 shows that wherever we used a two spray strategy with the first spray applied at the 2.5 to 3 leaf stage of the wheat crop, we achieved excellent control of known resistant wild radish with many different products.

Recommendation for gnarly wild radish

- Plan to spray problem paddocks twice
- First spray should be at Z12 to Z13 (2 to 3 leaf stage of the crop) depending on product.
- Second spray should be no later than Z31 (first node)
- Aim to always spray small radish. First spray should target radish no bigger than the top of a beer can
- Rotate herbicide groups between the two sprays
- Ensure excellent spray coverage slow speed, high water rate, right nozzle / pressure
- To start spraying at Z12 you will need to be organised. Make a plan, have product on farm, ready to go.
- Spray capacity / access to labour will need to be considered to achieve this
 recommendation. Nurse tanks are a great way to increase spray capacity at minimal
 cost.