

Herbicide

Sharpen

# **Reducing wild radish seed-set**



### How costly is wild radish seed-set and survival?

Very costly – and for a long time.

The GRDC estimates wild radish costs Western Australia growers alone over \$40 million a year as a direct result of yield loss and contamination. Wild radish seeds left in the soil at the end of one season may set up germinations that can go on robbing crops of moisture and nutrients for the next six years.



### What is the critical timing for action to prevent seed-set?

Reducing the weed seed bank is vital for effective weed management. If you have wild radish survivors late in the season, stopping seed-set is critical for reducing your weed seed bank. The earlier you can prevent seed-set of these escapees, the better off you will be. Since seed pod formation begins soon after the commencement of flowering, action from early flowering is ideal.



### What's wrong with relying on standard chemical solutions?

Resistance issues and timing restrictions.

Wild radish populations in Australia have now shown resistance to glyphosate (Group M) as well as group B, C, F and I herbicides.

Glyphosate, 2,4-D and diquat can't be applied until most of the weeds may have gone to seed.



### What's the most effective strategy?

The GRDC recommends an integrated approach that includes herbicides with multiple modes of action used at diverse timings as well as non-chemical management methods.





Wild radish contamination can cost up to \$50/t at harvest

### Wild radish in wheat



## Sharpen<sup>®</sup> Herbicide





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### What makes Sharpen exceptionally effective for reducing seed-set?

### Its outstanding efficacy

- Sharpen is a broadleaf weed specialist
- Sharpen's fast knockdown helps minimise seed viability
- Sharpen is systemic and moves to and damages the flower, fruit and seeds of the wild radish

#### Its resistance-free Group G MOA

- Sharpen is a Group G herbicide (with no known resistance weeds in Australia)
- Sharpen's MOA is a different MOA than other commonly used herbicides for seed set reduction such as glyphosate (Group M) and phenoxies (Group I)

### Its unique early application window

- Early enough to burn off most wild radish flowers and pods
- Late enough to reduce viable wild radish seed set up to 90% compared to untreated



Sharpen<sup>®</sup> Herbicide From GS71 (watery ripe)

to GS83 (early dough)

2,4-D – after firm dough glyphosate – from late dough diquat

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### Will it kill flowering wild radish plants?

- Most but not all there may be some regrowth depending on the soil moisture
- High water rates (100 L/ha or above) may improve weed kill, but it will not be 100%
- As with any physical seed-set reduction (windrow burning, Harrington Seed Destructor, etc.), the focus is reducing next year's weeds via this year's seeds

This reduction figure reflects the difference applying Sharpen at 34 g/ha made across multiple trials: 10 were assessed for the reduction in overall pod numbers and 7 of them for pod viability as well. The combined impact left less than 10% of viable seeds compared to untreated.

For more information about Sharpen, visit **crop-solutions.basf.com.au** or contact your local BASF representative





**BASF** We create chemistry