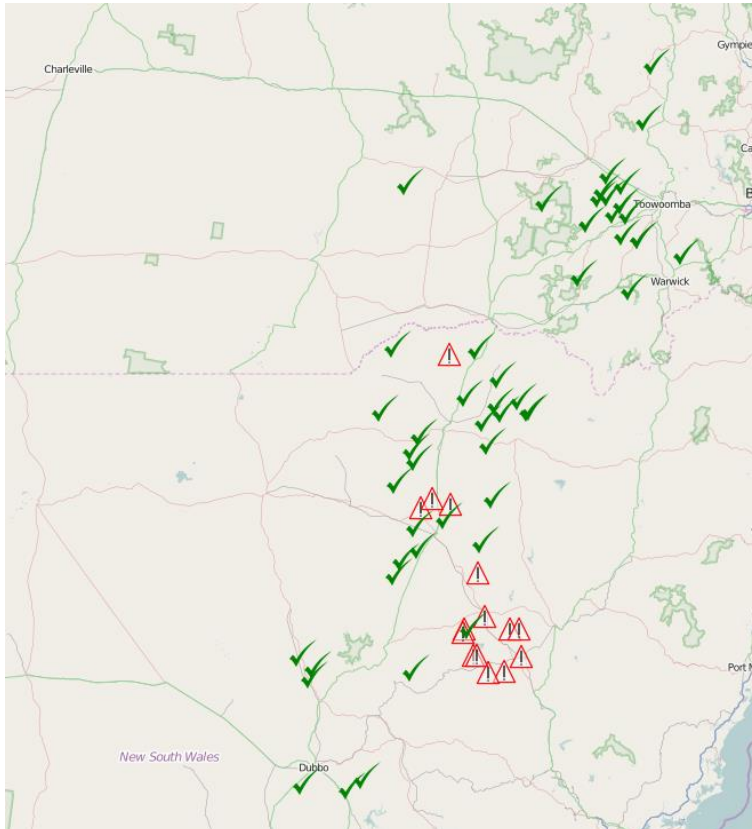


## Survey of Glyphosate Resistance in Common Sowthistle

The Queensland Department of Agriculture and Fisheries (DAF) is undertaking a GRDC funded survey of fields across the region and is looking for help in gathering common sowthistle seed samples. We have had strong participation from growers and agronomists in Northern New South Wales and the Southern Downs. Fewer samples have been received from the Western Downs, Maranoa and Central Queensland, and growers and agronomists in these areas are particularly encouraged to send in samples.



**Figure 1: Map showing the location of tested populations. Green tick = susceptible, Red triangle = resistant. For resistant populations, at least 20% of plants survived routine screening tests using small plants (no more than 5 true leaves), treated with 660ml/ha of a commercial glyphosate formulation (540 g/L glyphosate). This is the label rate for this size class – in a fallow situation or prior to planting a crop in the Northern Region.**

The sampling can be easily done when you are ‘out and about’ in the field, simply by visiting a paddock (crop or fallow) containing sowthistle. All the materials you need to do this will be provided to you on request to Annie van der Meulen (contact details provided at the base of this article).

Basically, there are 3 simple steps in collecting the sample:

1. Gather the ripe, fluffy seeds from 20+ sowthistle plants into a bag.
2. Complete the 1 page field data form.
3. Send these into DAF.

Provided adequate seed germination of the sample, you should receive back a report on the samples you send in within 2-3 months, so that you know whether the population is resistant to glyphosate at label rates. This information should come in handy when you are making herbicide decisions for the next season.



Figure 2: Photo showing the 'ready-to-collect' seed heads of common sowthistle. These fluffy seed heads open in the late morning, and need to be collected by lunch time, before the wind blows the seeds away.

Sampling can be done at any time when sowthistle is setting seed, which is most of the year if soil moisture levels are reasonable. We will be accepting samples up until to February 2016.

Growers and advisers interested in submitting samples should contact Annie van der Meulen before taking samples. Annie will then send you out a sampling kit.

Further information on the survey (please click):

[GRDC Update Paper: Weed issues and action items](#)

For helpful advice on sowthistle management, the below web resources are available (please click):

- [Ecology and management of common sowthistle \(\*Sonchus oleraceus\* L.\)](#)
- [Managing herbicide resistant weeds in the summer fallow](#)
- [Common sowthistle \(\*Sonchus oleraceus\*\)](#)
- [Preventing herbicide resistance in at-risk weeds](#)

If you would like to be involved or would like more information, please do not hesitate to contact:

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