



## Stamp out pests & diseases: control unwanted cotton

**Controlling unwanted cotton in the farming system is an essential part of good integrated pest and disease management.**

The industry encourages a zero tolerance of **volunteers** (plants that have germinated, emerged or established unintentionally in fields or along roadsides, fencelines etc) and **ratoon cotton** (plants that have regrown from left over root stock from a previous season). **It's important to get on top of them early**, as a lack of control increases resistance risks and provides a 'green bridge' for pests and diseases to carry over between seasons.

### How do I control volunteers and ratoons?

#### Volunteers:

- Cultivation and herbicides are the two most common methods of volunteer control. Both require the plant to have germinated and emerged before control can occur - but it's important to target plants when they're small.
- There are a number of herbicides registered for controlling volunteer cotton seedlings (listed in the [Cotton Pest Management Guide 2014-15](#), table 34, page 115). The best results will occur from using a double-knock strategy.
- When volunteer plants get beyond the seedling stage, there are no registered herbicides for control, and cultivation is the most cost effective and efficient option. Manual removal of the plants (ie. via chipping) may be necessary for isolated plants.

#### Ratoons:

- The simplest and most cost effective way to control ratoon cotton is to

prevent it occurring by carrying out effective root cutting/root pulling after picking, in conjunction with pupae busting.

- It is almost impossible to control a ratoon plant with herbicides in spring/summer, because of the relatively small leaf area on a ratoon plant compared to its very large root system.
- Where ratoons do occur, it's a sure sign of a problem in the system: best addressed by using a heavy cultivation to remove the plants.

## What are other growers & consultants doing about them?

Our CottonInfo RDOs spoke to growers and consultants about their volunteer and ratoon cotton control:



### **Adrian Nelson, agronomist, Quirindi:**

"For ratoon cotton, careful setup of root cutters after picking is important as herbicide options are limited. Cultivation is an important tool and we are fortunate that heavy frosts in winter help with ratoon control. For volunteers, pre-water if required for back to back cotton paddocks to germinate volunteers, and sow last if possible. Herbicide controls in fallows are effective particularly on small plants. The use of Broadstrike herbicide in refuges applied PSPE is effective for volunteer control and allows greater options when selecting refuge paddocks."



### **Rob Houghton, grower, Gogeldrie:**

"Cultivation is my key tactic. I use a mix of Hammer in field to clean up volunteers after pre-irrigation prior to planting the following summer crop. Roundup is part of that pre-plant knock down. I used a combo mulcher/root cutter over the last few years which I am very pleased with. The combo increases the chance of getting a winter crop in because it saves on a pass and improves even flow of trash - hence a better prepared seedbed and an earlier plant date."

### **Stewart Denston, grower, Trangie:**

"Our fallow fields are sprayed with robust rates of starane herbicide, which is especially cost effective if the cotton is small. A few years ago we started a zero tolerance policy on fleabane and started removing them by hand (root and all) when they were still small and not yet too woody. At the same time we found it easy to pull out the volunteer cotton, especially when



there was a bit of moisture in the rotor bucks, check banks, field edges and channel banks. Basically if we see a volunteer plant that we can't pick, mulch or root cut then we pull it out!"

## Where can I go for more information?

- Check out the [Cotton Pest Management Guide 2014-15 volunteer and ratoon chapter](#) (see page 114).
- Read CottonInfo's [managing ratoons and volunteers fact sheet](#).
- Download this [case study on the St George cotton community volunteer clean up](#).
- Visit the [CottonInfo website](#) (our stewardship, biosecurity, insect, disease and weed management pages all talk about managing volunteers and ratoons).
- Read the [CRDC Spotlight magazine article](#) on the industry's volunteer cotton survey (see page 12).
- Contact CottonInfo's technical specialist for disease management, volunteer and ratoon control, [Ngaire Roughley](#).



 Share

 Tweet

 Forward

Copyright © 2015 CottonInfo, All rights reserved.

[unsubscribe from this list](#) [update subscription preferences](#)

Brought to you by the cotton industry's joint extension program, CottonInfo.



is a joint initiative of



Cotton Research and  
Development Corporation



*Best Practice*

