

Project: Effective baiting options for the control of conical snails in the Albany port zone – SCF00004-A– Stirlings to Coast Farmers

BIO:

Christine has 20 years experience in agriculture, fisheries and natural resource management and holds a B.Sc, P.G Dip. in Agribusiness and a PhD in Agricultural Policy and Economics. Christine is working with SCF to develop and implement a business plan over the next 12 months that will enable SCF to move forward and achieve their goal of being a self-sustaining group. Christine is based at the SCF office in Albany. MOB: 0429 236 729 and EMAIL: ceo@scfarmers.org.au

TRIAL PROGRESS:

A grower survey on current snail baiting practices was distributed to over 200 growers across the Albany port zone in 2016, with 120 responses received back. The results are currently being analysed and a report will be produced by the end of February 2017.

Three caged trials have been conducted at DAFWA, Albany. The results of these trials have contributed to the design of the field trial, which is currently being set up and will run in the first half of 2017.

KEY POINTS:

To date, the key preliminary findings from the project are:

- All active ingredients in snail baits were equal in causing mortality to snails. The amount of active ingredient in these trials did not influence mortality in snails, however the more bait points there are, the more snails are killed by the baits.
- The rainfastness of a bait, 14 days after application, does not impact on the mortality of snails. After 14 days, it is highly probable that non-rainfast pellets would lose their integrity and decompose in wet conditions, making it less likely that snails would come across baits to feed on.
- Iron-based baits and metaldehyde baits cause similar mortalities in small pointed snails. Within the metaldehyde group there were differences between some baits, with several products appearing to cause over 95% mortality.

FURTHER WORK REQUIRED:

Based on our initial findings, the 2017 field trial will compare two metaldehyde baits – a rainfast and non-rainfast bait – against a no-baiting option, across three different soil types, at 4 different application times.

While this project has covered baiting options for the control of conical snails, there is still work to do on preventing grain contamination in the event that baiting fails. Options at harvest time for preventing grain contamination by snails (stripper front vs conventional front headers) and trialling methods of cleaning grain samples require more work. It may also be advantageous to investigate the efficacy of snail repellent sprays that are currently being developed.



SCF Project Officer Kathi McDonald counting snails in one of the caged trials!



Small pointed conical snails collected for caged trials.



Snails congregating around baits in the caged bait efficacy trial.