



Department of
Agriculture and Food



GRDC Grains Research &
Development Corporation
Your GRDC working with you

Priorities for pest management for the 2013 crop

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25 February 2013



Ability to predict pest incursions?

- No confidence in predictions for incursions of “flying” pests
- See Pestfax Map for variability between years (www.agric.wa.gov.au/Pestfax)
- More reporting from you to Pestfax = stronger information linking pre-season rainfall and pests



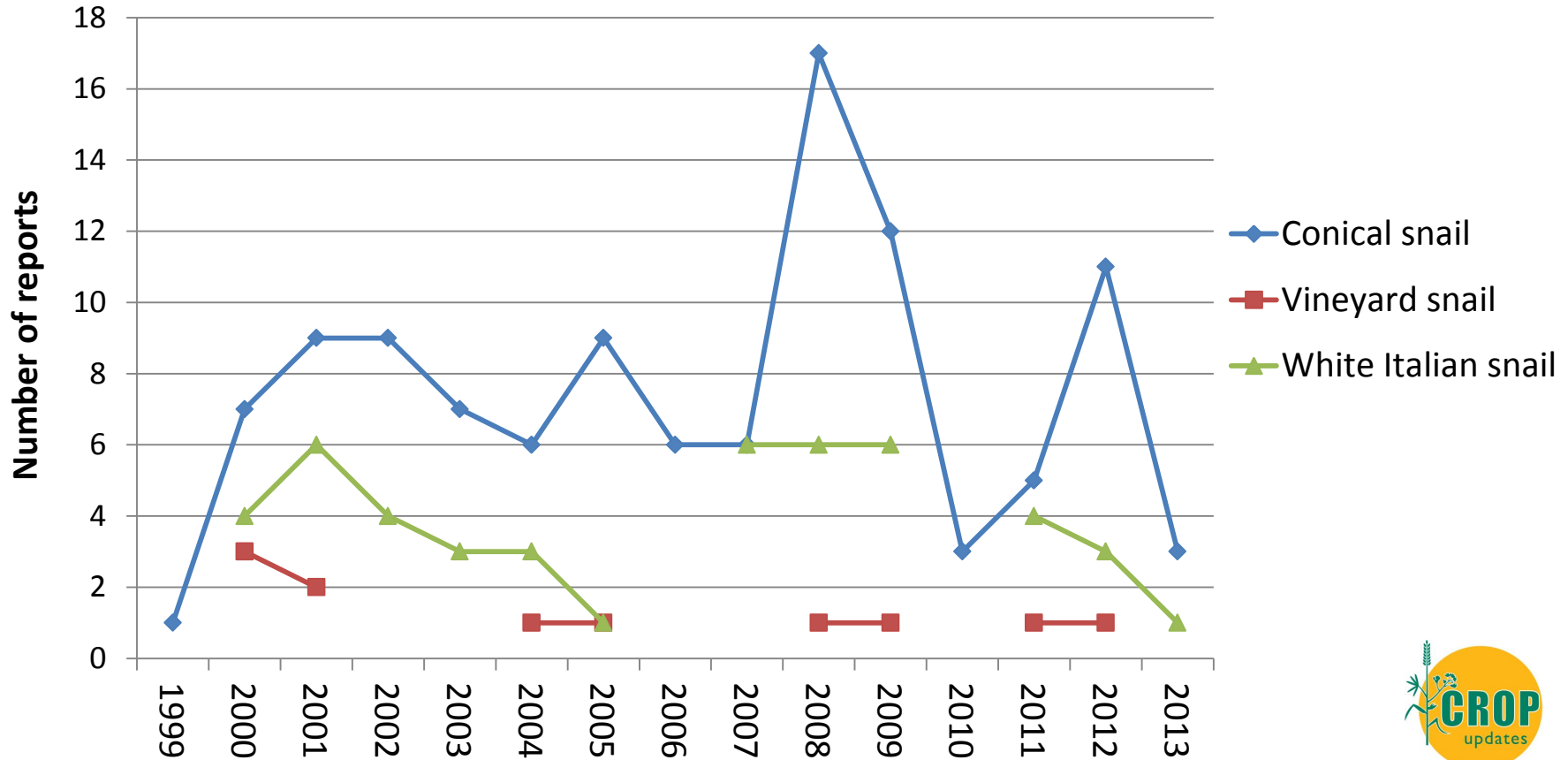
Resident pests

- Either wingless or weak fliers
- Persist between years
 - European earwigs
 - Weevils
 - Mites
- Can plan management strategies

Trends in enquiries

- Predict new/emerging pests

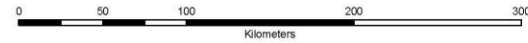
Snail reports 1999-2012



CONICAL SNAIL DISTRIBUTION - WA

Legend

- ★ Positive Location
- Local Government Area



White Italian



Small conical



Vineyard





Photos courtesy of Jeremy Lemon

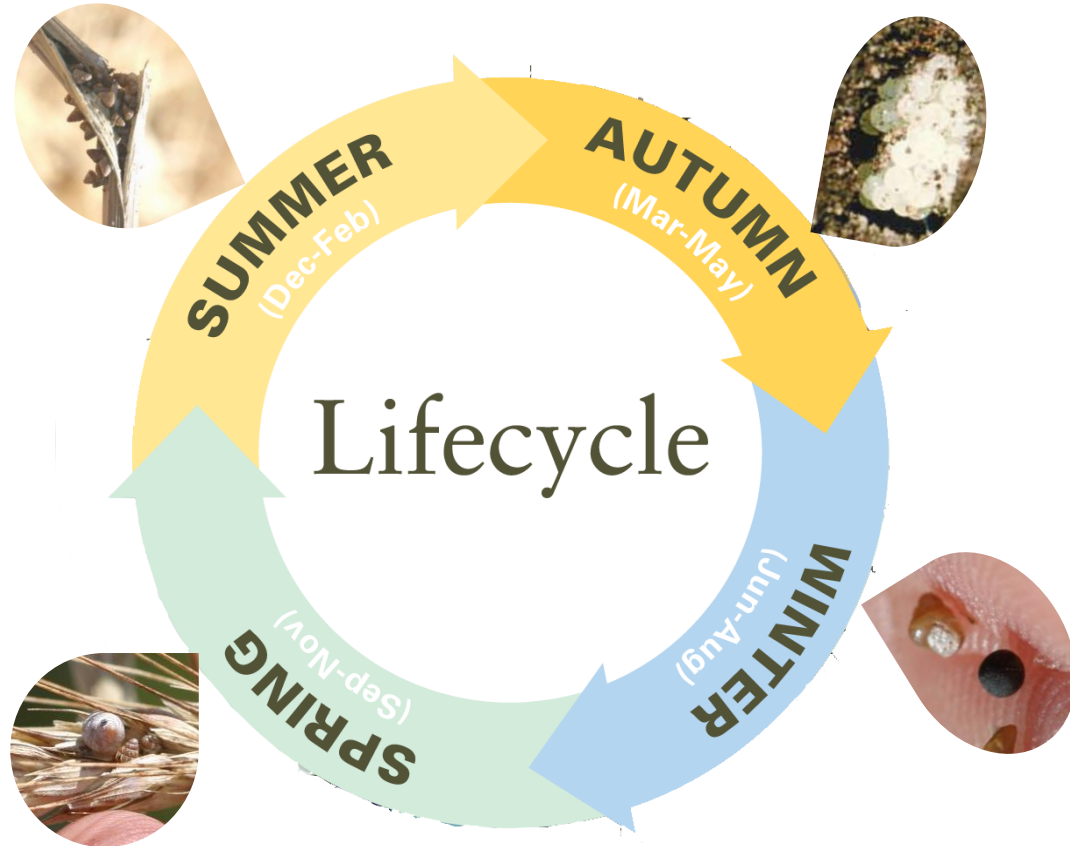
Increase in snail numbers

- Doesn't happen overnight
- Factors that increase snail survival:
 - Available habitat
 - Soil moisture
 - Presence of calcium

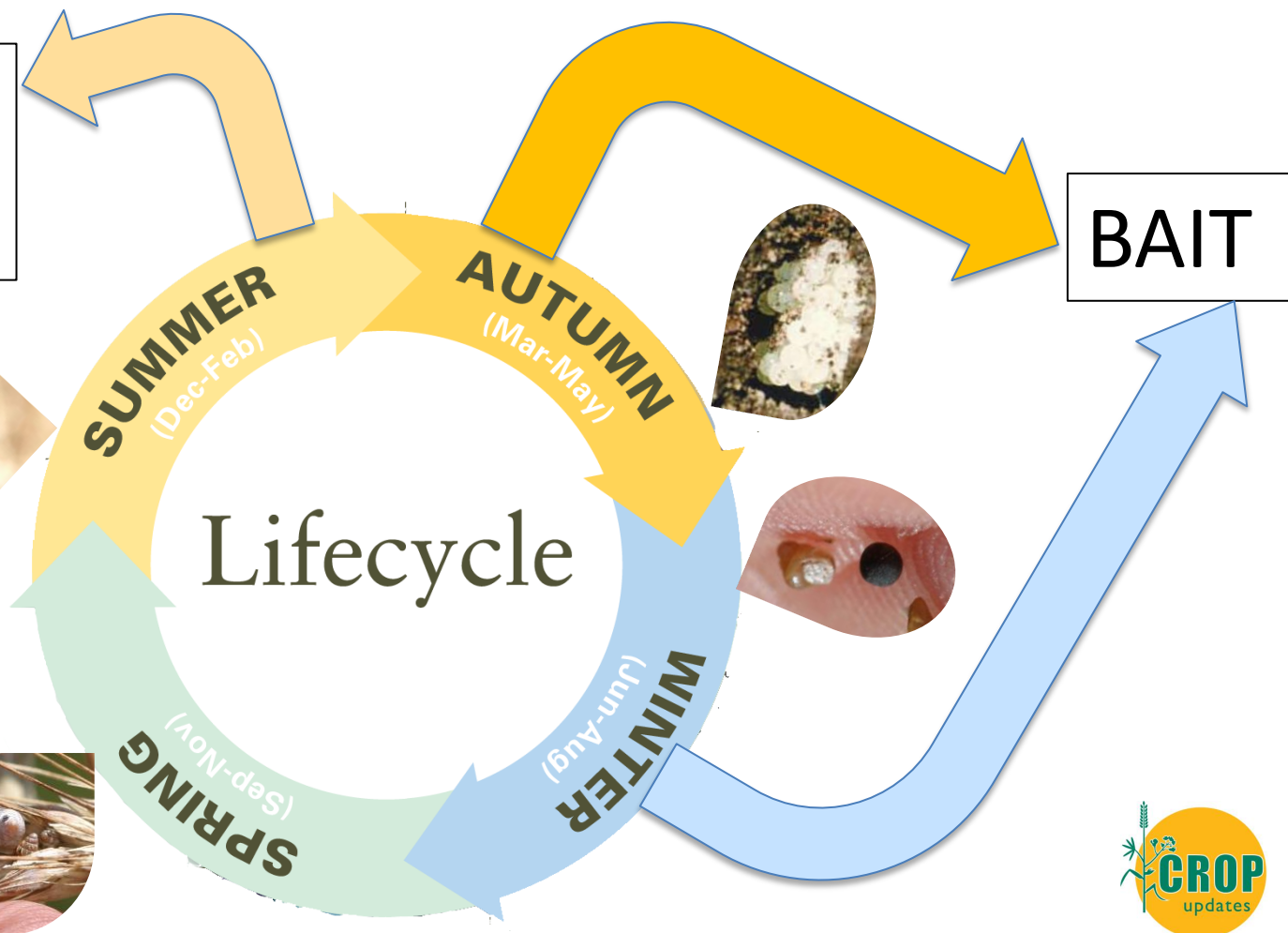
Before economic damage:

- Grain contamination
- Notice snails in paddocks
- **Threshold for damage:**
 - Canola = 20 per m²
 - Cereal = 40 per m²
 - Pasture = 100 per m²

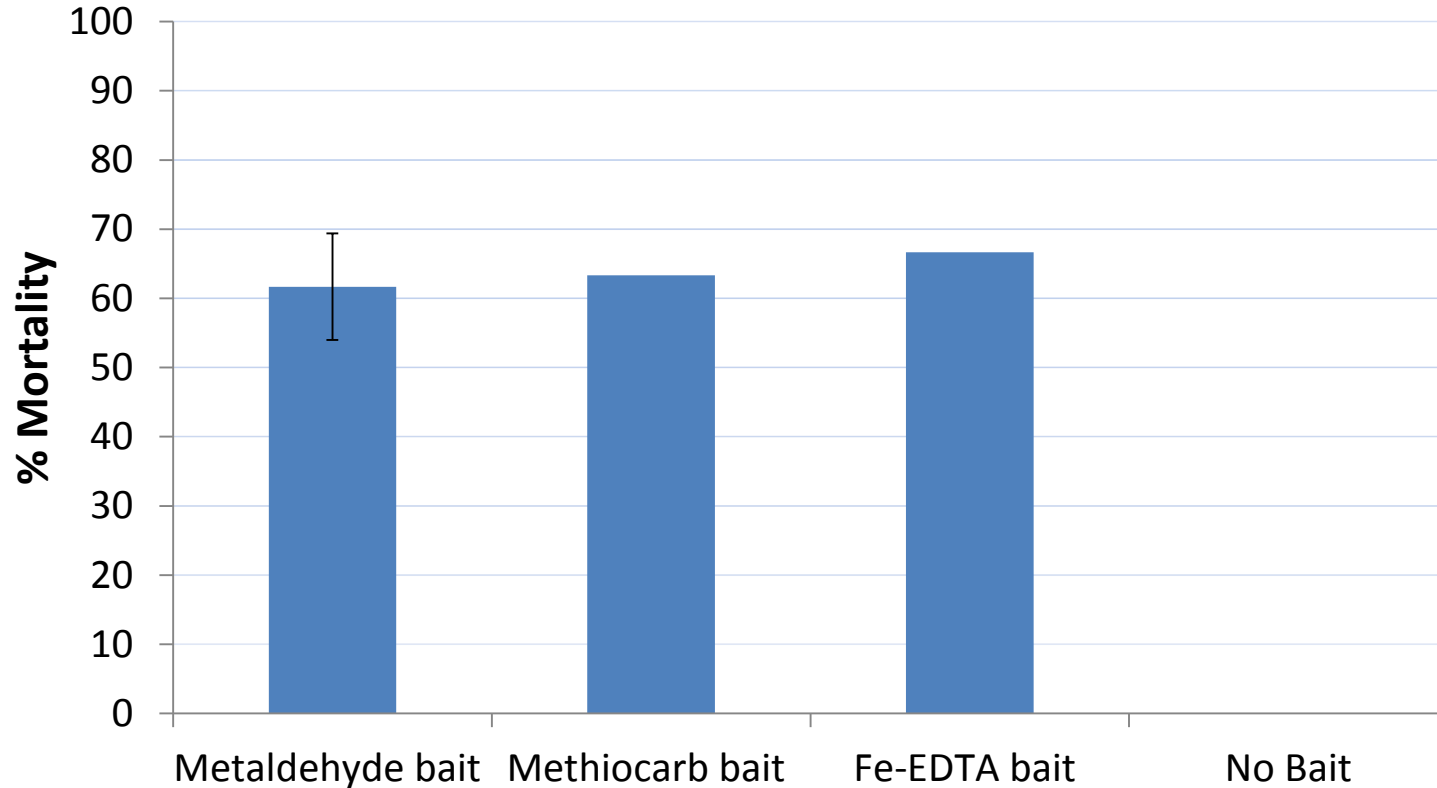
Good control = breaking the life cycle



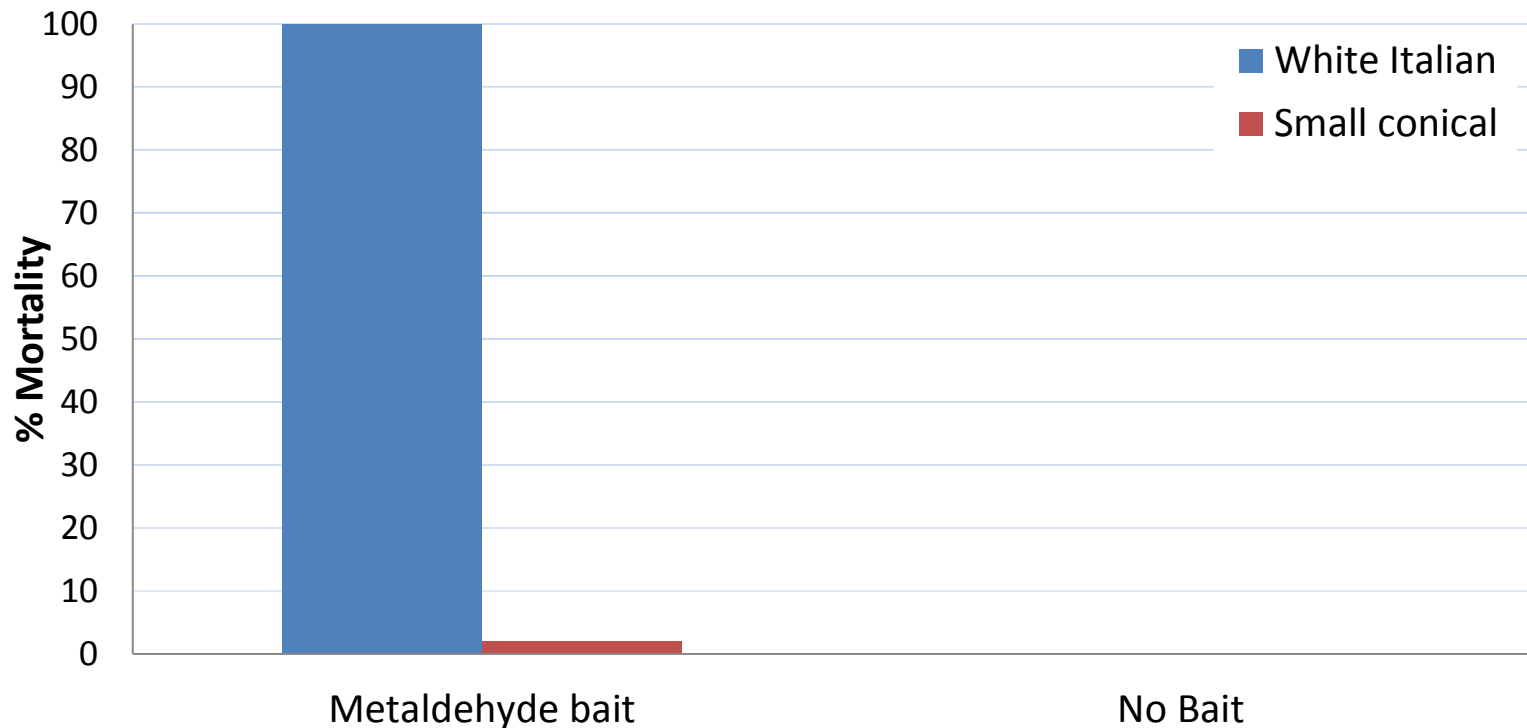
↓ WEEDS
↓ STUBBLE



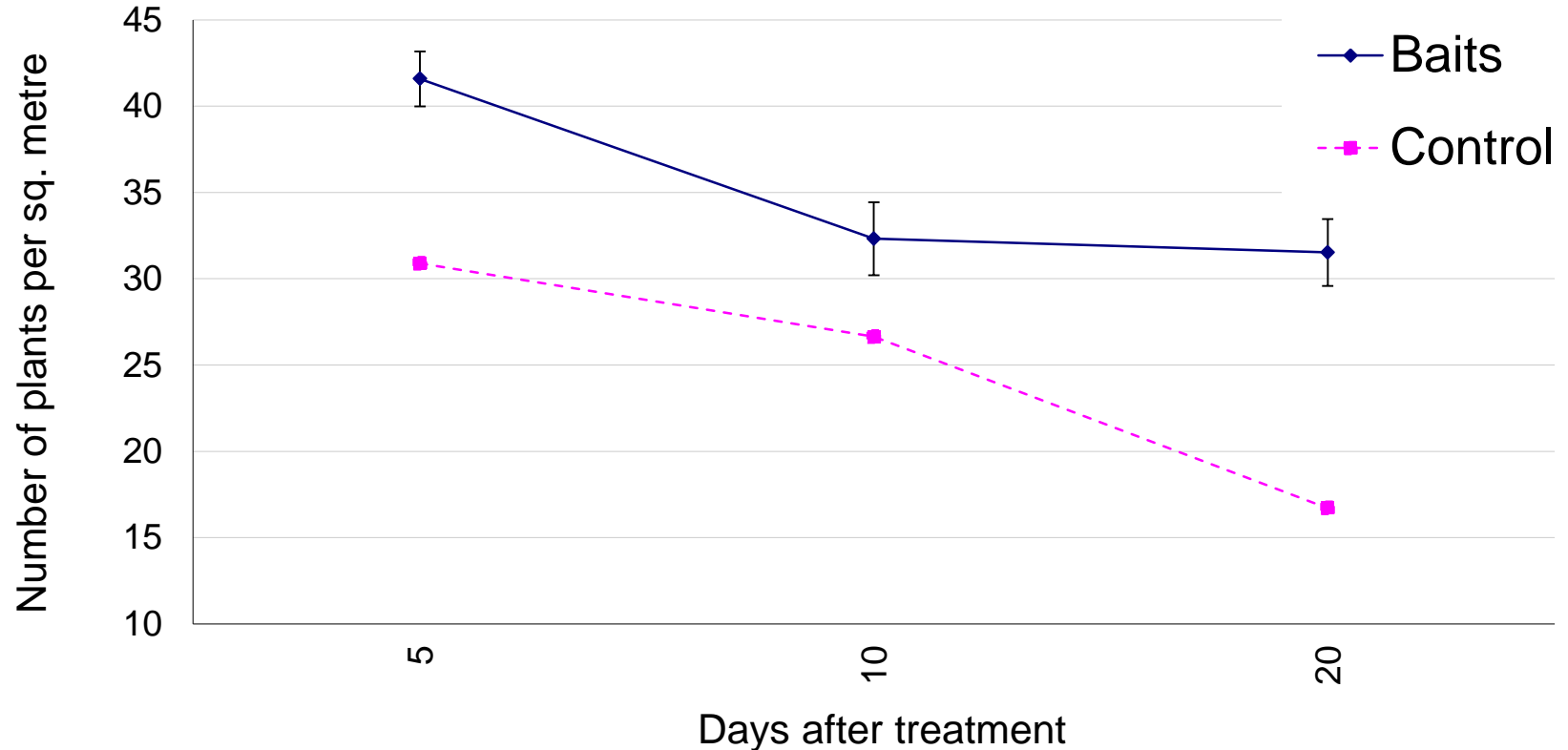
Mortality of conical snails + canola seedlings \pm baits



Mortality of snails \pm baits



Field trial \pm bait + snails at 200/m²



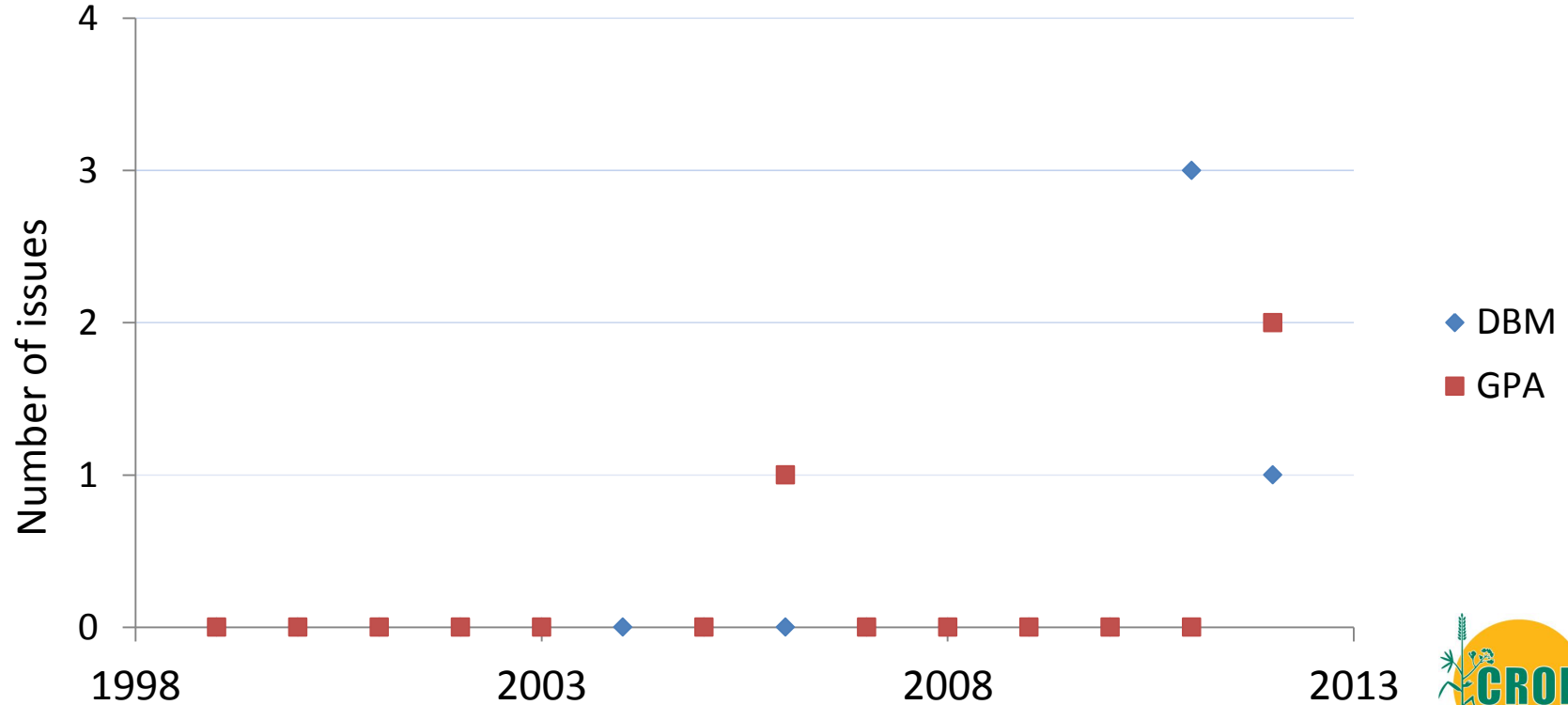
Need multi-pronged approach

- No silver bullet
- Management of snails needs multipronged approach
- No snails yet? Good biosecurity..

Pestfax and trends

- Increase in reports of spray failures for:
 - Green peach aphid (GPA)
 - Diamond back moth (DBM)
 - Redlegged earth mites (RLEM)

Pestfax issues ± resistance



Resistance testing

- GPA and DBM bioassays of F_1 generation
- Not for this season
- RLEM resistance testing results this season

UPDATE

Resistant Redlegged Earth Mites

- Still only in WA
- 25 properties including one in Central Ag. Region
- Management?

LEGEND:

Green = resistance in RLEM not found in year 2, 3

Red = resistance in RLEM persists



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Key messages

- More reports into Pestfax needed to increase confidence in predicting “bad” pest years
- Farming systems approach to decrease resident pests
- Resistance suspected? Contact DAFWA



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Questions?

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