



Landcare Research
Manaaki Whenua

Storage life of ACP possum pellet baits

Dave Morgan and Jane Arrow

Landcare Research, Lincoln



Background

- Tests done in the 90s led to recommended storage lives of :
 - No. 7 – 3 months
 - RS5 - 6 months
- Creates logistical difficulty
- Many changes in ACP's processes – need to reassess



Aims

To store baits for 13 months and measure changes in :

- 1080 and cinnamon over a year
- Consumption and efficacy (i.e. % kill)



Tested

- No. 7 pellets
 - non-toxic 16-mm (7-g) 0.15% cinnamon
 - 0.15% 1080 20-mm (12-g) 0.3% cinnamon
- RS5 pellets
 - non-toxic 16-mm (7-g) 0.15% cinnamon
 - 0.15% 1080 20-mm (12-g) 0.3% cinnamon



1080 and cinnamon content

- Tests done at 1, 3, 5, 7, 9, and 13 months



Palatability and efficacy tests

- Tests done at 1, 3, 5, 7, 9, and 13 months
- Ten individually caged possums for each test of No 7 and RS5
- Prefeeding – 50 g non- toxic baits together with normal food (apples, feed pellets)
- Four days later – 50 g toxic pellets + normal food

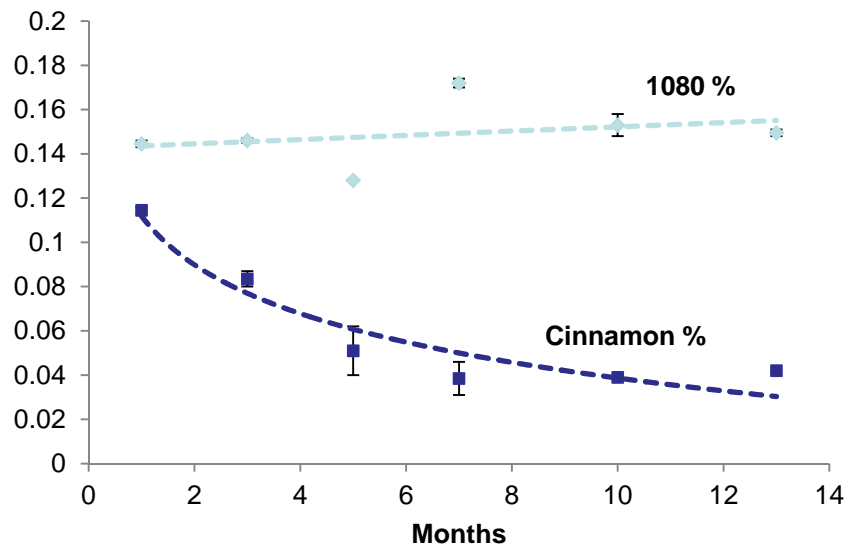


Label instructions

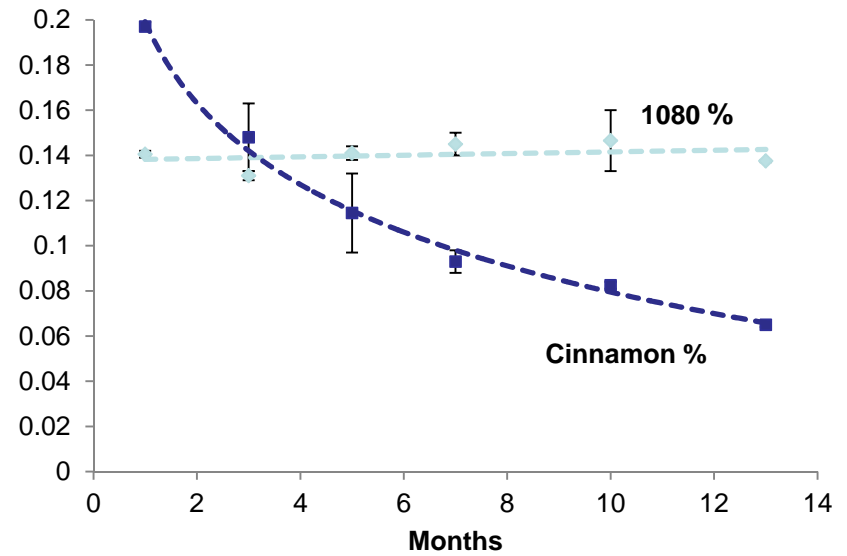
'Storage: *Store in original container, tightly closed, under lock and key and away from feed or foodstuffs. Keep out of reach of children. This product must always be under the control of an approved handler who holds a current test certificate endorsed for Class 6 and Class 9 substances. Do not store in direct or diffused sunlight. Avoid cyclic heating and cooling.*



1080 and cinnamon concentration (%)

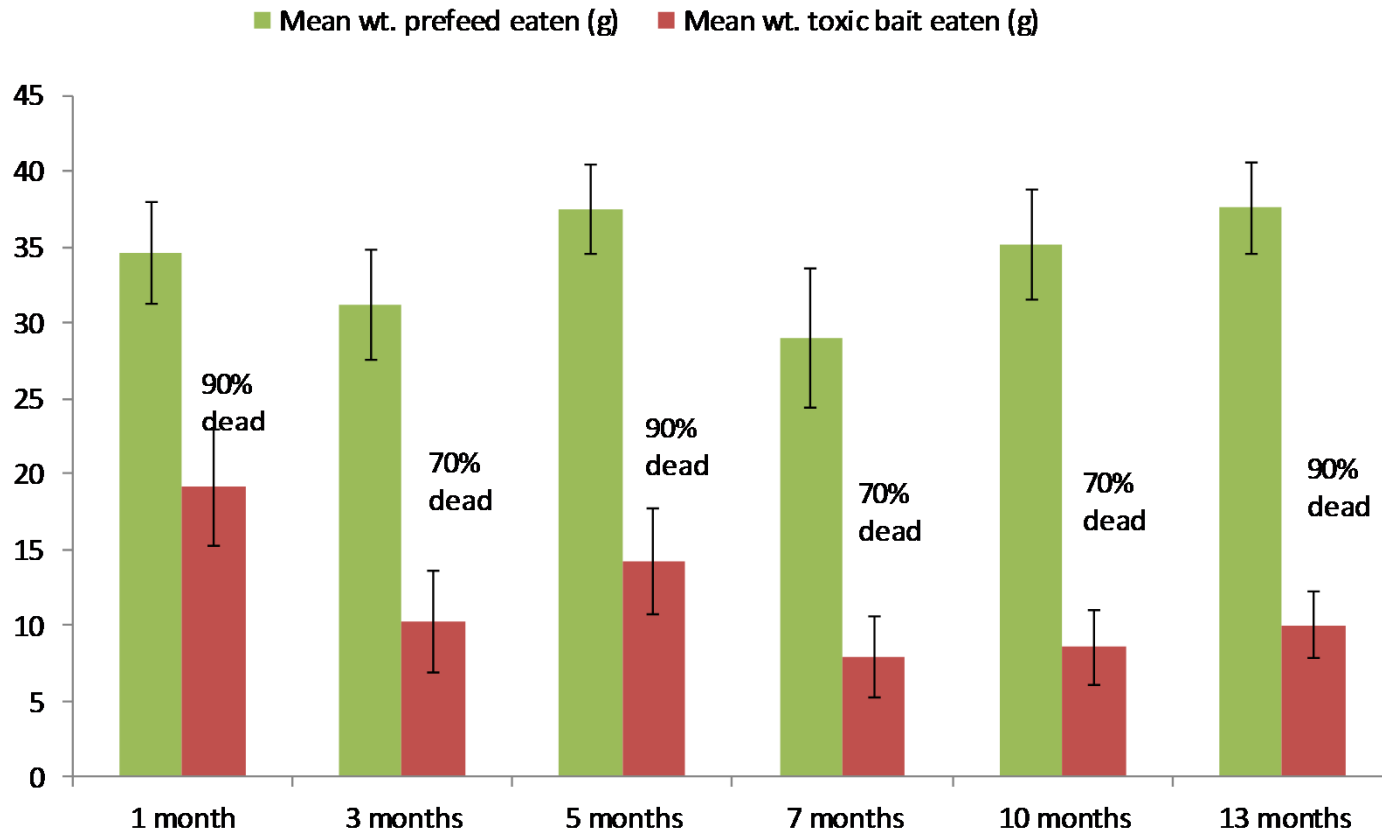


No 7

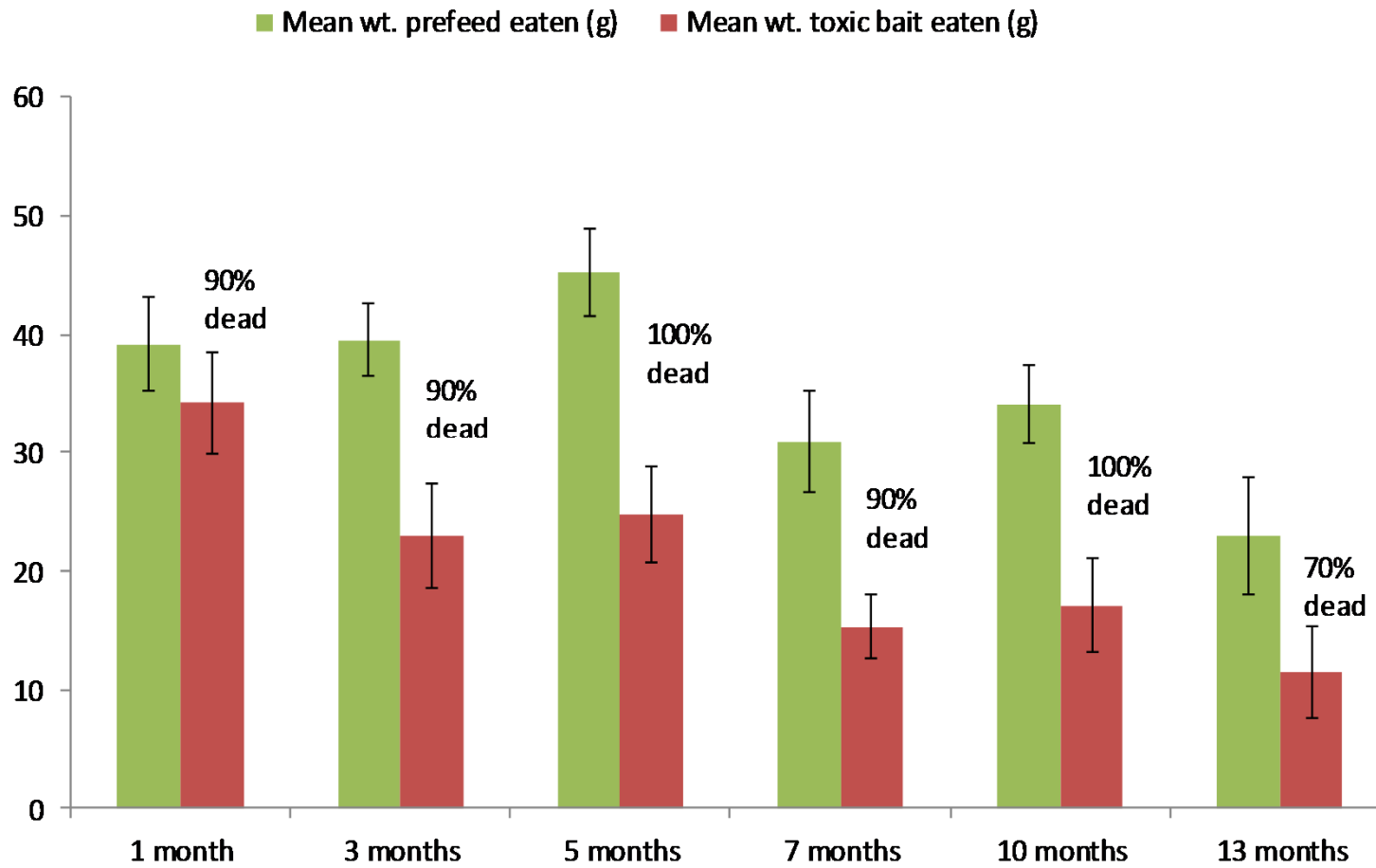


RS5

No 7



RS5



Toxic baits at 13 months



No 7



RS5

Look out for moths in the storage area



A tough test

- Caged possums less likely to eat baits than wild possums because:
 - well fed so not as hungry
 - warm so less energy demand
 - not very active so less energy demand
 - disturbance from other possums ??
- The minimum values of 70% efficacy are therefore regarded as conservative

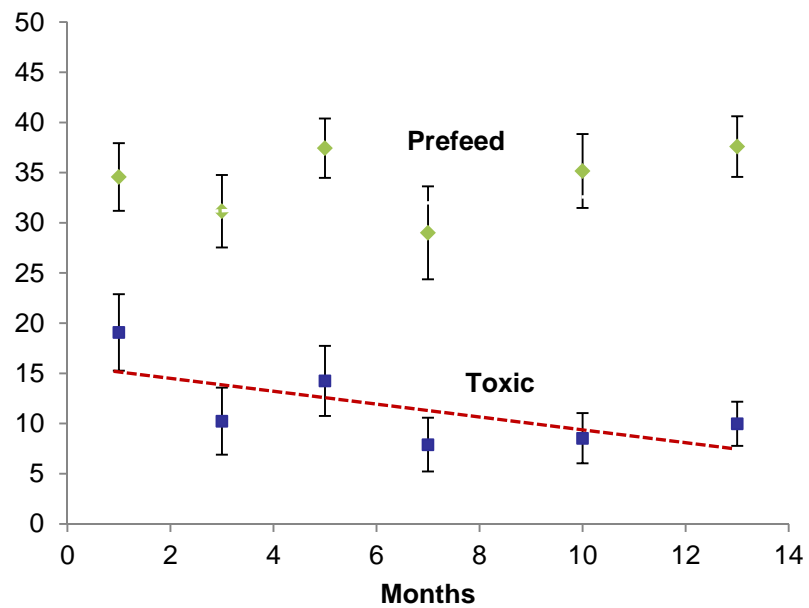


Conclusions

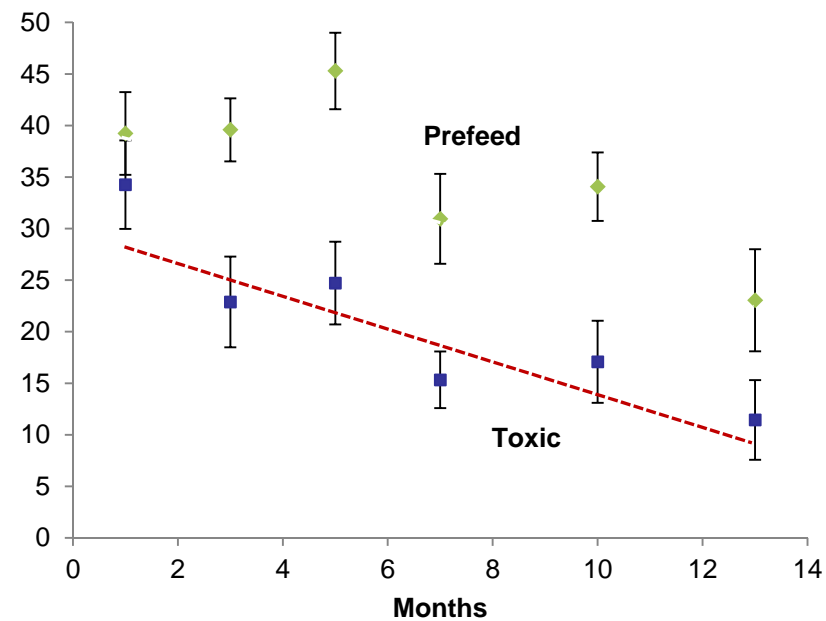
- No 7 needs to be checked with correct cinnamon content (0.3%)
- Overall, results suggest baits stored under label conditions will have a storage life of 1 year from manufacture



Mean consumption (g)



No 7



RS5