

Palatability of FeraCol® for dama wallaby (*Macropus eugenii*) control

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Abstract

Dama wallabies (*Macropus eugenii*) are considered significant pests in the Bay of Plenty. FeraCol, a possum control product, was tested for palatability and efficacy on eight penned male dama wallabies. FeraCol had very low palatability to captive wallabies. Only one wallaby ate a lethal dose, and it died 4 days later. FeraCol, in its present form, would be unsuitable for controlling dama wallabies.

1. Introduction

Landcare Research, Lincoln, conducted a pilot trial on the palatability of the possum cholecalciferol bait FeraCol on dama wallaby (*Macropus eugenii*) for the Department of Conservation (DOC) Science & Research Unit in June-September 2000.

2. Background

Sodium monofluoroacetate (1080) is successfully used to control wallabies but, with increasing public concern, non-target risks, and potential bait shyness problems, alternatives are required by DOC. In a review of possible alternative toxicants for the control of dama wallabies, Morriss et al. (2000) identified the possum cholecalciferol bait FeraCol (Feral Control, Auckland) as a possible option.

Cholecalciferol has not been used to control dama wallabies. Ferafeed (a peanut-butter-based prefeed used in conjunction with Feratox cyanide capsules) has been eaten by wallabies in the Rotorua district (Jeremy Kerr, Feral Control, Auckland, pers. comm.). This suggests that FeraCol, which is in a peanut butter base, could be palatable to wallabies, but no palatability or efficacy data are available.

3. Objective

- To test the palatability of FeraCol on captive dama wallaby.

4. Methods

Eight male dama wallabies were captured in the Rotorua district and transported to Guus Knopers' farm, Te Puke. These animals were given at least two weeks to acclimatise to captivity. The wallabies were penned individually and presented with 350 g of FeraCol paste. The bait was available for at least 12 hours overnight (as wallabies are predominantly dusk/dawn feeders). They also had free access to their normal feed (calf muesli). Individual consumption of FeraCol and normal feed was measured and palatability assessed. Palatability was defined as the weight of FeraCol eaten, expressed as a percentage of total food eaten. In addition, all animals were closely monitored for 21 days and times to death recorded.

5. Results

Wallabies ate an average of 198 g of their familiar, normal diet (calf muesli) during the trial period and only a mean of 9 g of FeraCol. FeraCol had very low palatability to wallaby, with only one animal eating more than 10% of the total food intake as FeraCol (Table 1).

There was only one death following FeraCol consumption - the wallaby with the highest bait intake. This animal died 4 days after eating FeraCol, with signs of illness (lethargy) showing on day 3.

6. Conclusions

- FeraCol in its present form would be unsuitable for controlling dama wallabies.
- Individual dama wallabies may eat FeraCol baits.

7. Recommendations

- The palatability of a range of bait base materials needs to be tested on captive dama wallaby.
- The palatability and efficacy of cholecalciferol in a bait base material known to be palatable to dama wallabies need to be tested.

- The palatability and efficacy of Feratox and cyanide paste on penned dama wallaby should be tested.

8. Acknowledgements

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9. References

Morriss, G.A.; O'Connor, C.E.; Warburton, B.; Eason, C.T 2000: Alternative toxicants for dama wallaby (*Macropus eugenii*) control. Landcare Research Contract Report LC9900/8 1 (unpublished). 9 p.

Table 1 . Feed intakes and palatability.

Wallaby no.	Weight (kg)	Calf muesli eaten (g)	FeraCol eaten (g)	Palatability (%)
1	5.2	240	6	2.4
2	5.3	122	1	0.8
3	5.6	205	0	0
4	6.2	236	0	0
5	6.1	179	6	3.2
6	5.3	211	10	4.5
7	6.5	203	0	0
8	5	189	50	20.9
Mean ±SE	5.65±0.2	198±13	9±6	4.0±2.5