

2 July 2020

Chemical Review
Office of the Chief Regulatory Scientist
Australian Pesticides and Veterinary Medicines Authority
GPO Box 3262
SYDNEY NSW 2001

Dear Sir or Madam,

WILDLIFE HEALTH AUSTRALIA SUBMISSION: CONSULTATION ON USE PATTERNS FOR ANTICOAGULANT RODENTICIDE PRODUCTS

Please find attached a submission regarding native wildlife and anticoagulant rodenticide products.

Wildlife Health Australia (WHA) welcomes the APVMA's reconsideration of anticoagulant rodenticide products. Non-target poisoning of native wildlife with anticoagulant rodenticides is a significant global concern. Exposure to anticoagulant rodenticides has been reported in a broad range of species and geographic areas of Australia, and is implicated in wild bird mortality events in Australia. Further research is needed to understand the impact of anticoagulant rodenticides on native wildlife populations.

WHA recommends increasing the oversight, regulation and stewardship of AR usage in Australia, following the approaches of other countries such as the US Environmental Protection Agency and European Chemicals Agency. Monitoring native species exposure to anticoagulant rodenticides is critical to understanding the impact, and assessing the effectiveness of any regulatory changes.

We hope that this submission is of assistance. Wildlife Health Australia would be happy to discuss it further should you require additional information or clarification.

Yours sincerely,

Rupert Woods AM CEO, Wildlife Health Australia

Impact of anticoagulant rodenticides on wildlife

Non-target poisoning of native wildlife with anticoagulant rodenticides (ARs) is a significant global concern (e.g. Nakayama et al, 2018; Van den Brink et al, 2018), particularly for some classes of animals such as birds of prey due to secondary poisoning via consumption of prey species (e.g. rodents). In Australia, AR exposure in wildlife has not been broadly studied, but there is evidence that it is also a significant issue here (McLeod & Saunders, 2013; WHA, 2017).

Lohr & Davis (2018) reviewed the impacts of AR on native Australian wildlife, and found that AR exposure and suspected poisoning have been reported in a broad range of species and geographic areas. ARs have been implicated in a number of wild bird mortality events in Australia, including threatened species (Lohr & Davis, 2018; Cox-Witton et al, 2018). Lohr (2018) found detectable AR exposure in 72.6% of southern boobook owls (*Ninox boobook*) found dead or moribund in WA, mostly from urban or peri-urban areas, and exposure to two or more ARs in 38.4%. Native mammals are also susceptible to AR poisoning (Lohr & Davis, 2018; McLeod & Saunders, 2013). Possums, for example, commonly present with suspected rodenticide poisoning to wildlife veterinary clinics in urban areas in South East Queensland (Grillo et al, 2016).

Despite known knowledge gaps, the importance of both sub-lethal and long-term exposure of native wildlife to ARs also needs consideration (Van den Brink et al, 2018). Exposure to sub-lethal doses of ARs has been proposed as a contributing factor to mortality due to other causes. By reducing immune function, AR exposure could increase susceptibility to parasitism and disease; impact on an animal's ability to move, fly or react and subsequently increase the likelihood of predation and collisions; and increase the chance of significant blood loss after minor injuries (summarised in Lohr, 2018).

Data on non-target poisoning of wildlife

Wildlife Health Australia (WHA) receives wildlife health data from government and non-government sources through Australia's general wildlife disease surveillance system. Data are reported into the national electronic Wildlife Health Information System (eWHIS) database.

WHA provides annual reports of confirmed and suspected poisoning events in wildlife to the APVMA's Adverse Experience Reporting (AER) Program. These reports include poisoning events associated with ARs in native wildlife. However, these reported cases will clearly represent a very small proportion of the overall cases occurring in native wildlife in Australia. The magnitude of the problem is not known and warrants further investigation to determine the level to which non-target species are affected by AR poisoning and exposure, and the impact of ARs on native animal populations. Data collected in the eWHIS database on AR poisoning events in wildlife can be provided to the APVMA confidentially if needed.

Recommendations

The following recommendations could be considered to reduce the exposure of Australian native wildlife to ARs:

- Increase the oversight and regulation of AR usage in Australia.
- Adopt the approaches of other countries, such as the US Environmental Protection Agency and European Chemicals Agency, including, for example, the restriction of use of
 - o First generation AR products by consumers to tramper proof bait stations, and
 - Second generation AR products to certified professionals only.
- Implement a stewardship program (e.g. the <u>UK's Rodenticide Stewardship Regime</u> coordinated by the Campaign for Responsible Rodenticide use).
- Ensure labelling of AR products and training of end users is adequate to minimise poisoning of non-target wildlife.
- Increase awareness of members of the public on humane alternatives to ARs. Examples of existing resources: Healthy Wildlife Healthy Lives, BirdLife Australia.
- Monitor native species exposure to ARs to help understand the impact on non-target species
 and also to assess the effectiveness of any regulatory changes. Examples of overseas
 monitoring schemes include: <u>UK Predatory Bird Monitoring Scheme</u>, <u>European Raptor</u>
 <u>Biomonitoring Facility</u>, <u>LIFE APEX Project</u> (Movalli et al, 2019).

References

Cox-Witton K, Ban S, Grillo T (2018). Widespread mortality of raptors and owls — avian influenza and avian paramyxovirus excluded. *Animal Health Surveillance Quarterly*, 23(4), 12

Grillo T, Cox-Witton K, Gilchrist S, Ban S (2016). Suspected rodenticide poisoning in possums. *Animal Health Surveillance Quarterly*, 21(3), 8

Lohr MT (2018). Anticoagulant rodenticide exposure in an Australian predatory bird increases with proximity to developed habitat. *Science of the Total Environment*, 643, 134-144

Lohr MT & Davis RA (2018). Anticoagulant rodenticide use, non-target impacts and regulation: a case study from Australia. *Science of the Total Environment*, 634, 1372-1384

McLeod L & Saunders G (2013). Pesticides Used in the Management of Vertebrate Pests in Australia: A Review, Orange, NSW Department of Primary Industries

Movalli P, Duke G, Ramello G, et al (2019. Progress on bringing together raptor collections in Europe for contaminant research and monitoring in relation to chemicals regulation. *Environmental Science and Pollution Research*, 26, 20132–20136

Nakayama SM, Morita A, Ikenaka Y, et al (2018). A review: poisoning by anticoagulant rodenticides in non-target animals globally. *Journal of Veterinary Medical Science*, 17-0717

Van den Brink NW, Elliott JE, Shore RF et al (Eds.) (2018). *Anticoagulant rodenticides and wildlife* (Vol. 5). Springer International Publishing.

WHA (2017). Pesticide toxicity in Australian native birds. Wildlife Health Australia https://www.wildlifehealthaustralia.com.au/Portals/0/Documents/FactSheets/Avian/Pesticide%20Toxicity%20in%20Australian%20Native%20Birds.pdf

ABOUT WILDLIFE HEALTH AUSTRALIA

Wildlife Health Australia (WHA) is the coordinating body for wildlife health in Australia and operates nationally. The head office is located in Sydney, NSW.

WHA activities focus on the increasing risk of emergency and emerging diseases that can spill over from wild animals and impact on Australia's trade, human health, biodiversity and tourism. We provide a framework that allows Australia to better identify, assess, articulate and manage these risks. We provide the framework for Australia's general wildlife health surveillance system.

Our mission is to develop strong partnerships in order to better manage the adverse effects of wildlife diseases on Australia's animal health industries, human health, biodiversity, trade and tourism.

WHA directly supports the Animal Health Committee (AHC), Environment and Invasives Committee (EIC), Animal Health Australia, the Animal Health Policy Branch and the Office of the Chief Veterinary Officer (OCVO) and Chief Environmental Biosecurity Officer (CEBO) within the Australian Government Department of Agriculture, Water and the Environment (DAWE) and Australian governments in their efforts to better prepare and protect Australia against the adverse effects of wildlife diseases. It provides priorities in wildlife disease work, administers Australia's general wildlife disease surveillance system as well as facilitating and coordinating targeted projects. Wildlife health intelligence collected through the National Wildlife Health Information System (eWHIS: www.wildlifehealthaustralia.com.au) administered by WHA is provided to members of AHC and the Australian Government DAWE, and Department of Health, on issues of potential national interest, potential emerging issues and significant disease outbreaks in wildlife. The information is provided in line with the agreed policy for data security. WHA supports the National Animal Health Information System (NAHIS) by provision of quarterly reporting and Australia's Chief Veterinary Officer by hosting the World Organisation for Animal Health (OIE) Focal Point for Wildlife. WHA also provides Australia's representative to the International Union for the Conservation of Nature Species Survival Commission Wildlife Health Specialist Group (IUCN SSC WHSG).

WHA is administered under good corporate governance principles. An elected management group, chaired by an appointment from DAWE, and including an AHC representative provides strategic direction and advice to a small team, which oversees the running of WHA. It is important to note that WHA involves almost every agency or organisation (both government and NGO) that has a stake or interest in animal and wildlife health issues in Australia. There are over 40 member organisations and more than 750 wildlife health professionals and others from around Australia and the rest of the world who have an interest in diseases with feral animals or wildlife as part of their ecology that may impact on Australia's trade, human health and biodiversity.

More information on WHA is available at: www.wildlifehealthaustralia.com.au.