

## THE RISK OF USING FIPRONIL IN BIRDS: CASE REPORT

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### RESUMO

#### **Clínica Médica e Cirúrgica de Animais Silvestres e Exóticos**

Introduction: Fipronil is an insecticide of the Phenylpyrazole Class, used as a control measure for ectoparasites, acting mainly on the central nervous system (COUTINHO, 2005). Mite control represents a great health challenge for the commercial breeding of wild birds, causing inadequate practices such as self-medication, which can be extremely harmful, causing relevant intoxications and losses. Objective: To report the case of Fipronil intoxication in a commercial breeding of *Sicalis flaveola*, emphasizing the importance of care in the use of pesticides for the control of ectoparasites. Case report: The situation occurred in a commercial breeding of Saffron Finch, about 400 animals, after the application of Cavaleiro-SC®. The owner reported that, after spraying the product, some birds died and others began to struggle in the cage, showing imbalance and altered feces. One of the individuals was taken for a veterinary consultation and, during the clinical evaluation, was possible to observe alterations in the nervous system, such as loss of balance, head tilt, presence of hemorrhage in the ears and changes in the digestive tract, presenting lipid droplets in the microscopic analysis of the feces. The recommended protocol included the administration of 1 drop of the manipulated hepatic formula, composed of: Silibin pythosame (18.75mg/Kg), L-methionine (5mg/Kg) and Omega 3 (100mg/Kg) BID for 20 days; 1 drop of Prednisolone (2mg/Kg/BID for 3 days); Activated charcoal sachet (1 sachet/total mixture of seeds for 400 birds in a single dose); 5 drops of Merceton® diluted for every 100mL of water in the water feeder and replaced daily for 7 days. Upon return, the animal presented traces of blood in auricular feathers, which were cleaned and administered Transamin® in a single dose. After the protocol, the animal recovered and no longer showed clinical signs. Discussion and results: Self-medication and the use of formulations that are not suitable for animals, such as the Cavaleiro-SC® product, are harmful practices for animals, since there is a lack of knowledge of the concentration and toxic dose. In this case, the nervous system alterations, such as the strangle in the cage, were a consequence of the Fipronil's ability to inhibit GABA receptors. Furthermore, because of the unknown toxicokinetics of Fipronil in birds, the clinical alterations are not conclusive, but some alterations

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are suggestive of liver disease, corroborated by the presence of lipid droplets in the feces and the similarity to reports of swollen hepatocytes and liver weight in other species intoxicated with Fipronil (COUTINHO 200). Conclusion: Studies on the long-term consequences of Fipronil intoxication in birds are necessary, by accidental intoxication or as self-medication to ectoparasite control. Finally, it's the scientific community's responsibility to disseminate information about the dangers of intoxicating agents for humans and animals, such as deaths and resistance to these agents. References COUTINHO, C.F.B. et al. Pesticidas: Mecanismo de ação, Degradação e Toxidez. **Pesticidas: Revista de Ecotoxicologia e Meio Ambiente**, Curitiba, v.15, p.65-72, 2005.

**PALAVRAS-CHAVE:** Fipronil, Intoxication, self-medication, *Sicalis flaveola*

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