

Carbofuran Use and Abuse in Kenya: Residues in Soils, Plants, Water Courses and the African White-Backed Vultures (*Gyps Africanus*) Found Dead. (2011)

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Abstract

The increasing number of incidences of alleged wildlife poisoning with Furadan in Kenya has sparked off a strong lobby fronted by wildlife conservationists against Furadan use in the country and prompted this study. The worst-case scenario was in 2004 in Athi River, where a massive number of 187 African white-backed vultures (*Gyps africanus*) and hyenas were found dead at a spot where poisoning was suspected to have occurred through a Furadan-laced camel carcass bait. This study was initiated by the Peregrine Fund—Africa Project, and the objective was to provide evidence for Furadan exposure, its misuse and involvement in vulture poisoning and potential impact on areas near two wildlife conservancies in two most affected districts. The study found evidence for ready availability of Furadan 5G in local veterinary retail shops and its illegal misuse by pastoralists and farmers against wildlife to protect their animals and crops. Analysis of soil, water and plants taken from the farms and water sources by high-performance liquid chromatography (HPLC) and gas liquid chromatography–mass spectrometry (GC–MS) found residues of carbofuran, 3-hydroxycarbofuran and 3-ketocarbofuran, indicating that Furadan was used extensively in farming causing residual environmental distribution and contamination and posing risks to small birds and mammals. Forensic analysis of residues in beaks, feet and crop content of the dead vultures as well as in a laced camel carcass bait and soil samples from one site of poisoning also showed carbofuran and its two metabolites supporting allegations of Furadan involvement in wildlife poisoning and high-mortality cases of African white-backed vultures (*Gyps africanus*) in Kenya.

Keywords

Furadan Poisoning Wildlife Environmental contamination Kenya

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