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EFFECT OF TOXIC SUBSTANCES ON BEES AND WILD FAUNA BIRDS

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ABSTRACT

Toxic substances that caused toxicosis in bees and wild fauna birds, comprise additional indication of their effect on environment. It is well known that during the latest decades population of rare birds and species in danger will become extinct. Between them are *Aegypius monachus*, *Aquila chrysaetus* etc.

One of the ways to estimate the extent of the environmental pollution problem is the collection of toxicosis cases data. For this reason, 34 cases of poisoned bees and 38 of wild fauna birds are studied. Poisoning took place during the years 1995-1999. The diagnosis of poisoning was set after estimating the history, autopsy findings and, mainly, toxicological analysis. Methods of identification and quantification were chromatographic (thin layer, gas and HPLC) and colorimetric.

From the results, it was derived that hundreds of beehives and thousands of wild fauna birds were poisoned, mainly, because of toxic substances used by human beings. In particular, in 32.3 of bees and 38.8% of birds, toxic substances were identified. Substances were of several groups as organophosphates, carbamates, alkaloids (strychnine, etc.), pyrethrins, cyanides etc. Most of the toxic substances caused the death of bees and birds.