

POTENTIAL RISKS OF BEE POISONING IN MONTENEGRO

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Abstract

Bee poisoning is becoming a growing problem in the world. With more intensive agricultural production, urbanization, heavy industry, environmental pollution from various sources, the risk of bee poisoning is high. Bee poisoning most often occurs as a consequence of the use of pesticides in agriculture, the use of acaricides in the treatment of bees, treatment of tick and mosquito habitats with chemical agents, pollution from industrial plants that release toxic substances, heavy metals, chlorinated biphenyls, dioxins, etc. Considering that periodically mass deaths of bees and continuous weakening of bee societies occur on the territory of Montenegro, the aim of the paper was to consider the potential risks and dangers of bee poisoning.

In recent years, there has been a global decline in bee populations. Bees are the best indicators of environmental contamination, they are very sensitive to elevated concentrations of dangerous toxic substances in water, soil, air, plants. Agriculture has a very significant impact on environmental pollution. The application of agro-technical measures and chemical means in agriculture significantly changes the conditions for beekeeping. In addition to various diseases of bees and bee brood, poisoning with plant protection products is a major danger for honey bees. The greatest degree of destruction of beneficial insects occurs during the use of insecticides in order to destroy harmful insects in forests and orchards. In Montenegro, there is also a danger of bee poisoning from many of the mentioned sources. Considering that mass deaths of bees and continuous weakening of bee communities periodically occur on the territory of Montenegro, bee poisoning should be taken into account. However, there are no data on bee poisoning in Montenegro. The reasons for this may be the lack of a program of regular testing of dead bees and honey plants that visit bees during grazing on the presence of pesticides.

In order to protect bees from poisoning, monitoring of bee poisoning should be adopted and implemented at the state level - as part of a comprehensive program of measures to protect bees from poisoning - which should be respected by agricultural and other producers. Monitoring results should show real exposure and endangerment of bees from pesticides.

Key words: *Bee poisoning, Pesticides, Montenegro.*