ENVIRONMENTAL IMPACT OF PESTICIDES ON POLLINATORS AND ENTOMOFAUNA

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ABSTRACT
In order to prevent or reduce the damages caused by plant diseases, the use of pesticides has been rapidly extended mainly because of their efficiency and the facility of using them. Unfortunately, the use of pesticides had a negative influence on the environment, causing numerous effects, such as: soil contamination, water pollution, high risk of intoxication for humans and animals, residues in different parts of the plant, reducing biodiversity, contributes to pollinator decline and destroys habitats, all of which determined instability in the ecological community.

The pollen from the most cultivated plants is distributed by insects. Bees are the most important pollinators. It is estimated that the cost of natural pollinated crops is almost 265 billion euro, and approximately 90% of spontaneous flora requires natural pollinators. Unfortunately, in the past years, there has been a massive decline of bee population (Carreck, 2014).

Latest studies indicates that globally the bee population decline is determined mainly because of using pesticides, also entomopathogenic nematodes and the use of cell phones that emit electromagnetic fields radiations.

Because of pesticides, bees started to manifest some common effects, such as losing orientation or smell, the ability to learn, thermoregulation. Their heart beat and respiratory system are being reduced and their exocrine glands are being shrunk (Nominato, 2015).

Greenpeace issued a list with the most dangerous pesticides that should be banned and eliminated from every ecosystem in order to avoid the exposure of bees towards these devastating effects.

KEYWORDS
Effect, entomofauna, neonicotinoids, pesticides, pollinators.
REFERENCES

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