

Toxicological Effect of Environmental Pollution on Honey Bees †

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Abstract: Every year, every living species faces a fresh set of problems. Environmental pollution in the form of smog is currently a major problem. Air pollution is likely to be one component of a larger issue. Because it may impact human health in so many ways, 'it's only natural that it affects other animals as well. Airborne pollutants affect all types of life, even insects. The presence of pesticides in the beekeeping environment is generally recognized as one of the most important concerns that affect the 'honeybee's existence. Now, environmental pollution in the form of 'smog' can be added to the list of stressors. Researchers have discovered how air pollution may be affecting honeybee health in the wild. According to other studies, more than 80% of the bees taken from moderately or highly polluted locations died within 24 hours. Bees from industrial and heavily polluted areas were also discovered to be covered with minute particles comprising lead, tungsten, arsenic, and a variety of other dangerous metals. Bees have become lethargic in their regular tasks due to hazards form of air pollution, which may be reducing their lifespan. Polluted air has negative consequences not just for humans but also for honeybees, who survive significantly less in such contaminated air and live a handicapped existence in which they are unable to visit the flowers as frequently as they would if the air were cleaner. Furthermore, heavy metal concentration factors for honey appear to be greater in polluted areas than in unpolluted areas. These metals' presence in plant flowers is linked to their presence in associated honey and byproducts. In our environments, bees play a crucial role as pollinators. Pollution is hurting the health of pollinating insects, which means ecosystems are also being impacted. There are some gaps in our knowledge about environmental pollution and the honeybee keeping sector in India.

Keywords: environmental pollution; ecosystem; honeybee; pesticides; smog.

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Conflicts of Interest

The authors declare no conflict of interest.