



Usage of pesticides for better agriculture improvement

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DESCRIPTION

Pesticides are designed to kill and they often kill or damage organisms other than the target pests, including humans, since their mode of action is not limited to one species. The WHO reports that there are 3 million cases of pesticide poisoning and up to 2,20,000 deaths every year, mostly in developing countries. Moreover, pesticide application is often not reasonably practical. Nevertheless, as the contribution of agrochemicals to that agricultural production is well-established it would also cause damage to the ecosystem, including humanity. In the field insect pests, weeds, diseases, rodents and rabbits are controlled by pesticides (Cavoski, 2011).

Although the pesticide industry in the developed world has made good progress in developing and manufacturing low-risk/low-volume consumer formulations and environmentally friendly pesticides, pesticides in developing countries are still mainly available in traditional formulations such as dirt wettable powder, emulsifiable concentrate and solutions etc. Synthetic pesticides and fertilizers (agrochemicals) are commonly used in Indian agriculture (Le Couteur, 1999). Farm output is directly proportional to agrochemicals that have been implemented since the first green revolution of the 1950s. In India, misuse and unsafe use are quite common. Some experimental data showed that various agrochemical ingredients that possess mutagenic properties had been regarded as possible chemical mutagens. Generally speaking, the genotoxic potential of agrochemical ingredients is small, as they produce positive results in a few genotoxicity studies. However, in a single test, the lowest operative dose is usually very high (Rocheleau, 2009).

Thus, the toxic consequence, a primary risk factor for short and long-term consequences such as carcinogenic and reproductive toxicology, is primarily genotoxic potential. Most of the chemicals used as pesticides, however, are not

entirely selective. The lack of highly selective pesticide action poses a risk to both man and other desirable life forms existing in the environment, thus raising concerns about the consequences of pesticide use on the environment and human health where monitoring, control and management activities are feeble or even simply nil. Unlike other man-made chemicals, pesticide exposure may affect a large dose of the human population, including workers and that dose of the general population that may increase exposure through domestic use, proximity to agricultural settings and contaminated food consumption. In addition, some subjects may be exposed to pesticides by their use for public health purposes, as is the case with people living in residential quarters of urban centres.

The synthetic organic compounds used to control undesirable harmful and risky types of plants and animals to help individuals. Pesticides are harmful and utilized to control the awful consequence of different irritations upon our biological system and environment (Yousef, 2011). The pesticides incorporate fungicides, bug sprays, herbicides, nematocides and molluscides, and so on, which intensely influence man long with animals, plants, and encompassing environment. The impact of pesticides on certain physiological occasions, for example, biochemical changes, haematological changes, and conduct anomalies, have been studied in marine, aerial and earthbound animals through the activities of a few proteins that came about by their activity. In this way, it is obligatory to think about the harmful impact of pesticides to evade the pesticide caused perils in nature.

CONCLUSION

Pesticides have spread through all segments of our environment due to their indiscriminate usage. In the earths physical, chemical and biological evolution, numerous naturally occurring tumorigenic agents subsequently appeared

in soil and water. The exponential acceleration of the human cultural revolution, beginning perhaps with the controlled use of fire, has introduced further carcinogenic agents. New and unique chemicals, increased concentration of radioactive substances, various hydrocarbons and other atmospheric contaminants, insecticides and herbicides with carcinogenic properties.

REFERENCES

- Cavoski I, Caboni P, Miano T (2011). Natural pesticides and future perspectives. *Pesticides in the modern world-pesticides use and management*.169-190.
- Le Couteur DG, McLean AJ, Taylor MC, Woodham BL, Board PG (1999). Pesticides and Parkinson's disease. *Biomedicine & pharmacotherapy*. 53(3):122-130.
- Rocheleau CM, Romitti PA, Dennis LK (2009). Pesticides and hypospadias: a meta-analysis. *Journal of pediatric urology*. 5(1):17-24.
- Yousef YA, Akasheh TS (2011). Photolysis of Some Benzimidazole Based Pesticides. *Pesticides in the Modern World—trends in Pesticides Analysis*. 43.