



P48 : ECOTOXICOLOGICAL RISK ASSESSMENT

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Ecotoxicology is a sub-branch of toxicology, which makes studies on chemicals' environment spread and on the prevention of the effects of harmful effects on the organisms and ecosystem. The studies conducted in the field of Ecotoxicology and the obtained data is less than in the area of environmental toxicology.

In ecology there is risk assessment process. One of the purposes in risk assessment is determining the acceptable level of risk and making risk management in order to reduce this risk.

We can examine three steps for risk management which starts with planning.

1. Problem formulation: Information collect for risky and protection required plant and animal species.
2. Analysis: Analyzes are performed to assess the extent of harmful exposures and damage that may occur to plant and animal species.
3. Risk characterization: It includes two important components. Risk estimation and risk description: "Risk estimation" combines risk profile and exposure effects. "Risk description" provide important information for the interpretation of results, and define a level of risk for harmful effects on animals and plants.

It is possible to estimate ecological risk from the level of pollutants in earthworms' tissue. Effective results is taken by reaching of 0,015%- 6.0's% of disposable drug to alive target with pesticide application. It is recognized to be a risk from the ecotoxicological terms as the remaining 94-99.9% parts are reaching non-target audience because of using unintentional spraying technique.

Conclusion: An environmental and health issue arises at a global level as a result of the persistent organic pollutants spreading around the world because of entering food chain, and accumulating in animals and humans. In this regard, the preparation of an inventory of the substances which are predicted to be controlled by ecotoxicological studies is necessary to reveal the size of the pollution they create.

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