



P58 : PESTICIDES AND WATER POLLUTION

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Objective: Our aim is to evaluate the researchs about the water pollution caused by pesticides and the regulations.

Method: This study is a collection of the general knowledge about the pesticides, amounts of their usage, their effects on health, problems caused by pesticides, knowledge level of the farmers, studies and the regulations about the subject.

Results: Pesticide usage is decreased in the last ten years. Main problems about pesticide usage are determined as the decrease of sensitivity to pesticides, effect on the non- target organisms, residues, and health. Acute health effects begin from irritation, dermatitis and may end with death as a result of systemic absorption. Most of the deaths are related with the high toxic parathion and methamidophose. Cancer, birth defects, neurotoxicity, neurobehavioral disturbances, neurophysiological changes, effects on fertility are the main chronic effects. Pesticides can seep to the water masses by ground. Leakage may be by evaporation, erosion and may be taken by plants and so on. Additionally pesticides may pass on to the plants through the soil and can be indirectly or vertically to animals. Organochlorine insecticides, DDT, dieldrin and aldrin can concentrate on living with accumulation of biological bodies. Pesticides can contaminate groundwater. This is measured by Groundwater Ubiquity Score (GUS). The most important role in the registration of pesticides is EPA in the United States (Environmental Protection Agency) and the European Commission (EC) in European Union. In our country, there are many regulations on the subject

Conclusion: Public health education on the measures to be taken, and education of each component on the subject is required. Legislation should be introduced to international standards and national standards should be set. An organization that sets and follow the standards should be established.

Keywords: Pesticides, residues, water pollution, health effects of pesticides, regulations