Pesticides and their toxicity.

Daniel J. Wescot*

Department of Anthropology, Texas State University, San Marcos, United States

Accepted on 05 November, 2021

Description

The ability or capability of a pesticide to cause illness is known as pesticide toxicity. Toxicity can be detected by exposing test animals to variable dosages of the active ingredient. The pesticide contains all of the following: Herbicide, insecticides, nematicide, molluscicide, piscicide, avicide, rodenticide, bactericide, insect repellent, animal repellent, antimicrobial, fungicide, and lampricide. These are very toxic as pesticides are deposited in the colon, where they gradually cause poisoning of the body. In countless studies, pesticides have been linked to cancer, Alzheimer's disease, ADHD, and even birth defects. Pesticides also have the potential to damage the nervous system, the reproductive system, and the endocrine system. The World Health Organization divided pesticide toxicity into four classes. They are extremely hazardous, highly hazardous, moderately hazardous, and low-hazard. The main factors influencing toxicity are metabolism, absorption ability, gender, dosage, and particularly dose-time relationship, exposure route, form, and innate chemical activity. Pesticides can cause short-period adverse effects, called acute effects, such as stinging eyes, rashes, blisters, blindness, nausea, dizziness, diarrhea, and death. And chronic adverse effects like cancer and Alzheimer's disease can occur months or years after exposure. There are four types of pesticides: Herbicides, insecticides, rodenticides, and fungicides. Low-hazardous pesticides live in the body for 15 days, moderately hazardous pesticides for 1 month, and highly hazardous pesticides for about 2 months. There are some chemicals that have acute toxicity, such as arsine, chlorine, diborane, nitrogen dioxide, nickel carbonyl, methylfluorosulfonate, hydrogen fluoride, phosphogene, sodium azide, sodium cyanide, and other cyanide salts. Some examples of toxic chemicals are mercury, lead, formaldehyde, per-and polyfluoroalkyl substances, arsenic glyphosate, and polychlorinated biphenyls. Oral toxicity is the toxicity that occurs after the oral administration of a substance. The toxicity was developed based on factors like dose, duration

and route of exposure, and the shape and structure of the chemical. Inhaling the insecticides can cause poisoning and lead to eye tearing, coughing, heart problems, and breathing difficulties. The ingredients are named based on the type of pest they control. Insecticides are used against insects, herbicides are used against weeds, and fungicides are used against fungi and molds. Molluscicides are used against molluscs. Try to use fewer pesticides as it saves money and lowers health risks. Using more pesticides than recommended by the manufacturer will reduce crop yield.We can control the pests by using crop rotation. Decrease the use of pesticides by using alternatives such as biological control of insects or natural killers that are not harmful to the crop. Store the pesticide in the original container. Before use, check whether the label usually contains information about the safe use of the pesticide. The label should be in the resident language that can be understood by users. Ask the seller for a chemical safety data sheet, and ask for help if you cannot understand the information. In the event of a misfortune, the information on the label can help you. Confirm that the label is readable. Farmers' main exposure to the chemicals occurs during mixing, application, taking care of the equipment, re-entry into the field, spill, disposal, selling, transporting, and storing. Pesticides could persist and lead to life-threatening diseases.

*Correspondence to

Daniel J. Wescot Department of Anthropology Texas State University San Marcos United States E-mail: daniel@cot.edu

Citation: Wescot DJ. Pesticides and their toxicity. J Clin Exp Tox. 2021;5(5): 4.