

A Short Note on Health Risk Assessment of Pesticide Usage in Menia El-Kamh Province of Sharkia Governorate in Egypt

Abstract

Menia El-Kamh province of the Sharkia Governorate constitutes one of the largest agricultural areas in Egypt. About 88% of the nearly 472,000 people living in this province rely on agricultural activities for subsistence. Several pesticides including organochloride, organophosphorus, carbamate, and parathroid insecticides, fungicides, and herbicides are commonly used in citrus, vegetable and other crop-growing areas to increase agricultural productivity. However, their use has also been associated with several cases of pesticide poisoning. In this research, we conducted a field survey to assess the knowledge, attitudes, and practices of the farmer's community regarding the safe use of pesticides. We also evaluated the residual concentrations of selected pesticides in water, soil, milk, fish, and orange samples.

Keywords: [egypt](#) • [pesticides](#) • [chemical fertilizers](#) • [sumithion](#)

Introduction

The agricultural sector may be an important part of the Egyptian economy. The full space of agricultural land in Egypt is seven million feddans, and therefore the population exceeds sixty million. Agriculture accounts for regarding two hundredth of each gross and domestic merchandise and total exports, and for regarding thirty fourth of total employment [1]. The agricultural sector greatly contributes to the general food wants of the country and provides the domestic trade with agricultural raw materials network and tutored them by error back-propagation (Pao 1989 and Karlik 1994). The neural Residual levels of pesticides in Egyptian foods usually average more than those found in developed countries, either as a result of the quantity of arch technicians offered to enforce the laws regarding pesticide usage are inadequate or due to the shortage of adequate money resources [2]. Many Egyptian studies work the residual levels of pesticides in foods have reported risky concentrations in potato tubers, milk samples, fruits and vegetables. A higher proportion of poisoning and sickness in Egypt happens in remote agricultural areas where there are inadequate activity safety standards, low social control of pesticide-related legislation, poor labeling of chemical containers, illiteracy, inadequate protecting consumer goods and laundry facilities, and user's lack of information of chemical hazards. A field survey was conducted between February and Sep 2001, throughout that a form was developed and administered to a complete of 187 farmers WHO were heads of arbitrarily hand-picked households from many agricultural districts in Menia El-Kamh province of the Sharkia Governorate in Egypt [3]. The form centered on the assessment of information, attitudes and practices of those farm employees concerning the safe use of pesticides, and therefore the identification of the foremost outstanding health related issues within the space. During the sphere survey, many environmental samples were collected for the analysis of chemical residuals. Soil samples were collected from eight totally different locations as well as the about wila, Banykoriesh, Kafreldair, Mohamadia, Seneta, Shembara, Taliene, and Walaga districts. Water samples were collected from surface and lined

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drainages, rice fields, canals, and taps [4].

Description

The results of field survey concerning the safe use of pesticides indicated that ninety eight.9% of farmers did not wear gloves whereas ninety eight.4% failed to wear eye glasses or glasses once intermixture or applying pesticides. About thirty fourth ne'er wear trousers and shoes once applying pesticides. Among the respondents, 31.5% reported that they need ever eaten up food, whereas sixty six drunk water, and 38.8% smoke-cured once intermixture or applying pesticides. regarding eighty four indicated that they old discomfort throughout chemical. Among the clinical symptoms of poisoning that they reported , 53.2%, 13.8%, 45.7%, 12.2%, 9.6%, 15.4%, 33%, 20.2%, 59.6%, 5.3%, 16.5%, 2.1%, 14.9%, and 3.2% were related to nausea, vomiting, eye irritation, arrhythmia, blurred vision, abdominal cramps, dizziness, diarrhea, headache, excessive secretion, wheezing, confusion, sweating, and coma, severally. As to the common diseases suffered throughout the last ten years, 34.6%, 29.3%, 14.4%, 29.8%, 6.9%, 20%, 8.4%, 22.3%, 57.4%, 27.7%, 6.4%, 13.3%, and 11.2% of respondents indicated that they old fever, skin irritation, skin

diseases, urinary organ diseases, metabolic process diseases, asthma, cancer, diarrhea, headache, abdominal pain, cardiomyopathy, vision disorders, and high blood pressure [5].

Conflict of Interests

None

Acknowledgments

None

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