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Mini Review

Pesticide Use and Adverse Health Effects

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Abstract

In terms of plant diseases, weeds, and pests of larvae, animals, and ecosystems, chemicals used for agriculture, agriculture and household use are known as international pesticides. It is fast-acting and cheaper, but these substances used during the cultivation process remain part of the product after harvest. Pesticides can change the human and animal's thyroid gland and other hormones, causing damage to the immune system, cancer and human brain abilities. In recent years scientists, women's disorders, congenital malformations, premature birth, miscarriage, low weight births are associated with the effects of persistent organic matter. Over the last 40 years, the effects of organic pesticides on health, especially in infants and young children, are likely to be high. According to a study in the United States, 1 million people enter the human body every week and about half of them pass through animal products. It is essential to ensure that people's health impacts on the health of the people according to international standards and tools, and provide users with scientifically-based and evidence-based information. In addition, the analysis of the type of pesticides, consumption, and residues in foodstuffs, as well as the analysis of the effects of pesticides on exposure to pesticides and human health, is essential.

Keywords: Ecology; Insects; Herbicides and Pesticides

Introduction

Background

In terms of plant diseases, weeds, and pests of larvae, animals, and ecosystems, chemicals used for agriculture and household use are known as international pesticides. Pesticides, herbicides, fungicides, etc., for the prevention and control of fruits, vegetables and seeds during planting and storage. substances used. It is fast-acting and cheaper, but these substances used during the cultivation process remain part of the product after harvest. Consequently, issues of pesticide residues in the fruit and vegetable environment have had a negative impact on consumers' health [1]. Although pesticides have played an important role in the supply of growing food supply to the world population, scientists have been investigating, and proving toxic to human health. The study found that pesticides have a negative effect on human health by accumulating, poisoning, causing allergies, and causing cancer.

Purpose

Analyze the health and environmental impacts associated with the use of pesticides to explore ecological hazards and related ethical issues.

Uses of pesticides in mongolia

Despite the fact that Mongolia has been using chemicals for plant protection and agriculture, it is still unclear whether the controls, surveillance systems, and even the proper management of pesticides are still in use. Pesticides are monitored when importing pesticides, but does not control during the cultivation process, and does not follow the instructions on occupational safety and health, rules and regulations for handling citizens, and does not have access to training, in other words, agricultural practices have not yet been passed. There is still no integrated database of pesticide data, and there is still a lack of assessment and assessment of the residual pesticides in potatoes and foodstuffs [2]. Since 2000,

a joint order of Ministers of Environment, Food and Agriculture issued a "List of Pesticides and Use Measures for Plant Protection" and has been licensed for importation. For example, in the list of 107 types of substances in 2013, 150 species of insecticides, 1100 tons of herbicide, 150 tons of herbicides and 15 tons of rostenticides. It should be noted that the relevant professional organizations should be aware of the name of the substances in parachute containing "The Global Sustainable Use of Pesticides" issued by the International Standards Committee of the Sustainable Agriculture Network within these 107 species. Some Mongolian laboratories disseminate information about the amount of pesticide residues in foodstuffs by analyzing and evaluating thinly chromatographic methods, while importers and home-grown fruits and vegetables have a high risk of cancer-causing pesticides (45% of respondents poor quality of food) is inadequate to use fruits and vegetables according to healthy nutrition recommendations. In 2010, "Khanbogd" the risk factor for non-artificial diseases" [5]. Researchers and researchers from the Department of Hygiene and Infectious Diseases of the Institute of Hygiene and Infectious Diseases (1992) studied the import of nitrates and pesticides in some imported foods and food products. "Out of pesticide residues, bactericidal levels, and hygiene value in some products of flora and fauna, some 7.3% of 1000 vegetable samples were found to exceed 50% of the pesticides, which exceeded the permissible level. and 2,75% of the samples of meat and meat products, and 8,62% of the samples of cereal products were found in pesticides and no milk or dairy products were found [6]. According to a study by the Ministry of Health and the Center for Food and Nutrition Research Center's "Methods to Study and Evaluate Impacts on Environmental Impacts on Environmental Pollution", it shows that toxins, meth scopes, hexachlorobenzene, high levels of pesticides, and pesticide levels of food consumed more than 0,0001-0,0002 per 1 kg of body weight, or have a negative impact on the health of the patient to determine the extent of exposure to creatinine in the urine a [7]. According to a 2007 - 2008 study by teachers and students of the Department of Food Chemistry, Department of Food Chemistry, the amount of pesticide residues (30mg%) in the vegetables in the country (150mg% - 73mg%) and adverse effects on human health was evaluated as a surveillance survey [8]. According to the Food and Nutrition Research Center of the Public Health Institute of Mongolia in 2010 - 2012, a total of 152 samples of 9 kinds of imported foodstuffs were taken from the Mongolian population, 10 identification of the pesticide residues such as lambanlacsachethotin, diphenylamine, and diazinon were conducted in the laboratory of the Chemical and Toxicology Laboratory of ILIC by an analytical method in the European Union. White and millet 1 - 5 pesticides were found in products such as rice, noodles, triangular porridge, raisins, tomatoes, carrots, garlic, potatoes, preserved fish, nuts, and tea; and in the milk and butter sample of jinphosmetil; bacillary-ethyl in noodles; diazonium in 9 specialty products, noodles, wheat flour, millet, rice and nuts; carbohydrazide in rice, wheat flour, carrots, potatoes, butter, cheese, caffeine; lactobacitothrin in rice, wheat flour, nuts, and food spices; titanic in nuts; rice, flour, potatoes, vegetables etc. The amount of fluctional residues in 13 different foods exceeded the Permissible maximum (PI) of pesticides residues compared to the standards and recommendations of Mongolia and internationally. Diazonium, detected in stem and garlic; The amount of diphenylamine residues in posterchildren, triangular rice, triangular rice and nuts in milligrams is at the level of the standard defined in the relevant standard. According to the internationally accepted methodology, the risk of estimating the food consumption of the surveyed population is based on the size of the pesticide residue. The results of the study indicate that statistically significant is not a risk of human health as a daily dose of flamylazole in the daily tolerance doses of some imported foods. In the Central Laboratory of PIA, 309 food products of the banana, apple, watermelon, turnip, carrots, cabbage, tomatoes and phosphorus pesticide residues were analyzed in 2008 in 243 food products of chlorine organic pesticide. Potatoes, carrots and red tomatoes, kimchi and peanut vegetables, apples, grapes and other fruits are defined as the standard permitted levels. Also, in GABL, 2009 - 2011, 162 samples of potatoes and vegetables were concluded that chlorine organic and phosphorus organic pesticides and 266 samples were approved for the amount of residual determination of delta, permethrin and hexachlorobenzene in the sample [9].

Pesticide use worldwide

There are over 1000 chemical pesticides in the world and about 3 billion pounds of pesticides are used in agriculture. It destroys 9000 species of plants, mites, insects, 50000 plant species and 8000 species of weeds that destroy crops. According to scientists, plant insect mites 14%, pathogen 13%, weed 13%, and no pesticides. 78% of the harvest on the world, 54% of the crop, 32% of the crop, harvest 35 - 42% decreases [10]. Over the last 30 years, the world has been heavily used in biopesticide with low toxicity. Consumption has increased year by year and spent $ 1.5 billion

in 2010 in this type of pesticide. Biometry is a pesticide derived from natural materials, such as animals, plants, micro-organisms, some mineral matter. Examples include cider, buffalo soda, bacillus thuringiensis, etc. [11]. The Standard Committee for Sustainable Agriculture Network (Sustainable Agriculture Network), the "List of Pesticides" in 2011, contains a list of acetate, aldrin, alpha-hexachlorocyclohexane, carbophobe, chlorides, carbohydrates, arsenic and silver water and cadmium compounds, DDT, dehydrin, diethylamide, phenolate, elvinine, fluoracitamin, heptachlor ide, penton and hexachlorobenzene, lindane, metamorphose, parathion, Myers, paracletes, pertactin, polychlorinated ammonium, theosophist, vinyl chloride, topiary, pentachlorophenol their salts, and oxidomethonmethyl pesticides, are prohibited [12]. According to the United States Food and Drug Administration, the list of pesticides and veterinary products in the list includes the following products: For example: 90% of the tested strawberry sample was contaminated and 36 pesticides were used during the sowing process. 39 species of raspberries use pesticides, and 58% of samples are polluted. In the cherry plant, 36 kinds of pesticides are used, and 90% of the samples were polluted. Similarly, 40% -60% of apple, pear, pellets, spinach, grapefruit, and sweet peppers were residues, and these 30 types of pesticides are used during the cultivation of these fruits and vegetables. In addition, the use of the "Environmental Research Group" (Environmental Working Group 2013) of the United States Food and Drug Administration ("Environmental Working Group, 2013") is a safe, non-polluting chemical "Clean 15 Foods": sweet corn, onion, pineapple, , sweet potatoes, etc. vegetables "without pollution" have to be washed and peeled. Also, a thick peel of watermelon, grapefruit, mango, kiwi, and vodka is a safe protection of chemical substances, and the contaminated part remains in the film, but it is recommended to wash thoroughly before use [13]. China produces 350 million tons of vegetables and 80 million tons of fruit annually, which is a large exporter of 45% and 16% of the global food supply. However, international experts point out that food security issues, in particular, are largely inadequate in pesticide management. In particular, residues in grains, grapes, fruits, vegetables, tea and medicinal plants are still higher than tolerable [14].

Pesticides impact on human health

According to scientists, the pesticide residues in consumers are very low in terms of how well the rules apply to pesticides, when and how they are used. However, there is a risk of adverse effects on human health if it does not follow the proper rules for proper use of the chemicals. The study found that pesticides have a negative effect on human health by accumulating, poisoning, causing allergies, and causing cancer [8-15]. Pesticides can change the human and animal's thyroid gland and other hormones, causing damage to the immune system, cancer, and human brain abilities. In recent years scientists, women's disorders, congenital malformations, premature birth, miscarriage, low weight births are associated with the effects of persistent organic matter. Over the last 40 years, the effects of organic pesticides on health, especially in infants and young children, are likely to be high. For example, Dichlorodiphenyltrichloroethane and its metabolites (DDT) have increased the number of microcrystalline cells, which are considered as the key determinants of genetic modification [10-12]. Although some of the epidemiological studies have shown that polychlorobiphenyls in the environment are negatively impacting the development of children's minds [13,14]. Longenecker also found that there was a strong correlation between mothers' dichloride levels in mice, birth defects and low birth weight in 2001 [15]. For example, the substance of the Palate is proving to be the animal of the animal that is harmful to the reproductive health and animal growth. Most phosphorus pesticides, which are included in the body, have been converted into one or more of the dialectal phosphate metabolites [16]. Therefore, the rate of dialysis metabolite in urine is evidence of one or more phosphorus pesticides [17]. According to a study in the United States, 1 million people enter the human body every week and about half of them pass through animal products. Pesticides can affect the health of the environment due to its residual size, its nature, the pathways to human body, the accumulation, the body's discharge and other factors. Most pesticides are rapidly absorbed into fat fats, and they are absorbed into the lipid layer of the membrane. This changes the normal function of the cell and their protein composition. For example, changes in the enzyme system interrupt the metabolism and reduce the activity of central and nervous and reproductive organs, affecting the endocrine glands, blood and blood-forming organs, cardiovascular system, liver and kidneys [18]. The normal function of the organisms is to be poisoned when the substance that was introduced into it can not be extracted or broken. Detoxification is classified as sharp and chronic. Acute poisoning refers to the presence of a large amount of harmful toxic substances, which may have serious effects on all physical activity and may present certain signs of poisoning. Chronic exposure may be caused by a small amount of poisoning. This is because of the long-term use of stable pesticides. The degree of

pesticides in the environment and foodstuffs will create a condition for accumulating the human body [19]. The introduction of chemical substances in human body is primarily due to insufficient labor safety measures and poor agricultural practices. Chlorogenic compounds are the most toxic to the human body and animal through the respiratory, digestive tract, and skin. Therefore, it is important for countries in the world to select and use harmful and non-toxic substances to the environment, to take measures to limit or stop the use of hazardous materials and to monitor and report the level of pollution of food.

Conclusion

It is very difficult to accurately calculate the pesticide size. Disposable pesticide accumulation not only threatens the health of the population but also pollutes natural resources and hinders social and economic development. It will be difficult and harder to handle this problem in an efficient way. Danuta Heavener, Commissioner for Regional Economic Policy of the EU (Hublner, 2007). Most of the pesticide accumulation early in the evening may infiltrate the soil and water into the atmosphere. This will increase the cost of contamination and increase the risk of poisoning. It is important to monitor the amount of pesticide in Mongolia, which is coming from abroad and domestic food. Pesticides include changes in human and animal thyroid gestation and other hormones, the immune system, the cancer, the human brain's ability to abort, the miscarriage of pregnant women, and the under-birth. It's a threat to our country with few people. Consequently, it is important to recognize that vegetable farmers have to check the extent to which pesticides can be used, as well as how to properly use them, and to what extent the quantities of fertilizers produced when buying their vegetables. It is essential to ensure that people's health impacts on the health of the people according to international standards and tools, and provide users with scientifically-based and evidence-based information. In addition, the analysis of the type of pesticides, consumption, and residues in foodstuffs, as well as the analysis of the effects of pesticides on exposure to pesticides and human health, is essential.

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