The invention of organochlorine insecticides

Health & Medicine, Disease



After the II World War greater plough was saw technological and scientific innovations in nutrition, medicine and agriculture and improved the life to well-being of people. After invention of Paul Muller wonder-drug organochlorine pesticide-DDT, the scientists of the developed countries jumped on that discovery due to combat the diseases which may astoundingly killed fewer people than bombs and bullets due to typhus and malaria which transmit by the insects. Post-war world made a swift and some-times painful transition to a peace-time economy, farmers used technologies they revolutionized cultivation. In short span, scientists were developed new classes of chemicals (pesticides) to eradicate insects and weeds. Approaches include a broader functioning and conversion of technologies to increase food production through amplification rather than expansion, alteration in diet and trim down food waste. These approaches remain mainly elevated and the capacity to feed the world's growing population has proceeded at the cost of significant ignorance for ecological bumps.

Then, as today, cultivation uses 75% of all pesticides which developed in between 1940 to 1950 and this decade is called the golden age of chemical pesticides. The use of land and water for food production to meet the global population results unfortunately deteriorate the environment. After Rachel Carson's Silent Spring (1962), the importance of the problem to a wider public, the Natural Environment Research Council provided founding in 1965 for carried out research on ecological damage. Organochlorines were the first synthetic organic pesticides which are is to replace the first generation

pesticides and it contains linked chlorine atoms, reveals a large variety of structures with much varied chemical properties and has high lipophilicity.

Organochlorine insecticides (OCs) are a group of synthetic compounds, produced from hydrocarbons, in which one or more chlorine atoms are in the place of hydrogen atoms, and may contain oxygen and sulphur. These compounds are entering the environment to improper application of agricultural run-off, industrial and domestic waste-water. Some of them are found in ground 10-15 years after use, also have been found in the polar regions where they have never been used, it has enough persistence transport prospective to move around the globe, colder regions is often higher than in warmer. These chemicals pretentious the organism in numerous ways by tainted air, water or through the dermal contact in developing countries and contaminated food (meat, fish, and grains) in developed nations. Long after use of these compounds are remain intact in the environment, and widely distributed in nature and accumulate in the adipose tissue of a variety of biota and increase in concentration at the higher levels of food webs. It causes serious long-term impacts such as cancers, birth defects, systems such as immune, endocrine system disruptions, nervous and reproductive dysfunction, foremost vulnerability to disease and even vitiated acumen.

OCs has fascinated global attention due to their resistance to environmental degradation, toxicity, and bioaccumulation potential. Most of the organochlorine insecticides has been abandoned or severely restricted in

developed nations since the early 1970's, although will continue to persist in developing nations.