

## Preface

The European Union entered the 21st century with over 100 000 registered environmentally-unfriendly chemical compounds. Although the process of chemical synthesis is strictly controlled and the working life monitored for health hazards, the fate of wastes is known to a little extent. They have now become a source of severe problems, since ignorance of threats posed by their deposition in the environment has led to their disposal at waste dumps as the main method of handling them, often with no precautions taken against their effect on the environment.

Not much safer procedures have been applied to wastes acknowledged as dangerous, including out-of-use pesticides (see also Chapter 1 and 4). According to the law, they should have been disposed in so-called “dumps”, a large number of which were built in Poland in the 1970s for the disposal of products containing organochlorine insecticides (see Chapter 2 for more details). Now, efforts are being made to trace them in order to transfer the wastes deposited therein to better-secured sites or to neutralise them. The problem arose how to look for the forgotten hazardous wastes, often covered with soil but active in releasing unwanted contaminants. Biomarkers are usually used for this purpose (see Chapter 3).

The study was undertaken in 2002 on the influence of old pesticide dump on the surrounding ecosystems to choose the best method to monitor the contamination (see Chapter 5). Chemical analysis was very little helpful to prove the contamination because the dump was located in the sandy soil (see Chapter 6). Determination of community indexes (see Chapter 7) and using small rodents (see Chapter 8 and 9) have been proved to be better methods to detect environmental hazard. Pathomorphological examination of animals living on the studied area was the best method and it should be recommended to searching for abandoned hazardous wastes (see Chapter 10).

In the name of the authors I am passing this monograph to the readers with hope that it would be helpful to cleaning the environment off the hazardous wastes.

Krystyna A. Skibniewska