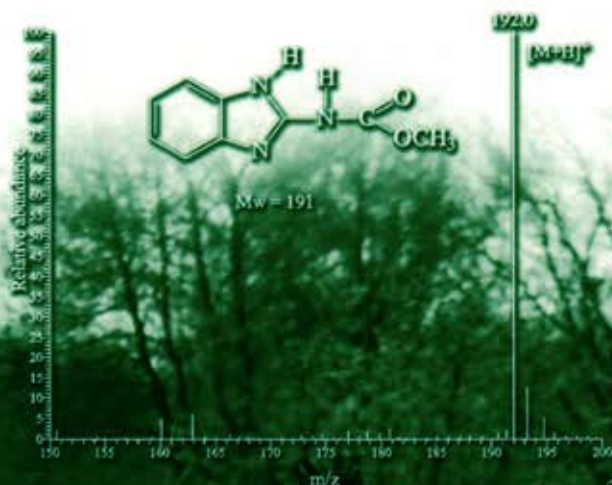


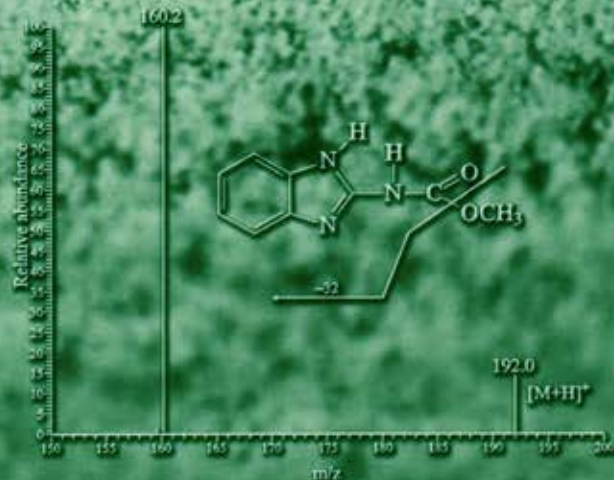
Handbook of PESTICIDES

Methods of Pesticide Residues Analysis



Edited by
Leo M.L. Nollet
Hamir Singh Rathore

 CRC Press
Taylor & Francis Group



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Preface

With the introduction of fertilizers and high-yielding varieties of cereals, and other commercial crops, management in agriculture has assumed a new dimension in countries such as India. With the provision of assured irrigation facilities, the intensity of land use has also been stepped up. To avoid risk factors in this high-cost and high-intensity crop management system, farmers need an effective and inexpensive plant protection schedule; this is the reason for the manifold increase in the use of chemical plant protection in the last two decades.

Chemical plant protection is profit-induced poisoning of the environment. Among the chemicals used, the organochlorine insecticides have been the major cause of anxiety for ecologists, not only because they persist for so long but also because of the ease with which they are taken up into the bodies of living organisms, especially the fatty tissues of both animals and humans.

Our information on the occurrence of residues in various parts of the environment is very uneven and localized. For example, a great deal of data on residues are available in China (29%), the United States (13%), Japan (7%), India (6%), Spain (6%), and Germany (5%), while we know virtually nothing about the extent of pesticide contamination in Africa, South America, and much of Asia (Nepal, Pakistan, Sri Lanka, etc.), although large amounts of organochlorine insecticides have been used in these regions.

Therefore, there are vociferous clashes between those ecologists who believe that all pesticides are bad and should be banned, and agriculturalists and others who believe that continued use of large quantities of pesticides is essential to the survival of humanity. There is thus a need for a balanced approach to this issue, and this can be resolved by collecting information selectively because of the vast literature available on this subject. This book provides simple and inexpensive methods as well as ultrasensitive sophisticated high-priced methods of pesticides residue analysis. It is hoped that it will serve as an important source of knowledge for pesticide users and policy makers as well as a guide for those dealing with pesticide residues analysis.

The editors would like to thank all the contributors for their excellent efforts. Their in-depth knowledge is worthy of appreciation.

**Leo M. L. Nollet
Hamir Singh Rathore**