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## Effects of Agricultural Chemicals–Pesticides on Insects and Soil Organisms

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### Message from the Guest Editors

Agricultural chemical compounds known as pesticides are widely used to combat diseases, pests, and weeds, in order to increase food production, yield foodstuff, and prevent food losses. Pesticides are designed to be toxic with various modes of action; besides being toxic to the target pest species they are intended to control, they are also harmful to non-target organisms. In addition to direct lethal effects, sublethal effects of pesticides on environmental organisms are also common after application in the field. Moreover, due to their long-term and extensive use, pesticide resistance has become one of the challenges of integrating pesticides into an existing integrated pest management (IPM) program. All these effects will substantially impact on the rational scientific use of pesticides in the field. Considering the enormous quantity of newer and a wide variety of modes of action of pesticides applied in agriculture, understanding the potential impacts of pesticides on target or non-target organisms, including pesticide resistance and its mechanisms, has become paramount in the IPM program.



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## Message from the Editor-in-Chief

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