# Insecticides: New Chemicals, Resistance, and the Environment

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THE PHENOMENON OF INSECTS developing resistance to insecticides has attracted much attention of scientists from the very beginning (Brown 1958). Resistance phenomenon is not only a great problem for economic entomologists and toxicologists, but also is an intriguing puzzle for geneticists, biochemists, evolutionary biologists and ecologists. Many excellent reviews have been published to cover various areas of insecticide resistance science (e.g. Plapp, 1976, Oppenoorth and Welling, 1984, Georghiou and Saito, 1982).

Therefore, in this article I have avoided the overall coverage of resistance studies in general. Instead what I would like to present is a special aspect of resistance that is related to development of very specific and resilient resistance factors which confer resistance to only the selecting insecticides and to those either structurally very related or having identical mode of action to the selecting agent. Particular emphasis will be given to the type of resistance involving "target selectivity" which is caused by a single genetic factor. The major reason why I am interested in such a type of resistance is that they might be rather stable among