

EFFECTIVENESS OF NONCONVENTIONAL INSECTICIDES FOR TURFGRASS AND LANDSCAPES

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As a result of current climate of environmental awareness, public concern for the use of conventional pesticides, and the Food Quality Protection Act (FQPA) of 1996, use of biorational (i.e., nonconventional) insecticides is gaining popularity. Biorational or biopesticides are pesticides of natural origin that have limited or no adverse effects on the environment or beneficial organisms. Biorational pesticides are derived from a variety of biological sources, including bacteria, viruses, fungi, and protozoa, as well as chemical analogues of naturally occurring biochemicals such as pheromones and insect growth regulators (IGR's). Biorational chemicals are classified into two distinct groups: biochemical and microbial. Based on numerous research studies, both biochemical and microbial products have specific limitations. Respective products have certain criteria that must be met to have meaningful effectiveness, while others have nominal control even under ideal conditions. The development of effective biorational insecticides will continue to become an important focus for chemical manufactures.

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