

## Role of Microbial Pesticides in Pest Control and Their Advantages and Disadvantages in Nature

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**Abstract :** For many years, synthetic pesticides have been used to kill pests; due to their toxicity and pollution, they are now a risk to human and environmental health. Lately, biopesticides have emerged as possible substitutes for petrochemical pesticides. The sources of biopesticides are widely accessible, easily biodegradable, have a variety of modes of action, are less expensive, and have little toxicity toward humans and other creatures that aren't the intended targets. Plants, bacteria, and insects are used to create biopesticides, they used in controlling diseases in crops. Microbial pesticides are produced from different microorganisms such as Trichoderma, Bacillus, Pseudomonas, and Beauveria. Also, botanical pesticides have already been commercialized; they are extracted from neem, pyrethrum, azadirachtin, etc. This paper describes biopesticide categories, their sources, mode of action, advantages and disadvantages, and their role in sustainable agriculture.

**Keywords :** biopesticides categories, formulation, mode of action, pest control

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