

## Types and Significance of Biological Pest Control

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### ABSTRACT

Biological control is the process of controlling pests such as mites, insects, Rodents, and plant viruses by using other organisms. The agents who kill the insect's pests are also known as Biological control agents. Examples of Biological control agents are predators, parasites, pathogens, and other competitors. A best method of biological control is the using of parasitic wasps to control aphids.

**Keywords:** Bed bugs; Pests; Beetles; Thrips

### DESCRIPTION

The biological pest control strategies include importation of Competitors, Combined use of parasitism and pathogens, Pathogens, Augmentation, Conservation. The Biological pest management is mainly of 3 types there are importation, augmentation, conservation of natural enemies. These techniques can also be used in combination form or alone. By using decapitating flies we can control red imported fire ants, and a group of flea beetles, traps, and stem borers used against alligator weed. Depending on pests there are five types of Biological control methods include poisoned bait, field burning, and trap cropping and the use of pesticides, mechanical pest control, and physical pest control. They also include experimental and computational methods.

### SIGNIFICANCE

There are many difficulties in the chemical control of insect pest like predators develop a liking for other diets and may itself develop a pest [1]. By using the chemical control for pests in farming there are many disadvantages like Chemicals may be non-specific and kill beneficial insects, Pest may improve resistance to the pesticide, Chemical deposits may cause injury to humans, especially farmers. By using the Biological control we can reduce pest numbers to low levels at which there is little economic damage, it is generally highly precise to a specific pest, Pests do not become resistant, it can offer a long-term result to a pest problem and there is less possibility environmental contamination [2]. The disadvantages of Biological control include Research and development prices are high. The pest can

stay in small numbers and leads to damage to a level which may affect economic damage, frequent usage is needed to keep a population balance among predator and prey. By using Biological control we may face some risks like indirect effects on non-targets, direct attack on non-targets, changed relationships between a control agent and a native species, including change generated by global climate change, dispersal of the bio control agent to a new area [3,4]. One of the major problems in the biological control of bug pests is that predators improve a preference for other diets and may itself become a pest.

### CONCLUSION

Biological control can be inconsistent. It takes a more time and tolerance for the biological agents to show their magic on a pest population, whereas other methods like pesticides work shows immediate results. It contains mainly three methods there are introducing new natural enemies and establishing a permanent population, mass rearing and periodic release, either on a seasonal base or inundatively, Conservation of existing natural competitors. Biological control is friendly method to environment. In this method Microorganism like a bacterium, fungus, virus acts as the active ingredient as they can manage many different types of pests, although each separate active ingredient is relatively specific for its targets.

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