

Combined Efficacy of Biofertilizer with Different Biopesticides on Aphid's Infestation (*Acyrtosiphon pisum*) and the Productivity of Pea Crop (*Pisum sativum*)

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Abstract: Legumes are the major source of protein diet in India and its quality and quantity is mainly affected by insect pests and aphids. *Acyrtosiphon pisum* is considered to be a serious pest of pea crop because it reduces both weight and caloric content of young pea plants by as much as 64 and 113% respectively, depending upon the number of feeding aphids. Foliar application of single and binary combinations of vermiwash with biopesticides minimize the infestation of the *A. pisum* and improve the crop productivity. Significant decrease in *A. pisum* population was observed after foliar spray of vermiwash with neem oil followed by aqueous garlic and annona leaf extract. The combination of neem oil with vermiwash caused complete removal of the *A. pisum* population. Vermiwash obtained from municipal solid wastes and animal dung with neem oil was found to be most effective against *A. pisum*. The use of vermiwash of buffalo dung and municipal solid wastes with neem oil or garlic extract is better alternative to manage the pea aphid infestation by *A. pisum* in pea crop.

Key words: Vermiwash • Biopesticides • Pea (*Pisum sativum*) • Productivity • *A. pisum* • Pest infestation
