



**RESEARCH ARTICLE :**

## Field efficacy of *Pseudomonas fluorescens* against the cotton leaf hopper, *Amrasca devastans* Distant (Hemiptera: Aphididae) in Bt and non Bt cotton

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**SUMMARY :** An experiment was conducted to evaluate the efficacy of *Pseudomonas fluorescens* against leafhopper of Bt cotton and non Bt cotton in two location of Vanavarayar Institute of Agriculture, Pollachi and South Indian Millers Association, Udumelpet. Seven treatments *i.e.* foliar application of *P. fluorescens* @1%, soil application of *P. fluorescens* 2.5 kg/ha, soil and foliar application of *P. fluorescens* @1%, foliar application of *P. fluorescens* @1% and *Beauveria basianna* @ 1%, foliar application of *Beauveria basianna* @ 1%, imidacloprid 200 SL @ 200ml/ha and Untreated check were evaluated. Among the bio inoculants treatment the maximum per cent reduction in leafhopper population with a mean of 71.00; 83.45; 85.01 and 63.28; 82.32; 91.58 at 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> spray after application in both the locations respectively in Bt cotton during 2013-14. The similar trend was also observed in non Bt cotton. During 2014-15, the maximum per cent reduction in leafhopper population recorded among the bio inoculants treatment, the soil and foliar application of *P. fluorescens* @1% in two locations and both bt and non Bt cotton. The highest mean seed cotton yield was obtained in soil and foliar application of *P. fluorescens* @1% in two locations, and both years of 2013-14 and 2014-15.

**KEY WORDS :**

Bioefficacy,  
Biopesticides,  
*Pseudomonas fluorescens*, Bt cotton, Non Bt cotton, Leafhopper

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