

**Bioassay of Actinomycetes Isolates against Fall Armyworm,
Spodoptera Frugiperda (J.E. Smith)**

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ABSTRACT

A study was conducted with 24 isolates of actinomycetes to screen the insecticidal efficacy of whole culture against fall armyworm in the laboratory at International Crop Research Institute for Semi-Arid Tropics (ICRISAT). Different species of *Streptomyces* and non-*Streptomyces* were sub-cultured and inoculated into starch casein broth and incubated for whole culture (WC) preparation. WC of actinomycetes was used for testing efficacy against FAW through diet impregnation bioassay. Among them, isolates KG-13 (*Nocardiopsis* sp.), CAI-17 (*Streptomyces albus*), and CAI-134 (*Nocardiopsis* sp.), showed more than 50 per cent mortality viz, 66.66 %, 56.67 %, and 53.33 %, respectively.

Keywords: *Actinomycetes, fall armyworm, diet impregnation assay and larval mortality*