

PROJECT INFORMATION

Network Project on Application of Microorganisms in Agriculture and Allied Sectors (AMAAS)

PROJECT OVERVIEW

Funding Agency	ICAR Scheme
Total Outlay	6.0 lakh
Duration	NA
Single / Multi-Institutional	Multi-Institutional
Lead Centre if Multi-Institutional	ICAR–NBAIM, Mau
Cooperating Centre(s)	ICAR–CCARI, Goa and others
Principal Investigator	Sanjay M. Bandi

RATIONALE

The excessive reliance on chemical pesticides for the management of sucking pests has led to concerns like development of insecticide resistance, resurgence and adverse effects on non-target organisms. In view of these concerns, entomopathogenic fungal isolates are being evaluated for eco-friendly management of sucking pests.

RESEARCH GAPS

Non-availability of potential native entomopathogenic fungal isolates

OBJECTIVES

- 1) To evaluate the entomopathogenic fungal isolates against major insect pests infesting coastal crops.
- 2) To develop entomopathogenic fungal isolate-based bio-formulations for field application.

ACTIVITIES

- To evaluate the pathogenicity and toxicity of selected fungal isolates against major sucking pests– tea mosquito bug and cowpea aphids under laboratory condition.
- To standardize culture conditions for optimal growth of potential entomopathogenic fungal

isolates.

- To develop bio-formulations based on potential entomopathogenic fungal isolates for field application.

EXPERIMENTAL DETAILS

Treatment:	Entomopathogenic fungal isolates
Fertilizer Doses	NA
Variety	NA
Replications:	5
Observations:	Mortality of test insects, mycosis, conidial concentration, spore viability
GPS Coordinates:	NA

EXPECTED OUTPUT

Effective entomopathogenic fungal isolates, bio-formulations.

EXPECTED OUTCOME

Bio-formulations developed from promising entomopathogenic fungal isolates provide effective and eco-friendly biological control of insect pests, thereby reducing dependence on chemical pesticides and promoting sustainable crop protection.

FIELD INFORMATION

When the field was developed:	NA
What are crops being cultivated season-wise:	NA
Soil type:	NA
Soil pH, EC, OC:	NA
Soil depth:	NA
Soil NPK and Micronutrient status:	NA
Common pests and diseases:	NA