

Research Achievements under NEH Scheme in “Validation and Promotion of Integrated Pest Management in Rice and Horticulture Crops” in Siaha District, Mizoram (2024 –2025)

KVK took up a project on ‘IPM in rice and vegetable crops’ which was sponsored by National Research Institute for Integrated Pest Management (NRIIPM), New Delhi from 2019 till date. Initially, 5 villages were selected for this project viz. Kiasi and Phura village for IPM in rice and Kaochao ‘E’ village for IPM in fruit crops and Lobo and Noaotla III villages for IPM in vegetable crops. 50 farmers each were selected as beneficiaries for this project in each villages. The project was really successful and in the coming years more beneficiaries were included in the project and it keeps on expanding to several other villages. At present, the project has expanded to 50% of the villages in the district and is continuing to expand. Under this project, different plant protection equipment, chemicals, tools, etc. were distributed to farmers and trainings and method demonstrations on IPM were conducted as well. Distribution of inputs like pipe, sprayers, insect light trap, pheromone lures, yellow sticky traps, etc as well as construction of three community water tank have also been carried out under this project.

Activities & Achievements During 2024 - 2025

Baseline Survey	34 Nos.
Training	50 Nos
Demonstration	30 Nos
Seed distribution : <u>Vegetable seeds</u> – Tomato, French bean, coriander, pumpkin, spinach, cow pea, winged bean, methi, arhar, onion, okra, brinjal, mustard, cabbage, chilli, Sweet corn, maize, field pea, cauliflower, broccoli, radish, carrot, baby corn, garlic, potato. <u>Cereals</u> – RCM - 7, RCM - 8, RCM - 10, RCM - 11, RCM - 12	2000 farmers 200
Pesticides distribution	2000 farmers
Sprayers	100 farmers
IPM kit bag	100 farmers
Weedicides	100 farmers
Pheromone traps	500 farmers
Yellow Sticky traps	1000 farmers
Portable Light Traps	10 farmers
Field day	5 Nos
Diagnostic visit	50 Nos
Leaflets/ Study materials	30 Nos.
Community Water Tank	3 Nos.

Impact of the Project : No. of block covered - 2 nos.
 No. of villages covered - 34
 No. of farmers covered - 2000

Creation of awareness on importance of IPM through farmers training and method demonstration has covered 70% of the farmers from different villages. 30% of the farmers in

Siaha district has started to adopt IPM modules for plant protection measures. The average increase in productivity of crops in IPM adopted areas as against farmers practice was 21% in rice and 25% in vegetable crops.

Technologies Demonstrated under IPM during 2024-2025 :

Sl. No.	Name of Technology	No. of demonstration	Location
1	IPM in Cabbage SOT : NRIIPM, New Delhi, 2010	1.Mustard as crop after every 25 rows of cabbage. 2.Release of T. brassicae @ 50,000 eggs/ha. 3.Installation of pheromone @ 12 traps/ha. 4.Installation of yellow sticky trap @ 12 nos./ha to monitor aphid population. 5.Hand picking of aphids and infested leaves. 6.Spraying of neem oil @ 5ml/litre of water at weekly interval and in severe case, spraying with chlorothalonil @ 0.2%.	Noaotla III Lobo Chhaolo
2	Management of Thrips and Fruit Borer in Chilli SOT : ICAR – Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra, 2015	Management of thrips and fruit borer of chilli with Spinetoram 12% SC 60g ai/ha, three sprays at 15 days interval.	Zyhno Siatlai Noaotla
3	Organic Management of Soft Rot of Ginger SOT : CAU, Iroisemba, Manipur, 2014	1. Dip rhizome pieces in hot water at 47°C for 30 minutes before planting. 2. Rhizome treatment with <i>Trichoderma</i> spp. @ 10 g kg ⁻¹ seed or Rhizome seed pieces in 5% Garlic extract for 2 h and allow airing dry prior to planting and allowing to air dry prior to planting. 3. Soil drenching with Garlic extract (5%), 20 days interval, 3-4 times after planting reduce the rhizome rot incidence and also increase the yield.	Chheihlu Thosai Siahatla
4	Management of Leaf Curl Disease in King	Rouging and foliar spraying of Neem product (Achook) @2ml/l of water, 2-3	Zyhno Siatlai

	Chilli SOT: CAU, Imphal, 2013	times at 10-15 days interval. b) Installing yellow sticky traps @ 10 traps/ha. c) Foliar spraying of Imidacloprid 17.8 SL @ 0.5ml/l of water, 20-25 days after transplanting	Siaha
5	Management of White Grub in Potato SOT : NRIIPM, New Delhi, 2010	1. Proper tillage and liming 2-3 months before sowing @ 200-400kg/ha. 2. Mixing <i>Metarhizium anisopliae</i> and EPN in organic manure 15 days before sowing to be applied during planting of tubers and at earthing up and spraying of <i>Beauveria bassiana</i> and NPV @ 5ml/lit water at vegetative stage.	Chhaolo Noaotla I Noaotla III
6	Performance of Bio-agents for reducing the incidence of soft rot of ginger SOT : ICAR, College of Hort. & Forestry, CAU, Pasighat, 2012.	Rhizome treatment of <i>Trichoderma harzianum</i> @ 5g/kg of rhizome + soil application of 2.5kg of <i>Trichoderma harzianum</i> mixed with 50kg FYM 10-15 days before sowing + foliar application of <i>Pseudomonas fluorescence</i> @ 5g/l of water for every 15 days interval after first appearance of rhizome rot.	Zyhno Chheihlu Thosai
7	Blast Disease Management in Rice SOT :	1. Field sanitation. 2. Seed treatment with <i>Pseudomonas flourescens</i> @ 10 g/kg of seeds. 3. Spraying with Copper oxychloride @ 0.25% or Copper hydroxide @ 0.25%. This should be done immediately after the onset of disease and should be continued at 7-10 days interval until the disease becobecome less severe.	Phura Chheihlu Kiasi

