

Success Story on Integrated Pest Management for White Grub in Groundnut Under CFLD Oilseeds

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Introduction

In India, groundnuts (*Arachis hypogaea* L.) are a significant crop for oil seeds. An unconventional location for groundnut farming is the NEH region. The crop was recently brought to the NEH region for agriculture, and during the kharif season, it proved to be successful when rainfed. It has a very high potential yield. Due to its many uses as food, feed, cover crops, and for replenishing soil fertility, the crop is becoming more and more popular among farmers in the NEH region. However, the lack of advanced technology among farmers is the primary reason for the low groundnut yield in their fields. The NEH region's groundnut productivity can be significantly increased by implementing the right set of methods.

Ms. Libila, age 38 years, from T. Khullen Village of Senapati District, Manipur was one of the beneficiaries under Cluster Frontline Demonstration (CFLD) of Oilseeds during 2019-20. She had a farming experience of more than five years.

Challenges

White grubs are soil-inhabiting polyphagous pests and are also known as root grubs. They feed on organic matter in soil as well as the root system of many economic crops. The damage to groundnut crop ranges from 20-80%. Before KVK intervention she used to apply wood ashes and removal of dried plants, but due to lack of knowledge on scientific cultivation practices and control measures for white grub the production and productivity of groundnut was hampered.

Initiative

KVK-Senapati provided constant need-based training and demonstration programme conducted to improve their skills and knowledge. Leaflets and training manual on management of white grub also helped to develop skills. She took up groundnut cultivation in the year 2017 initially in an area of 0.4 ha. After seeing her keen interest in groundnut



cultivation, KVK, Senapati under CFLD programme, included her as one of the beneficiaries and assisted her in procuring critical input like good quality seed, plant protection materials etc.

Technology demonstrated - Deep summer ploughing, early sowing, seed treatment with *Trichoderma viride*, *T. harzianum* @ 4 g/kg seed, Soil application of phorate 10CG @ 25kg/ha, Appln. of Chloropyriphos 20 EC @ 4.0 lt/ha or quinalphos 25EC @ 3.2 lt/ha at 25 & 60 DAP, Pheromone trap @ 5trap/ha for mass trapping of *S. litura*

Results

Initially, she got yield of 11.31 q/ha and earn an annual income of Rs.30420.00. With KVK intervention, crop advisories are provided from time to time after which she could achieved a yield of 15.24q/ha with an income of Rs.47828.00.

She sold her produce at the local market and KVK- Senapati also brought the surplus produce from her after recovering the quantity which KVK provided to her.

Impact

A very well positive response was achieved towards the demonstrated technology. At present, she becomes a successful groundnut grower in and around her locality. Her farm became a source of motivation for other farm women and farmers of the

district. Because of the attractive income from groundnut cultivation, many farm women are motivated to start growing groundnut.

Lessons Learned

The major lessons learned by her are only through scientific management practices and other crop advisories given by the KVK experts and also her

constant effort and hard work helps to become a successful groundnut grower. Apart from her family member support and her own interest in groundnut cultivation, she also learned that KVK's critical inputs and capacity building programme is the enabling factor to take up groundnut cultivation on a large scale.

Table 1 Performance of technology (Increase in productivity and returns)

Technology intervention	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Before	11.31	48750	79170	30420	1.62:1
After	15.24	58922	106750	47828	1.81:1
% Increase	35 %			57.22%	
