Significant Achievements of Krishi Vigyan Kendra Lada, Samastipur-II

1. Round-the-year vegetable seedlings production in low-cost poly house

Vegetable production in Bihar is significantly influenced by seasonality and weather conditions. The productivity of vegetable crops is very low due to diverse climatic conditions and number of factors like abiotic stresses like high rainfall during the rainy season, moisture stresses during summer, frost during the winter season, poor soil nutrients due to losses resulting from the process of leaching and biotic stresses. Protected cultivation provides the best alternative for the regulation/modification of the above factors as per the requirement of the crops to realize the maximum potential. They also have the advantage of off-season production to get higher prices.

High-value vegetable crops: The major crops have been identified for the production of seedlings under low-cost poly house as tomato, capsicum, chili, cauliflower and cabbage.

Construction of low-cost poly house: The low-cost poly house of 100 m^2 area can be constructed by using transparent, UV stabilized and 200-micron thickness polythene sheet and locally available materials like bamboo for framing and tied with the help of a wire. During the summer season, there is a need to use 60% shading net for protection against scorching sunlight. The total estimated cost for a 100 m^2 area will be about Rs. 10,000. There is no need for a heating and cooling system.

Benefits of low-cost poly house

1) It is cheaper to build. While the cost of making a regular Poly house is around 1500 - 2000 Rs per Sq. meter. the cost of making the bamboo poly house is just 100-150 Rs per Sq. meter.
2) It provides a protected environment for seedlings growth from adverse climatic conditions.
3) It can produce high quality seedlings.
4) In poly house temperature is nearly 6-10^o C higher than outside which makes favourable for growth of the seedlings.

5) Under bamboo poly house, the use of space is very efficient and more seedlings can easily grow in a minimum area giving a maximum profit.
6) **Details about seedling production in 100 m^2 area**

S.No	Seedlings	Month	Cost (Rs)	Income (Rs)	Net income (Rs)
1	Brinjal	June - July	11500	32500	21000
2	Cauliflower	July – Aug.	18 500	38250	19750
3	Tomato	Aug. – Sept.	12500	32500	20000
4	Bottle gourd	Dec.- Jan.	18500	55500	37000
5	Chilli	Feb. – Mar.	10800	32500	21700
Total			**71800**	**191250**	**119450**
B.C Ratio: 2.66					

Impact factor: Round-the-year vegetable seedlings production in low-cost poly house very much benefitted and adopted around 150 small and marginal farmers after conducting training programme and showing demonstration unit of KVK, Lada.

Low-cost poly house- At KVK, Farm

Training of farmers

Low-cost poly house at Farmer's field


समस्तीपुर भास्कर 27-10-2022

ताजपुर • कल्याणपुर • पूसा • वारिसन

कार्यक्रम • किसानों को प्रबंधन सुरक्षा व रोगों के प्रकोप से बचाव से संबंधित जानकारी से अवगत कराया

सामुदायिक स्तर पर सब्जियों की पौधशाला में पौधा तैयार कर आमदनी बढ़ाएं किसान

खेती करने के दौरान पौधे को किट के प्रकोप से बचाने के बारे में भी दी गई जानकारी

News Paper Coverage

2. : Management of Fruit Fly (*Bactrocera cucurbitae* Coq.) using Fruit fly trap in Mango orchard.

Fruit fly is a serious pest not only of fruit crops but also of vegetable and cucurbits and causing huge losses to farmers in Samastipur district. In spite of using hazardous pesticides, farmers are bound to bear about 30 – 70 % yield loss every year and sometimes it may reach upto 99% due to the attack of fruit fly. The management strategies employed for the control of fruit fly by farmers of Samastipur district is mostly concentrated on application of synthetic insecticides. Further, indiscriminate use of insecticides has led to problems of resistance to insecticides, pest resurgence, harmful pesticide residues and environmental pollution. Since, the maggots damage the fruits internally; it is difficult to control this pest with insecticides. Therefore, there is a need to explore alternative methods of control, and develop an integrated control strategy for effective management of this pest. A front line demonstrations (FLD) of Fruit fly trap were laid out by KVK, Lada, Samastipur at the fields of mango growers during two consecutive years (2022– 2023) to introduce and promote the ecofriendly management technology of fruit flies by installation of 20 traps/ha. The technology was found feasible, cheaper as well as easy to adopt at farmer's field. An average of 31.03 per cent increased yield was observed resulting ₹60675 average increased income per hectare comparing with plots under farmer's practice where traps were not installed. It's very economic and ecofriendly method for the management of fruit flies.

दैनिक भास्कर समस्तीपुर भास्कर 14-05-2022

प्रशिक्षण • प्रशिक्षण में प्रो ट्रे विधि से बीज अंकुरण व फ्रूट फ्लाई विधि से आम के फलों के बचाव के लिए किसानों को दी गई जानकारी

फ्रूट फ्लाई ट्रैप विधि का प्रयोग कर रोकें आम के फलों में लगने वाले रोग, फल को बचाना बेहद जरूरी है : डॉ. जामीर

a. Media Coverage	b. Training on fruit fly trap

	
C. Field inspection	**d. Distribution of fruit fly trap**

3. Adoption of Zero-tillage technique for wheat at KVK, Lada farm

Krishi Vigyan Kendra, Lada adopted zero-tillage technology for the cultivation of wheat at KVK, Lada farm. Around 5 ha of land is being cultivated under wheat seed production programme with happy seeder machine. Zero-tillage is a conservation technology that has the potential of saving time, energy and inputs for small farmers. The successful demonstration of this zero-tillage technique was realised by following the principles of *"learning by doing"* and *"seeing is believing".* After the successful intervention of this technology, farmers started growing wheat and other rabi crops like mustard, lentil, pea etc. successfully after kharif paddy. The impressive performance of the technology awakened the farmers, farm women, rural youths of the village as well as neighbouring villages namely *Satyendra Prakash Singh, Ramdev ji, Pashupati Ji and Ramguni Ji* to adopt this climate resilient technology for second crop after paddy as it helps to increase yield and also provide environmental sustainability. Moreover, this technology was also found to be a better reconciliation under the climatic stress condition. During the sowing time Honourable District Magistrate of Samastipur, Bihar visited KVK, farm and appreciated this technology. Farmers were very much motivated after the demonstration and subsequent training programme and It is also expected to achieve a double increment in area under zero-tillage in next year.

	
Wheat sowing with happy-seeder at KVK, Lada farm	**Performance zero-till wheat**

	
Zero-till wheat at farmers field	**Newspaper coverage of visit of Honourable DM Samastipur at KVK, Lada**

4. Nutri-Garden Model at KVK, Lada , Samastipur-II

In, Samastipur District Malnutrition is a biggest issue. Vegetable based nutri-garden is the richest source of nutrition and can play an active role in eradicating under-nutrition. Nutri-garden is advanced form of kitchen garden in which vegetables are grown as a source of food and income in a more scientific way. For small and marginal farmers, nutri-garden can contribute to the family diet and provide several other benefits, particularly for women. According to Indian Council of Medical Research (ICMR, 2010) recommendation for vegetable consumption can be fulfilled i.e. 300 gm of vegetable per person per day in which 50 g leafy vegetable; 50 g root vegetables and 200 g other vegetables. In order to counter these issues KVK Lada developed a demonstration unit of Nutri Garden having different types of seasonal vegetables which are grown organically. This nutritional Nutri-garden unit is useful as well as for health of Farm women and promotion of different seasonal major vegetables in rural farm women for their better health. Nutri gardens are cost-effective, practical and they easily meet the balanced dietary requirements of rural households as well as substantially to the family income. This is the larger goal of ensuring availability of wholesome and nutritious food.

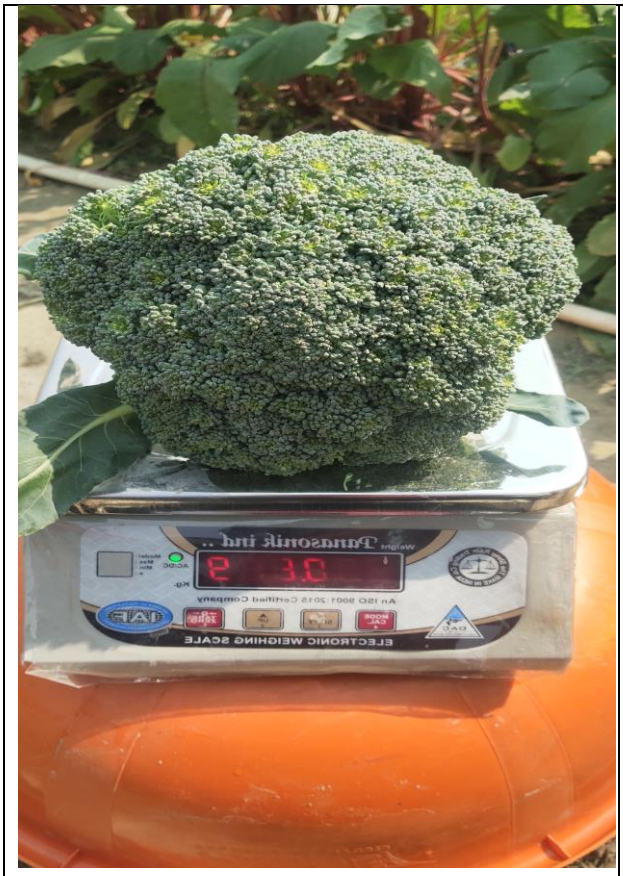
Nutri-Smart Village: Programme was launched in **5 villages** of Samastipur-II districts to strengthen the POSHAN Abhiyan.

Importance of Nutri-garden

- It ensures an inexpensive, regular and handy supply of fresh vegetables, which are basic to nutrition.

- Green vegetables contain vitamins and minerals, which protect us against diseases.
- Rural women communities have easy access to all the essential resources like land and water but they lack knowledge about the nutritional value and scientific consumption pattern of the available and easily-cultivable nutritious food products.

Concept of "eating a rainbow" in the plate must be popularized, as colors are the indicators of wide range of vitamins and pigments A well planned Nutri Garden.



राष्ट्रीय पोषण सप्ताह • लोगों को कुपोषण से बचाव व स्वच्छता को लेकर किया गया जागरूक

घर के पास खाली जमीन पर पोषण वाटिका लगाकर हरी सब्जियां उगाएं

पोषण युक्त सब्जी आहार में शामिल कर खुद सुरक्षित रहकर बच्चे को सुरक्षित रखें

Nutri Garden Model at KVK Lada