

ACTION RESEARCH ON TOMATO (LAITKYNSEW VARIETY) AT MAWLYNGBNA VILLAGE:

Mawlyngbna under Mawsynram Block, East Khasi Hills District, is a village in which about 95% of the population derived their livelihood from farming activities which includes both agriculture and livestock. The community still practice organic farming in which the people have continued to practice this old age traditions. Intercropping system is very common in the village in which different crops are growing together in the same plot leaving no space vacant. The village experienced a subtropical warm climate with heavy rainfall stretching from April to September.

Because of the heavy showers of rain, the ideal season for growing vegetables in the village is autumn to winter. As the climatic condition of Mawlyngbna is similar to that of Laitkynsew village which is the main producer of indigenous organic tomato, the trials on the cultivation of this tomato were undertaken at Mawlyngbna. To control powdery mildew, biopesticides such as *Trichoderma viridi* was used as seed treatment and foliar spray.

Farmers' voice:

According to Mr. Lam Tohtih, a farmer in whose farm the trial was conducted, this tomato is sweeter and juicier than any tomato that he has ever cultivated and it was the first time that such tomato was introduced in the village. He had never expected that the tomato would grow very well in the village and fetching a good market locally. According to him, the crop grows well when intercropped with garden pea, which also acts as a natural shade for the main crop.

Currently, is upscaling the cultivation to the adjoining village, Janiaw with seed availability of about 50g which can yield an estimated amount of about about 1 MT fresh fruits. He also wanted to expand its cultivation commercially to other suitable villages in the near future.



Fig 1: Laitkynsew Tomatoes

Sl. No.	Particulars	Observation
1.	Plant height till fruiting	0.6 - 2 meter
2.	Plant canopy till fruiting	90-130 cm
3.	No of branches/plant till fruiting	9-16
4.	No of leaves/plant till fruiting	29-38
5.	Flowering	Mid November continued till March
6.	No. of flower/plant	6-8
7.	Fruiting	Mid December continued till April
8.	No of fruits/plant	2-6
9.	Diseases infestation	Wilting was observed in some plants and it rejuvenate back after spraying with 5 % <i>Trichoderma</i> solution
10.	Fruit ripening	February
11.	Fruit diameter	4.5-13.7 cm
12.	Fruit weight	90- 570 g/ fruit
13.	Harvesting	It is plucked at physiological stage when the fruit turns pinkish in colour
14.	Yield/ha	10.8 tonnes



Fig 2: Mr. Lam Tohtih, Mawlyngbna



A. Tomato growing plot



B. Plant showing wilting



C. Rejuvenated plant after treatment with Trichoderma



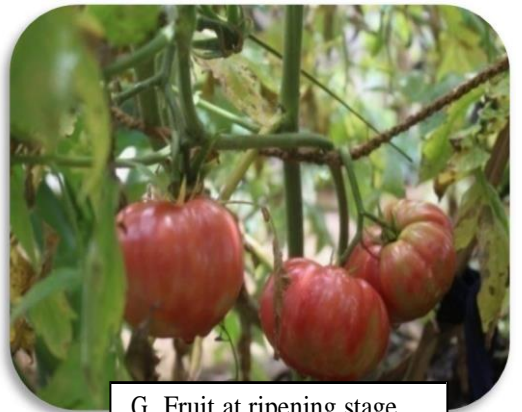
D. Tomato plant attaining height of 2.0 m



E. Fruiting at 120 DAS



F. Fruiting at 160 DAS



G. Fruit at ripening stage

Fig 3: Tomato Field Trials at Mawlyngbna Village