

LAKSHYA LAKHSHA

Report 3, March 30, 2010 • Fastest Semialata Plantation Growth in India

After Lac For Better Luck



Growth of Lac as on 15.04.2010. The Plantation in the field was made on August, 2009

iMAP

International Mass Awareness Programme
Village: Gangcha, P.O. Pandua, Chandrakona I
Paschim Medinipur



Third Report dated Oct.-Nov., 2009

- a. **Growth Factor:** After the monsoon was over, the Semialata plots started showing speedy growth both in height as well as foliage. It was a pleasant sight to see the plots full of matured plants with lush green leaves and healthy stems. The alluvial soil began playing its magic on the Flemingia Semialata. The staff of IMAP and the supervisors of the plots started keeping the records of the growth of these plants.
- b. **Early Inoculation:** Right from the inception of the Project, the Semialata plants grew up healthy and fine. This called for the consideration of early inoculation in these plants, as they showed signs of early maturity. As per the IINRG, these plants are fit for inoculation at the age of 1 year. However, in our case, the rapid growth was an exception and we conveyed this to the IINRG authorities and requested their visit at our sites to inspect the plants and suggest the necessary steps.
- c. **Visit of the IINRG Officials:** On 28 October, 2009, Dr Ajoy Bhattacharya, Director, IINRG (Formerly Principal Scientist & Head, TOT, IIRG) and the Former Director, IINRG Dr Bangali Baboo, visited our centre and the cultivation plots. Dr Amit Sanyal, Deputy Secretary & OSD, Department of Biotechnology was also on his official visit at that time. All the three experts closely monitored the plants and talked to the farmers directly. After a thorough inspection, they also suggested inoculation during February 2010.
- d. **Confidence of the farmers:** The visit of the top experts and their direct interaction with the farmers greatly influenced them as well as the general villagers of Chandrakona I block. They became more confident of the

*Caption. (Top to Bottom) 1. More than 6 Ft. in less than 6 months.
2. Dr. Ajoy Bhattacharya Director IINRG at his visit
3. Happy Farmers in the Plantation Site*



success of the cultivation process and gainful returns from them. More and more youth from the adjoining villages began showing interest in the Project and wanted to know the details of both the cultivation and the product, i.e. lac.

- e. **Need for Water:** Now as the monsoon is over, the plants required separate watering to maintain their growth index. We had to buy and hire pump sets to irrigate the plots regularly and make the payments on per hour basis. This escalated the cost of cultivation but ensured the good health and growth of the plants.
- f. **Use of Fertilizers & Pesticides:** With regular consultation with the experts from IINRG as well as the Department of Biotechnology, we used fertilizers and sprayed insecticides at each and every site, so that the plants get fertile soil and are free from insects. However, we took special care in selecting the type of pesticides, so that the plants remain rich enough to provide food for the lac insects after inoculation.
- g. **Involvement of Women:** As the Project developed from nursery to plantation, the involvement of the local women became stronger. From assisting their husbands or fathers, who are the farmers, they started showing interest in the process of this new type of commercial cultivation.
- h. **Intercropping:** In order to make the entire cultivation more beneficial and gainful, we have done intercropping right from the beginning. Utilising the space in between the Semialata plants, we planted vegetables like Tomato, Papaya etc. The rich alluvial soil of Paschim Medinipur came out with fruitful results in this case also. The vegetables have grown in leaps and bounds, giving an additional income to the farmers, apart from escalating their confidence ■

*Caption. (Top to Bottom) 1. Dr. Amit Sanyal & Dr. Bangali Babu at IMAP Site.
2. Watering at the field.
3. Fruits of inter-cropping.*



Third Report dated Dec.-Jan., 2009

- a. Flowers of Success:** In the month of December, 2009, the Flemingia Semialata plants were full of flowers. It was the first time, in the cultivation records of Paschim Medinipur, that a completely new plant showed its signs of prospect through the flowers. We were thrilled to witness the potential of a fruitful future.
- b. Labour Involvement:** The growth of the plants and the flowers needed special care. It was not possible for any single farmer to nurture the plants of the entire plot all by himself. So, labourers on daily wage basis were employed to take care of the plants. The supervisors and the staff of IMAP regularly monitor the work of the labourers and the development of the Semialata plants. This has generated employment opportunities for the local youth. In this period the number of man day generation is very high.
- c. Visit of Dr B P Sing & Dr Soumen Ghosal:** On January 11, 2010, Dr B P Sing, Principal Scientist and Dr Soumen Ghosal, Senior Scientist of IINRG visited our centre. We requested them to pay a visit to our centre to give the final opinion regarding inoculation and we are extremely grateful to them for giving us the time. They visited the cultivation plots and after monitoring the plants thoroughly, they suggested inoculation by February 2010.
- d. Preparing for Inoculation:** After the go ahead from IINRG, we began the preparations for inoculation. We requested Mr. Jaydeb Mahato to help us in this regard and he responded positively to our request of supplying broodlac for the Semialata plants. It was decided that the first set of inoculation will be done during the first week of February, 2010. IINRG also agreed to adopt some of our plants for FLD. ■

*Caption .(Top to Bottom) 1. The Blooming Flower of Semialata.
2. The Centre Incharge inspecting the field.
3. Dr. Soumen Ghosal advising IMAP members.*



Third Report dated Feb.-Mar., 2010

- a. Revolution through Inoculation:** Finally, it was on 6th February, 2010, our Project reached its second phase, i.e. inoculation. It was a revolution, as the first ever lac cultivation effort in Paschim Medinipur was gradually moving towards its target. Apart from that, our farmers' efforts and toil created another record, which was also first ever in the history of lac cultivation. Nowhere did the Semialata plants ever reach maturity for inoculation before at least a year. In our case, the plants became ready for inoculation within 6-7 months.
- b. Inoculation-First Phase:** Between 6 to 8 February, 2010, more than 15,000 Semialata plants were inoculated in various sites. The Broodlac required for the inoculation in this phase was supplied by Mr Joydeb Mahato. He also sent a team of experts to conduct the work. Our farmers and the staff of IMAP took a short on job training on inoculation from these experts. Large numbers of women were employed in this work. Specially made nylon bags were purchased for the broodlac and they were tied to the branches of Semialata plants.
- c. Inoculation-Second Phase:** In the second phase, IINRG adopted more than 2000 plants for inoculation. This time, a team of experts from Ranchi came and monitored the process. Our team, already exposed to the process could handle the job efficiently. The inoculation took place on 26 to 28 February, 2010. The remaining plants will also be inoculated in phases between April to June, 2010.
- d. Double Cropping:** Since the plants attain maturity early, it is evident that, from the next season, the plants can be inoculated twice a year, which means the productivity

*Caption .(Top to Bottom) 1. The IINRG, seat of Transfer of Technology.
2. The Innitiation of Inoculation.
3. Women workers at the field.*



of land as well as the amount of profit both will increase, creating greater comfort level for the farmers. By this, even the fallow lands can be best utilised by growing a commercial crop like lac.

- e. **Phunki Removal:** After the scheduled 21 days of inoculation, phunki i.e. the stick containing the lac insects were removed from the plants. We have followed each step of lac cultivation as per the norms set by the IINRG. Their various bulletins and publications have helped us a great deal. Mr Joydeb Mahato and his team also gave us various useful tips.
- f. **Following the Success:** Being convinced by the success and positive response at Chandrakona I, the Pascimanchal Unnayan Parishad and the Panchayet authorities of Garbeta III block has granted 28 acres of land to IMAP for lac Cultivation.
- g. **Training at IINRG:** To have a first hand experience and greater exposure, we sent 45 youth from Chandrakona I to IINRG for two-day training on lac cultivation on 10 February, 2010. The training by expert scientists, visit to the cultivation sites and processing centre greatly helped them and raised their interest on lac cultivation. Demand for more training sessions have already been generated.
- h. **Visit of Mr Joydeb Mahato:** On March 20, Mr Joydeb Mahato visited our centre and sites. He also visited the site at Garbeta III and promised all kinds of assistance.
- i. **Post Inoculation:** Within a month of inoculation, the lac insects have spread all over the Semialata plants. Now, after a month, we can see the growth of insects from the plants themselves. The branches are full of insects and we are hoping a rich harvest and a fruitful tomorrow ■

*Caption .(Top to Bottom) 1. The eager trainees at IINRG
2. The Inoculation is on Progress.
3. Joydeb Mahato at IMAP field.*