

Report of participation of Dr. M. Dutta, Consultant (Oilseeds) in the Field Day on Sesame organized by IOR, Hyderabad at Khirpai, West Midnapore and Sonamukhi, Bankura, West Bengal on 17-18th May, 2016

ICAR-Indian Institute of Oilseeds Research (IIR), Hyderabad is implementing a R&D project on “**Bridging the production gaps in potential districts of sunflower and sesame through dynamic technology transfer**” funded under NMOOP involving four states namely West Bengal, Andhra Pradesh, Telangana and Karnataka to demonstrate best management practices on sesame and sunflower for a period of 2 years. Under the project, 200 demonstrations (one acre each) in each year on sesame have been targeted in Prakasam and Kadappa districts in A.P and West Midnapore and Bankura districts in West Bengal. The project is implemented in West Bengal through the All India Coordinated Research Project (AICRP) centres on sunflower and sesame located at KVK, Nimpeeth (Ram Krishna Mission) and College of Agriculture, University of Kolkata, respectively. A field day on sesame was organized at Khirpai village, Chandrakona Block-I, district West Midnapore on 17th May, 2016. The field day was attended by scientists from IIR, Hyderabad; KVK, Nimpeeth; College of Agriculture, Kolkata; KVK, Seva Bharati, Jhargram; ADA, State Department of Agriculture and about 110 farmers. The list of field functionaries including participants of the field day is **annexed**.

In the beginning, field visit was performed to the farmers’ field followed by a ghostly with the farmers, scientists and developmental agencies. The following major observations emerged during the discussion:

- In Chandrakona Block-I more than 8500 ha area was under sesame crop out of a total cultivable area of 17000 ha. Sesame is grown after potato preceded by rice crop. The crop was at pod filling stage and largely free from disease and pests except for negligible incidence of *Macrophomina* wilt disease. However, some fields were infested with a weed, cock’s comb (locally known as Morag Jhoonti) whose flowers resemble sesame flowers.
- A recently developed white seeded sesame variety TKG-308 has been introduced under the project among 71 farmers in an area of about 50 acre, which had comparatively better performance than the predominantly grown variety Savitri that has brown coloured seeds.
- After testing of soil, the sesame crop demonstration was grown under broadcast method with minimum inputs like improved seed and seed treatment with fungicide without any chemical fertilizer or irrigation. However, the crop growth was quite appreciable as the fertilizer applied to the preceding potato crop was sufficient for sesame.
- The farmers estimated that seed yield of TKG-308, is expected to be 15.0 qtls per ha as compared to 7.5 qtls per ha by variety Savitri. However, TKG-308 was

slightly late maturing and its white seeds are reportedly not preferred in the market by the middlemen procuring sesame seed.

- It was suggested that line sowing along with application of single super phosphate may be adopted for better management of sesame crop. For assured marketing of the produce, College of Agriculture, Kolkata will guide the farmers by introducing them to companies like M/s Ashok Agrawal & Co. based in Kolkata, who have shown interest in sesame procurement.

Next visit was made to district Bankura where farmers' fields in village Bhairabdanga in Sonamukhi Block were visited on 18th May, 2016. During the field visit, in addition to the scientists of KVK, Nimpeeth and IOR, Hyderabad, District Agriculture Officer, Bankura was also present. The following observations were made:

- In District Bankura, sesame fields were interspersed with fields having vegetable crops in contrast to West Midnapore where sesame crop was exclusively grown. There is scope for bringing in more fallow areas under sesame.
- Although line sowing was practiced by some of the farmers, crop stand of sesame was thin due to moisture stress during germination. However, the performance of variety TKG-308 was comparatively better than Savitri.

The suggestions/action points are summarized as under:

- In spite of low inputs used sesame had excellent potential in West Midnapore and Bankura districts particularly under rice-potato-sesame cropping system. Adoption of improved package of practices like line sowing, weed management, strategic application of sulphur containing fertilizer, protective irrigation, plant protection measures and mechanical harvesting & threshing may increase the yield potential further in West Bengal which is the highest sesame yielding state.

(Action: SDA, West Bengal & IOR, Hyderabad)

- Since 20 FLDs on sesame is planned to be conducted involving KVK, West Midnapore, under cluster FLD programme, the project should take into account the same in its programme for the next rabi/summer season.

(Action: IOR, Hyderabad)

- Improved variety like TKG-308 which has shown better performance and is white seeded, should be widely adopted, however, the procurement of white seeded variety through better marketing avenues may be explored through strong linkages with procurement agencies as it has better export potential. Since variety TKG-308 is performing well, the same may be included under minikit

programme for the state as well instead of the only variety Savitri demanded by the state.

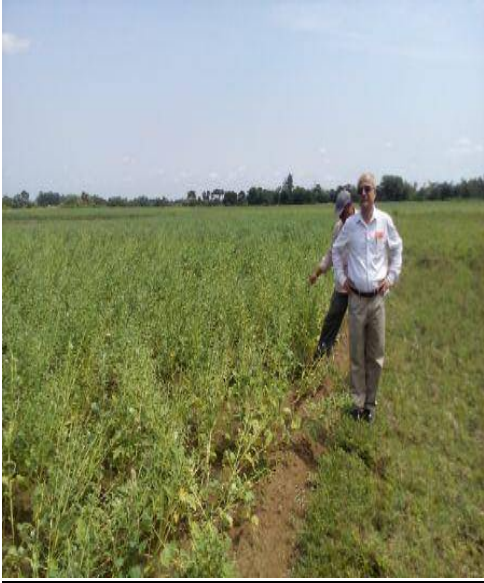
(Action: SDA, West Bengal & IOR, Hyderabad)

- Best management practices in local languages may be widely circulated among the farmers and timely availability of inputs may be ensured as the window of opportunity is very small under predominant rainfed farming. Farm mechanization may be encouraged through custom hiring due to acute shortage of agricultural labour.

(Action: SDA, West Bengal)

- As DAC&FW has successfully organized national level Kisan Melas in important oilseed crops (soybean, groundnut & rapeseed-mustard) recently in collaboration with crop based ICAR institutes through separate funding, the same could be attempted in sesame in West Bengal involving adjoining states like Odisha and Jharkhand.

(Action: IOR, Hyderabad & SDA, West Bengal)



List of participants**Date: 17.05.2016 District: West Midnapore**

| Sr. No. | Name & designation | Organization |
|----------------|--|---|
| 1. | Dr. M. Dutta, National Consultant (Oilseeds) | Oilseeds Division, DAC&FW, GOI |
| 2. | Dr. Jawhar Lal, Scientist (Plant Breeding) | IIOR, Hyderabad |
| 3. | Dr. Naba Kumar Baij, Sr. Scientist | KVK, Seva Bharati, Jhargram |
| 4. | Dr. Laxman, Jr. Breeder | KVK, Nimpeeth (RK Mission) |
| 5. | Dr. Abhijit Roy, Jr. Agronomist | KVK, Nimpeeth (RK Mission) |
| 6. | Sh. Sanjay Mondal, Asstt. Director (Agriculture) | State Agriculture Department, West Midnapore |
| 7. | Dr. Tamima Begum, Jr. Breeder | AICRP centre College of Agriculture, Kolkata. |
| 8. | Dr. Narayan Krishna Adhikari, Jr. Pathologist | AICRP centre College of Agriculture, Kolkata. |
| 9. | Dr. Md. Hitam Choudhuri, Jr. Agronomist | AICRP Centre College of Agriculture, Kolkata. |
| 10. | Sh. Ashim Kumar Dolui, Field Assistant | AICRP Centre College of Agriculture, Kolkata. |
| 11. | Farmers | 110 from different villages |

Date: 18.05.2016 District: Bankura

| Sr. No. | Name & designation | Organization |
|----------------|---|---------------------------------------|
| 1. | Dr. M. Dutta, National Consultant (Oilseeds) | Oilseeds Division, DAC&FW, GOI |
| 2. | Dr. Ashish Bera, District Agriculture Officer | State Agriculture Department, Bankura |
| 3. | Dr. Jawhar Lal, Scientist (Plant Breeding) | IIOR, Hyderabad |
| 4. | Dr. Laxman, Jr. Breeder | KVK, Nimpeeth (RK Mission) |
| 5. | Dr. Abhijit Roy, Jr. Agronomist | KVK, Nimpeeth (RK Mission) |
| 6. | Farmers | 25 from different villages |