

## KSU-ANGRAU POST-HARVEST RESEARCH WORKSHOP\*

October 18, 2008

COMMITTEE HALL 2

ANGRAU, Rajendranagar, Hyderabad

### Workshop Agenda

Time	Topic	Speaker
10:00 – 10:05 AM	Welcome/Introduction of participants	Dr. Chenchu Reddy
10:05 -10:10 AM	KSU-ANGRAU project goals	Bh. Subramanyam
10:15 -10:45 AM	Status of funded post-harvest project by Bapatla group	Madhumati
10:45 -11:15 AM	Ongoing postharvest research projects by Hyderabad group	T. Ramesh Babu
11:15 -11:45 AM	Discussion on KSU-ANGRAU project-Needs and future plans	All participants
11:45 - 12:15 AM	Introduction to GrainPro cocoons	Mr. Avinash Wagh (GrainPro Rep)
12:15 - 12:45 PM	Phosphine monitoring devices	Dr. R. C. Naik (UPL)
12:45 - 2:00 PM	Lunch break	Kitwai Cottage (off-site)
2:00 - 2:30 PM	Postharvest research needs in India-Pest management professionals perspective-I	Dr. Giridhar Pai (NBHC)**
2:30 -3:00 PM	Postharvest research needs in India-Pest management professionals perspective-II	Mr. Navreet Pruti (Pest Control Walshe)**
3:00 - 4:30 PM	Q & A/Round table discussion	All participants
4:30 PM	Adjourn	

- \*Coffee, water, and cool drinks will be available throughout the day.
- \*\*Did not attend because of business commitments.

## **Minutes of the Postharvest Meeting October 18, 2008**

The meeting started around 10:30 am. Dr. Chenchu Reddy, Director, International Programs, ANGRAU, welcomed the guests and mentioned the origins of the postharvest project. Dr. Reddy also moderated the workshop. Dr. Bh. Subramanyam explained that postharvest research in India was at its peak in the 50s through 70s, and given the magnitude of postharvest losses, both in dry durables and perishables, there is an urgent need to refocus efforts in this area. He explained that there were five goals for the KSU-ANGRAU project: (1) Evaluate losses due to insects and molds in two stored cereals and two stored pulses in godowns (warehouses) in Andhra Pradesh; (2) Evaluate effectiveness of existing storage and pest management practices on insect populations in warehouses and in stored commodities; (3) Evaluate efficacy of new products and technologies in mitigating insect infestations; (4) Assess end-use quality of commodities during storage; and (5) Develop educational materials and conduct technology transfer activities to improve existing storage and pest management practices in godowns to prevent pest-related losses. The purpose of the meeting was to get an update on research progress made by the Bapatla group, which was funded Rs 10 lakhs by the University, and also to bring relevant private sector folks (Grain Pro and United Phosphorus Limited representatives) to the table to support this postharvest project. The Hyderabad group's project is expected to get funded in April 2009, based on my discussions with the Vice Chancellor, Dr. Raghava Reddy.

The Bapatla group, lead by Drs. Pulipaka Krishnayya and T. Madhumati, gave an update of their research work. They developed a questionnaire to review sanitation and pest management practices in selected godowns and data were collected by personal visits. They have made tremendous progress in identifying key godowns to conduct their work and also highlighted storage and pest management practices. I suggested a few revisions to the questionnaire to collect data on dimensions of the godowns. The same questionnaire, with a few revisions, will be shared with the Hyderabad group, lead by Dr. Rameshbabu Tatineni and Dr. Dharma Reddy. The Bapatla group brought two students, N. Srisandhya and M. Swati, who will be doing their PhD and MS degree work, respectively, on several aspects of this postharvest project. The details of their approved projects were presented and suggestions were made to slightly modify their research work plan.

Dr. Rameshbabu gave a presentation of the postharvest research projects currently in progress at the Hyderabad campus. Presently, there are five postharvest research projects being conducted at the Hyderabad campus. The project deals with rice weevil incidence in stored maize and susceptibility of rice weevils to malathion and resistance of cereal grains and pulses to specific storage pests.

Recommendations were made to compile information on postharvest research projects and accomplishments at ANGRAU (Bapatla and Hyderabad Campus projects). At the present time only the Bapatla portion of the project was partially funded. During dinner with the VC and Dr. Chenchu Reddy on October 15, 2008, a suggestion was made to support the Hyderabad project as well, and the VC agreed to support it and funds will be given in April of 2009. Supporting the Hyderabad portion of the project, and fully funding the postharvest project, will help the scientists conduct research to develop best management practices to protect stored grain and grain quality in godowns.

Mr. Avinash Wagh gave an excellent presentation about the principle of insect and mold control with cocoons. The Vice Chancellor was present for this presentation. Two cocoons were sent by KSU to ANGRAU and one of the cocoons will be used by the Bapatla group and the other by the Hyderabad group. Mr. Avinash said that he would provide local support at the time of use of the cocoons. He also said that he would donate superbags (another hermetic storage unit) to Bapatla and Hyderabad scientists to conduct laboratory trials.

Dr. R. C. Naik, Vice President, United Phosphorus Limited, gave a presentation on various devices for measuring phosphine gas in air, and donated phosphine monitors, one for Bapatla campus and one for Hyderabad campus, to support the research. The cost of the donation was Rs. 1 lakh (including the air pump). In addition, he also gave several dosimeters, dosimeter tubes, and papers that change color in the presence of phosphine, Dr. Naik has agreed to provide dosimeters and dosimeter tubes as needed for the project. It is the responsibility of the ANGRAU scientists to keep Mr. Avinash and Dr. Naik informed about the project progress and for any assistance needed.

After a brief discussion, we broke for lunch served at the Borlaug Guest House. After lunch, Dr. Naik demonstrated how the electronic gas monitors work to scientists from Bapatla and Hyderabad. These monitors have to be shipped back to the UPL every 4 months for calibration. There was a brief discussion about sending 1-2 scientists from Bapatla and Hyderabad campus to KSU for a period of 4-6 weeks for additional training. The ticket and per diem will be paid by ANGRAU and KSU faculty will be responsible for local accommodation. It is important for ANGRAU and KSU submit this proposal for funding to US-AID, USDA, or other similar agencies.

This meeting was important to determine the progress made on the KSU-ANGRAU project, and with the information on cocoons and gas monitoring devices, I felt that all tools were in place for the scientists to conduct the proposed research.

The meeting was adjourned at 3 pm.

Prepared by:

Dr. Bh. Subramanyam  
October 27, 2008