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Volume No. III Issue: August , 2012

27th Board Meeting of PARB

The 27th Board meeting of Punjab Agricultural Research Board (PARB) has approved Rs. 450 million for the year 2012-13 to fund high priority research projects in Crops, Livestock, Forestry and Fisheries sectors under Competitive Grant System (CGS). The meeting held under the Chairmanship of Minister for Agriculture Punjab, Malik Ahmed Ali Aulakh, other members includes Secretary Livestock Irfan Elahi, Secretary Forestry & Fisheries Shah Nawaz Badar, MPA Rao Kashif Raheem, Chief Executive PARB Dr. Mubarik Ali, Additional Secretary Agriculture (Admin) Ameer Khatak, Vice Chancellor University of Agriculture Faisalabad (UAF) Dr. Iqrar Ahmed Khan, Vice Chancellor University of Veterinary and Animal Sciences (UVAS) Prof.



Dr. Talat Naseer Pasha, Chief Economist (P&D) Arif Anwer Baloch, Director General Research Dr. Noor-ul-Islam, representative of Finance department and Kissan Board . Minister in his opening remarks said that the current Government assigns specific place to PARB in the coordination and planning of agricultural research. He informed that Chief Minister Punjab has approved the nominations of two new MPAs, VC UAF, VC UVAS and VC PMAS Arid Agriculture University Rawalpindi as members of the Board. Minister also directed to include Forestry & Fisheries related projects in future. Secretary Forestry informed that they have series of meetings with PARB in this regard and would submit their projects very soon.

VCs UVAS and UAF stressed to restart the activity of travel grant for researchers and facilitate scientists in maximum capacity. Dr. Ali said that participation in international programmes enhances the abilities of researchers and build collaborations among scientists to work globally. Arif Anwer suggested that partial funding is available from many sources which can be availed for the said purpose. Minister directed to send a summary to Chief Minister with justification of continuity for this activity. In another decision, Dr. Pasha proposed that the names of Animal scientists shall also be included in the panel of experts for awarding scientist of the year.

The meeting discussed the recommendations of the Selection Committee against two posts of Executive members PARB and directed to recommend three candidates for each post, after that final selection shall be got approved from the Board through circulation.

Success Story of PARB's Project First Shipment of Mango Sindhri to Europe

Since the first institutional supported Metro mango sea-freight trial shipment to Germany in 2008, many developments have taken place in the areas highlighted in that report. The shipping protocols for local mango varieties have been developed at UAF through PARB funded project "Exploiting Controlled Atmosphere Technology Potential for Extended Storage and Shipping of Fresh Produce to International Markets". On-farm Pack house infrastructure was supported by USAID **"FIRMS"** funded project while ACIAR funded mango value chain project, contributed in postharvest disease management, research, capacity building of growers and pack house

operators. The best efforts of growers

from production to harvest and preparations were appreciable. The result of these efforts culminated into landmark success. A commercial CA shipment using a 40-feet Maersk container, from Murtaza Agriculture Farm (SMG group) Sindh to Total Exotics Netherlands, left farm on 13th June (03 days taken for harvest/preparation), and arrived on 11th July 2012, after 29 days and later had +7 days shelf life for marketing (a total of > 36 days after harvest). After arrival, fruit were ripened and distributed to different European stores. General remarks about shipment were very good. Fruit was firm green and attractive in appearance, having good taste.

There was complete control on disease and it was overall a successful shipment. The importer is pleased and interested to import large volumes of mangoes next year by sea using CAtechnology, thus opening the way for mango dream business. More refinement and R&D work on other mango varieties is in process.

One 40-feet container load of mangoes, saves Rs. 2.0million in freight charges, compared to the same quantity delivered by air



An Eid Millan party was held at PARB's office under the Chairmanship of Chief Executive Dr. Mubarik Ali for all the staff members. On this occasion Dr. Ali informed that new members will be on Board very soon and appreciated the efforts of staff who did a commendable job for the smooth running of ongoing projects. He specially acknowledged the efforts of Monitoring & Evaluation wing and Finance Division for their diligent efforts. He informed that PARB has now a special place of research in Punjab, having strong structure and planned activities in future insha ALLAH.



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Progress of PARB's		B's Projects
]	Exploiting Controlled Atmosphere (CA) Technology Potential for extended storage and shipping of fresh produce to International markets	Development, optimization and tech- nology dissemination of indigenous based Skin Coating Material (SCM) for fruits & vegetables
Objective: Increasing shelf life of fresh fruits and vegetables for export to distant markets		Objective: To develop appropriate application technology for locally developed SCMs
Cost: Rs. 21.159 Million		
Project Duration: 36 months		
Project Strategy : Different temperatures, oxygen and C02 con- centrations has been tested to optimize best storage conditions to extend shelf life of fresh fruits without deteriorating its quality.		Cost: Rs. 9.971 Million
		Project Duration: 48 months
Project Success:		Project Strategy:
٠	The project has standardized the parameters for Chilies, Mangoes, Apples and Citrus	Local based wax coating material has to be identified and applied on various hor- ticulture crops like mango, grapefruit, kinnow, peach, cucumber, tomato, bell pepper and melon. Project Success: The project has developed and standard- ized wax coating product by using indig- enous material. It has successfully been tested in laboratories at micro level and in the next phase will be tested with Sargodha Citrus Industry at macro scale.
•	The research findings on different varieties of mangoes (Sindhri, Sufaid Chaunsa and Samar Bahist) have increased the standard, shelf life without deteriorating the quality of fruit up to 30 days with 30 percent losses.	
•	The experiment on Chilies and apples have also produced successful results	
•	CA technology on kinnow did not get too much success due to sensitivity of fruit, however initial precooling and wax and proper Ventilation can increase it shelf life.	
•	The first shipment of Mango <i>Sindhri</i> has successfully been sent to Europe (Netherlands)	

Research Foresight on New Ideas

Crop Research Informatics (CRI) is involved in following activity outputs in research; those are recognized as essential to the successful achievement of any institutional goals and agricultural productivity. The areas supported by a critical mass of specialists includes; crop information systems, scientific computing simulation and modeling, GIS (Geographic Information System), GPS (Global Positioning System), research data management, computational biology (bio-informatics) and biometrics, all are much more important in the field of agriculture. In addition, the supply forecasts regarding all crops production should be taken into consideration in agricultural research planning, particularly through important aspect of simulation and crop modeling. *The researchers engaged or interested on new ideas either from public or private sector should be supported at each corner and appreciated to get education on these ideas, which is compulsory and imperative for this nation to work with the world.*

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Participation in International Events Funded by PARB

Dr. Arshad Javaid , Assistant Professor Institute of Agricultural Sciences, Punjab University participated in International Science & Technology Conference few months back, held in University of Istanbul, Turkey. Dr. Arshad said that the Conference has provided a good platform to learn collaboration in different research work. He suggested that we should

improve the quality of research as it's the only key for the up gradation of research in Pakistan. Dr. Shaheen Aftab, Principal Scientist Agricultural Biotechnology Division NIBGE participated in the Ist Biotechnology world congress. In her report submitted to PARB she informed that it was unique in promoting the translational nature of modern biotechnological research, with emphasis on both the basic science industry and academia as well as practical and clinical application. **"The conferences also provided a forum for in-depth assessment of the challenges involved in the dynamic and fast moving fields of biotechnology"** she added. She suggested that short or long term training in local and international Universities/research organization should be encouraged to update the cutting-edge advances in all major disciplines of Biotechnology.

This section truly reflects the views of scientists taken from their debriefing reports

Project's Monitoring in Glimpse



Developing Cotton Variety against CLCV through RNAi technique at Punjab University Lahore



Development of meat type in bred -lines of Quail Farming at UVAS Lahore



Development of resistant groundnut variety against leaf spot disease at BARI Chakwal



Presentation on project for extending storage and shipping of fresh produce at University of Agriculture Faisalabad