



# Central Institute of Post Harvest Engineering & Technology Ludhiana

Our Slogan: Produce, Process and Prosper

CIPHET E – Newsletter for May 2009  
Vol. 4 No. 5

## Director's Column



Dear All,

This month I got an opportunity to interact with the members of All India Food Processor Association, New Delhi. The All India Food Processor Association (AIFPA) is an important body of food processors which encompasses a cream of the Food Processors in India, involved in the processing of Fruits & Vegetables, Meat and Fish; Milk & Milk products, and also the manufacturers of Biscuit and confectionery products, Ready-to-serve Beverage and ethnic delicacies etc. I wish there should be frequent interaction with industry leaders, which will be useful in promoting new innovations for increasing the food processing activities in production catchments in India.

Another important event was the Coordination Committee Meeting of AICRP on PHT held under the guidance of Dr. MM Pandey, DDG (Engg) where future thrust of post harvest technology research in the country for next two years was finalized. The initiatives taken by DDG (Engg) to develop network project on horticulture post harvest mechanization and need for sharing R & D efforts among the SAARC countries through regional network programme will go long way in developing efficient post harvest management and value addition of food crops in member countries.

Another important initiative in post harvest management of horticultural crops is food festivals "Sangam 2009" being organized across the country by National Horticultural Board (NHB). It for sure will provide a platform for farmers to create a market for their produce and opportunity to display of farm equipment and machinery by CIPHET and CIAE, which can be tried by farmers to get better understanding on their functionality.

This month CIPHET released Banana-comb cutter technology to industry for mass multiplication. We are thankful to National Horticulture Board, for funding the project for mass production (4000 pieces), multiplication, demonstration, distribution and sale of 'CIPHET Banana-comb/hand cutter'.

With best regards

**R.T. Patil**  
Director

## **In this issue**

[\*\*Interface meeting with members of All India Food Processor Association, New Delhi\*\*](#)

[\*\*National Conference on “Technology-Led Development of Horticulture for Rural Upliftment”\*\*](#)

[\*\*Coordination Committee Meeting of AICRP on PHT\*\*](#)

[\*\*Training for Farmers/Up-Coming Entrepreneurs of Assam on Post Harvest Technology\*\*](#)

[\*\*CIPHET releases Banana-comb cutter technology\*\*](#)

[\*\*CIPHET participates in Sangam - Inter-State Horticulture Fair\*\*](#)

[\*\*Upcoming Events\*\*](#)

## **Interface meeting with members of All India Food Processor Association, New Delhi**

The All India Food Processor Association (AIFPA) is an important body of food processors in India which was established in the year 1943 by some highly accredited luminaries with a vision, which now encompasses a cream of the Food Processors in India, involved in the processing of Fruits & Vegetables, Meat and Fish; Milk & Milk products, and also the manufacturers of Biscuit and confectionery products, Ready-to-serve Beverage and ethnic delicacies etc. In the exports of processed food products, member industries account for considerable portion of the same. The main objectives of AIFPA are (1) To promote, encourage and support Indian Food Processing Industries and raise the technical standards of product quality to match global standards. (2) To seek redressal of the problems faced by the Food Processing Industries in India, which are presumed to impede their growth. (3) To collect, classify and circulate statistics and other information relating to Food Processing Industries, Agri-Exports etc. (4) To encourage and finance research projects to study technical problems relating to the Industry. (5) To conduct, promote and finance market research/market studies in India and abroad on processed food products. (6) To render technical, social and financial help to families of disabled or deceased technical consultants, scientists, food technologists, experts in agriculture, horticulture, marketing etc. as related to Food Processing Industry. (7) To institute awards and scholarships to encourage scientists, food technologists, administrators, consultants and executives who help in the growth and development of the Food Processing Industry. (8) To publish a bimonthly Journal i.e. "Indian Food Packer" as a non-profit activity, which aims to keep the food processing units abreast of the latest worldwide developments in Food Processing Industries.

The Association maintains a close liaison with the Research Institutions in the country and refers the problems of the Industry to these institutions for a technological solution. An interface meeting with Dr R T Patil, Director CIPHET was organized by AIFPA on 19.05.2009 at New Delhi where he presented the post harvest priorities for the country and achievements and approach of the CIPHET to meet their goals. Such interactions with industry leaders will help promote food processing activities in production catchments in India.

## **National Conference on “Technology-Led Development of Horticulture for Rural Upliftment”**

Recognizing the supreme sacrifice of Lt. Amit Singh, his ethics and values, a Foundation was formed at Pusa, Bihar in 2001 under Act of Trust for spreading patriotism among the youth, as a tribute to hero, who sacrificed his present for the tomorrows of the entire Indian citizens. The Foundation headed by Mrs. Bimala Singh, Mother of Lt. Amit Singh, is devoted to nation with commitment for the source of inspiration to build patriotic societies. The Foundation aims at better education, health care, economic development, ethics and values. The efforts of the foundation in education, institution of scholarships, awards, debates, essay competition, distribution of reading material have succeeded in improving competitiveness and confidence among the youths.

During the year to commemorate the 30th Birthday of Lt. Amit Singh a 4 days programme was organized at his native village from May 28-31, 2009. A conference on “Technology-Led Development of Horticulture for Rural Upliftment” was held as part of this programme on May 29, 2009. Many dignitaries like the concerned ministers of Govt. of Bihar; DDGs of ICAR, New Delhi and Directors of all Horticultural institutes attended this conference. Dr R T Patil, Director CIPHET was invited to present the scenario of post harvest management and value addition in horticulture and role of CIPHET. Live demonstration of CIPHET technology such as Banana Comb Cutter, Hand tool for pomegranate aril extractor and face care products developed from Kinnow peels was shown to the farmers and entrepreneurs from that region and after demonstration, these sample/gadgets were distributed to interested entrepreneurs/farmers.

## **Coordination Committee Meeting of AICRP on PHT**

The Coordination Committee Meeting of AICRP on PHT was held at Central Tuber Crops Research Institute, Trivandrum during 29-31 May 2009. The meeting was inaugurated by Dr. Pitam Chandra ADG (PE), ICAR, New Delhi and Dr. S. K. Naskar, Director CTCRI welcomed the participants of CCM in God’s own country, Kerala. Dr. M. M. Pandey, DDG (Engg.), ICAR New Delhi was the Chief Guest and presided over the Technical sessions. Dr. S. K. Nanda, PC (PHT) briefed about the AICRP on PHT. He made a comprehensive presentation on Assessment of Post Harvest Losses of Crops/ Commodities. The data generated from the study are expected to be very useful for researchers, engineers and policy makers. It was reported that the post harvest losses are reduced to a considerable extent and the credit goes to the scientific community for their contribution in development of scientific equipments and procedures, and various agencies involved in supply chain management starting from farmers to the consumers. Dr. S. K. Naskar emphasized on significant contribution of tuber crops towards food security and necessity of better post harvest management for these crops. Dr. Chandra drew attention of the scientists and engineers to global economic slow down and its unforeseen effects on small farmers of our country. Hence, he urged the scientist to take up challenging and target oriented projects, for instance, Agro Processing Centres (APCs) in the production catchment and also put the efforts to work collectively with wisdom in order to achieve inclusive growth. The Sectoral PIs of areas food grains, horticultural crops, livestock produce and jaggary and khandsari presented detailed progress of ongoing projects and new proposals along with the technical programmes. Dr. Anil Kumar Dixit made a presentation on how to assess the impact of Technologies Developed under AICRP on PHT. Dr. Bangali Baboo, Director, IINRG Ranchi, pointed out problems and prospects related to natural resins and gum industry in

India and expressed the need for intervention by Agricultural Engineers. The Plenary session on 31-05-2009 of the CCM was chaired by DDG (Engg.). He asked the group to identify the research gaps and missing links and prepare essentially a matrix of each programme according to the priority.

Dr. R. T. Patil made presentations on two proposals namely 1) **Network project on post harvest mechanization in horticulture crops** and 2) **Regional network for post harvest management and value addition of horticulture in SAARC countries** and activity to be taken up in India. The network project on post harvest mechanization in horticulture crops was based on the discussion and recommendations emerged in the interactive meeting of post harvest technology conducted by Dr. H.P. Singh, DDG (Hort), ICAR at IIHR, Lucknow in September, 2008. The objectives of this network project are 1) To identify the technology, which needs refinement and up-scaling for PHM and value addition of horticultural crops. 2) Development, evaluation and refinement of technologies/equipments for commercialization. 3) Transfer of appropriate technology/equipments/tools to the end users for loss reduction and value addition of horticultural crops. The aim objectives of this regional network project among the SAARC countries are 1) To identify and share the knowledge and post-harvest processing technologies across the SAARC countries; 2) To adapt, evaluate and disseminate post harvest processing and value addition technologies for fruits in SAARC countries; 3) To develop effective marketing linkages of processed products; 4) To assess the impacts of the adapted technological packages at project sites; 5) To ensure product quality and safety in the adoption of package of technologies.



## **Training for Farmers/Up-Coming Entrepreneurs of Assam on Post Harvest Technology**

The training on Post Harvest Technology for Rural Catchments for Farmers/Up-coming entrepreneurs from Assam was organized at CIPHET, Abohar during May 15-21, 2009. It was sponsored by State Institute of Rural Development, Guahati (Assam). Eighteen Farmers/Up-coming entrepreneurs from different Districts of Assam participated in the training programme. The training included lectures on Drying and Dehydration of fruits and vegetables for value added products, Development of value added products from guava and other fruits, Processing and value added product development from aonla, Shrink packaging of selected fruits and vegetables, Insect-pest management of stored grains, Pulses milling technology, Post harvest losses and their control in fruits and vegetables, Post harvest management of fruits and vegetables and their by products, Cereals processing, Project profile preparation and concept of Agro-Processing. The training also included the practical classes on novel products from aonla, ber, guava, and pomegranate including demonstration of waxing plant. The participants were also exposed to different laboratory and field experiments. Besides, participants were also exposed to Waxing and Packaging Plants of Kinnow, Hi-Tech Nursery and scientifically managed Farmer's Orchards and Food Industry. The training was conducted by Dr. R. K. Gupta, HOD (HCP) as Training Coordinator and Dr. D. Dhingra, Sr. Scientist, TOT Division and V.K. Saharan, Technical officer as Co-ordinators.



## CIPHET releases Banana-comb Cutter Technology

Bananas are harvested green and hard, before they mature. In Indian context, a major but unattended issue in post-harvest handling technology is a tool for separating banana-comb / hand from banana bunch. Conventionally it is done using knife or sickle that requires skilled persons. A little negligence on the part of the worker damages 10-15 bananas ((i. e. 2 to 8 %) from a bunch and even causes human injury. Central Institute of Post-Harvest Engineering and Technology (CIPHET), Ludhiana developed a device called Banana-Comb/hand Cutter to separate the banana from bunch. The “CIPHET Banana-Comb/hand Cutter” can be used instead of a sickle for separating banana-comb/hand from banana bunch. This tool is suitable for all sizes of banana bunch stems. Manually placing the tool and putting little pressure from top achieves cutting. CIPHET Banana-Comb/hand Cutter maintains smooth cutting curve of banana-comb/hand, with no fruit damage during cutting (as in case of knife or sickle cutting, some banana-finger get damaged). One person is required to perform the banana-comb/hand cutting activity with less stress. National Horticulture Board, Gurgaon has funded Rs 7.25 lakh project for mass production (4000 Nos), multiplication, demonstration, distribution and sale of ‘CIPHET Banana-comb / hand cutter’. Approximate cost of “CIPHET Banana-Comb/hand Cutter” is about Rs.150 + packaging and forwarding charges per piece. This technology was licensed to National Agro Industries, Ludhiana in a function held on May 18, 2009. Dr S R Verma, Ex-Dean of CAE, PAU, Ludhiana was the chief guest of the function and Sh. S K Singh, NHB Chandigarh, Dr. S K Berry, Ex Regional Director, CFTRI Ludhiana and Sh. Sukh Sohan Singh of National Agro were also present on this occasion. The contributors Dr Dattatreya M. Kadam, Dr. D Dhingra, Sh. Hardeep Singh, Mr Jaswant Singh and Mr. Jaswinder Singh were honored during the function.





## **CIPHET participates in Sangam - Inter-State Horticulture Fair**

To promote and provide national platform for horticultural products, the National Horticultural Board (NHB) has initiated food festivals "Sangam 2009" across the country. The first such festival was held at New Delhi on May 22 and will be followed by at Chennai, Mumbai, Hyderabad and Bangalore. This chain of event is particularly dedicated to popularize horticultural produces like mango, varieties of banana, litchi, rose apple, fig, cashew and saffron. Sangam 2009 would provide a platform for farmers to create a market for their produce. In this fair ICAR and other institutes will get opportunity to display some good varieties of fruit and vegetables developed by them which are not yet popular. Farm equipment and machinery will also be displayed in the festival, which can be tried by farmers to get better understanding on their functionality.

CIPHET participated in Inter-State Horticulture Fair-Sangam from May 22-24, 2009 at Agriculture Pavilion, Pragati Maidan New Delhi. The fair was inaugurated by Dr. D. Nand Kumar, Secretary, Govt. of India and Sh. Bijay Kumar, MD, National Horticulture Board, Dr. Gorakh Singh, Commissioner, NHB, Gurgown, Sh. Patnayak Add. Secretary NHM and Dr. Shreekant Mehta Director NHB visited our stall. The CIPHET Technologies related to mechanization of post harvest horticulture such as Banana Comb Cutter, Kinnow grader, Maize Cobe Shaller, Pomegranate Aril extractor were demonstrated in the fair. The value added products from Guava, Anola, Ber, Ginger Garlic and Onion Powder were also displayed and manufacturing technology developed at CIPHET were explained to farmers, entrepreneurs from different state of India. On the closing function of the fair Dr. G.K. Pillai, Secretary (Commerce) Govt. of India also visited the CIPHET-stall.



Dr. D. Nand Kumar, Secretary Govt. of India at CIPHET Stall



Banana Comb Cutter being demonstrated to Dr. G.K. Pillai, Secretary (Commerce) and Dr. Bijay Kumar, MD, NHB, New Delhi

## Upcoming Events

1. ICAR sponsored Winter School on “**Quality assurance and shelf-life enhancement of fruits and vegetables through novel packaging technologies**” will be held at CIPHET, Ludhiana during September 25 to October 15, 2009. The Course Director is Dr. D.R. Rai, Principal Scientist, Agricultural Structures & Environmental Control Division. You can contact him on Tel: +91 - 161-2313123, 0161-2819934 (R), 09417366034 (Cell), Fax: 0161-2308670, Email: [d\\_r\\_rai@yahoo.com](mailto:d_r_rai@yahoo.com), [drrai66@gmail.com](mailto:drrai66@gmail.com).
2. ICAR sponsored Winter School on “**Recent developments in post harvest processing and value addition to livestock produce**” will be held at CIPHET, Ludhiana during October 22 to November 11, 2009. The Course Director is Dr. K. Narsaiah, Senior Scientist (ASPE). You can contact him on Tel: +91 - 161-2313124, 09417143925 (Cell), Email: [knarsan@yahoo.com](mailto:knarsan@yahoo.com) Fax: 0161-2308670.
3. ICAR sponsored Winter School on “**Mathematical modeling and simulation of agricultural structure, process and product Quality**” will be held at CIPHET, Ludhiana during September 3-23, 2009. The Course Director is Dr. Dilip Jain, Senior Scientist (TOT Division). You can contact him on Tel: +91 - 161-2313122, 09216125933, Email: [jaindilip25@sify.com](mailto:jaindilip25@sify.com) Fax: 0161-2308670.

© CIPHET reserves all rights to information contained in this publication, which cannot be copied or reprinted by any means without express permission.

### For further details contact:

Dr. R.T. Patil, Director or  
Dr. V. K. Bhargav, Information Manager  
Central Institute of Post Harvest Engineering and Technology, Ludhiana, 141004 (Pb.)  
Phone: 91-161-2308669 (O); 91-161-2305674 (Director) 9216338421 (Mobile)  
Fax: 91-161-2308670  
Email: [ciphet@sify.com](mailto:ciphet@sify.com)  
Web Page: <http://www.ciphet.in>