

Research Highlights

2013-15



ICAR-AICRP on Post Harvest Engineering & Technology
ICAR-CIPHET, Ludhiana-141004. Punjab.

<http://aicrp.icar.gov.in/phet/>

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MAJOR ACCOMPLISHMENTS DURING 2013-15

POST-HARVEST TOOLS/EQUIPMENT DEVELOPED

1. Power operated turmeric slicer (Akola)
2. Hand operated Winnower-cum-cleaner (Almora)
3. Mahua Stamen removal machine (Bhubaneswar)
4. Manual and Motorised Sausage Stuffer (Chennai)
5. Cocoa pod breaker- Modified (Coimbatore)
6. Solar dryer for cocoa bean with biomass backup heater (Coimbatore)
7. Mango destoner cum pulper (Coimbatore)
8. Designed Pilot Plant for extraction of pectin from mango peel (Coimbatore)
9. Semi-automatic Jaggery moulding machine (Lucknow)
10. Fish Vending cum Display Unit- Modified with Composite Material (Mangalore)
11. Animal Skin Holder (Mumbai)
12. Multimode dryer designed for drying of grapes, fig and chilli (Raichur)
13. Apple seed corer (hand operated and paddle operated), Solan centre
14. Modified Apricot stone decorticator attached with dust separator (Solan centre)
15. Walnut dehuller machine (Srinagar centre)
16. Power operated pepper decorticator (Tavanur centre)
17. Banana peeler (Tavanur)
18. Green gram depoder cum sheller (Udaipur centre)

AGRICULTURAL OF STRUCTURES

- Established Model retail outlet for chicken (Mumbai)
- Small poultry processing plant (Mumbai)

PROCESS PROTOCOL AND PRODUCTS

- i. Extruded products from small millets (Bangalore)

- ii. Probiotic Low-fat Dahi from Small Millets (Bangalore)
- iii. Fermented alcoholic & Non-alcoholic Beverages from Kokum/Tomato (Bangalore)
- iv. Jackfruit Ice cream and Jackfruit Peda (Bangalore)
- v. Ready To Eat mushroom curry in retortable pouches (Coimbatore)
- vi. Dried fermented bamboo shoots (Jorhat)
- vii. Extrudates from VCO cake, broken rice, maize and pearl millet (Kasargod)
- viii. Low cost good quality gum from tapioca starch (Jorhat)
- ix. Probiotic guava, kinnow and mango juice (Ludhiana)
- x. Coco based mulhati guava products (bar & nuggets) (Hisar)
- xi. Cassava starch-nano clay composite based biodegradable film (Trivandrum)
- xii. Jaggery with carotenes, beta carotene and vitamin C (Anakapalle)
- xiii. Process protocol for Jaggery cubes (Anakapalle)
- xiv. Dietary fibre enriched pork nuggets and sausage (Khanapara centre)
- xv. Value addition to pork sausage with banana pseudostem flour (Khanapara)
- xvi. Ready to eat and ready to cook fishery products (Mangalore)
- xvii. Ready-to-eat fish ham with shrimp chunks (Mangalore)

ADOPTIVE TRAILS, POPULARIZATION AND TRANSFER OF TECHNOLOGY/ PROCESS EQUIPMENT DEVELOPED

1. Adoptive trails on various post-harvest machinery/plant (Dehydration of fruits and vegetables, PKV Mini dal mill, Millet thresher, CIAE cleaner-cum-grader, garlic peeler, garlic grader, continuous washing machine, fish deboner) were undertaken by the designated.
2. Model retail outlet for production of hygiene chicken meet (Mumbai Centre)
3. Performance evaluation and popularization of the tamarind dehuller cum de-stoner machine (Bangalore centre)
4. Technology for making Jaggery chocolates (Buralikson centre)

ESTABLISHMENT OF AGRO PROCESSING CENTRES

- APC established :30
- APC under establishment: 04

PATIENT FILED: 05

1. "Mechanized Jaggery Granulator for producing jaggery granules" application No. 1265/CHE/2013 filled on 19-03-2014 (Anakapalle)
2. "Production of probiotic fruit juices". Application No. 614/DEL/2013); Filed on 4th March, 2013 (Ludhiana)
3. "Development of Women friendly fish vending and display unit" Ref.#IPR/FA/13013, applied on 08/06/2013 through National Research Development Corporation (NRDC), New Delhi
4. "Retail Chicken Slaughter Unit" Application No. 1842/MUM/2014, dated 01/04/2014 (Mumbai)
5. "Carrot washer" Patient filed and obtained with Sh. Krishan Jangra, manufacturer

AWARDS

Our Entrepreneur Sh. Krishan Jangra, village Behbalpur, Hisar, received 'Innovator-Farmer award' by ICAR-IARI, Pusa, New Delhi on 28 February, 2014.

In addition, following works have been undertaken by AICRP on PHT

- Around 26 trainings and 31 demonstrations were conducted under TSP and 1005 individuals from 133 villages were benefitted.
- Data collection, scrutiny, analysis and draft report preparations for ICAR-MoFPI project on 'Assessment of Harvest and Post-Harvest Losses of Major Crops and Commodities in India'.
- Selection and staking of chambers under ICAR-FCI project on "Study on determining storage losses in food grains in FCI and CWC warehouses and to recommend norms for storage losses in efficient warehouse management". The progress of the project has also been discussed during two review meetings with FCI official during the period under report.