

NOTABLE ACHIEVEMENTS OF POST HARVEST TECHNOLOGY CENTRE, BAPATLA

Sl. No.	Description		
1	Name of RARS/Research station/AICRP/KVK	:	Post Harvest Technology Centre, Bapatla
2	Year of establishment	:	1981
3	Mandate crops	:	Not applicable
4	Notable achievements (in bullets)		Following technologies developed at PHTC, Bapatla a) On-farm paddy dryer b) Accelerated ageing chamber for paddy c) On-farm dryeration bin d) Mobile turmeric steam boiler e) ANGRAU turmeric grader f) ANGRAU turmeric polisher g) Technology for large scale drying of chillies by converting abandoned tobacco barns h) High capacity rapid chilli dryer i) ANGRAU multipurpose polyhouse solar dryer j) Compaction-cum-bagging unit for dried chillies k) Centrifugal dehuller for millets

ANGRAU TECHNOLOGIES			
	Category of Technology	:	Post Harvest Engineering & Technology
I	Name of the Technology	:	ON-FARM PADDY DRYER
II	Description of Technology	:	On-farm paddy dryer is a Mobile – Flat and fixed bed – Non Mixing type- 5 Ton capacity Paddy dryer
			
III	Application/Use	:	Drying of combine harvested high moisture paddy to a safe storage moisture content of 11-12% (w.b.)
IV	Unit cost of operation	:	Rs. 12 lakhs
V	Status of commercialization	:	Yes/No, if Yes
	Addresses of Licensees or Manufacturer	:	M/s Kardi Dryers Pvt. Ltd, 284, AvvaiShanmugamSalai, Chennai-600086
VI	Contact address for further details	:	Principal Scientist & Head Post Harvest Technology Centre Agricultural Campus Bapatla Guntur (District) Pin- 522101

ANGRAU TECHNOLOGIES			
	Category of Technology	:	Post Harvest Engineering & Technology
I	Name of the Technology	:	ACCELERATED AGEING CHAMBER FOR PADDY
II	Description of Technology	:	Accelerated ageing of paddy utilizing hydrothermal treatment
			
III	Application/Use	:	Ageing process improves cooking quality of rice and this mainly depends on the amylose content. By improving the amylose content in rice, the milling and cooking quality will improve
IV	Unit cost of operation	:	Rs. 2 lakhs
V	Status of commercialization	:	Yes/No, if Yes
	Addresses of Licensees or Manufacturer	:	M/s Kardi Dryers Pvt. Ltd, 284, AvvaiShanmugamSalai, Chennai-600086
VI	Contact address for further details	:	Principal Scientist & Head Post Harvest Technology Centre Agricultural Campus Bapatla Guntur (District) Pin- 522101

ANGRAU TECHNOLOGIES			
	Category of Technology	:	Post Harvest Engineering & Technology
I	Name of the Technology	:	ON-FARM DRYERATION BIN
II	Description of Technology	:	The purpose of grain storage is to retain the quality in terms of food value, seed germination and to prevent monetary losses. Aeration is done using relatively low airflow rates to cool the grain and eliminate temperature and moisture differences in the storage bin.
			
III	Application/Use	:	On-Farm Drying: To dry freshly harvested high moisture paddy to safe moisture content Aeration of grains: To aerate safe moisture paddy with low air flow rates to eliminate temperature and moisture differences in grain mass
IV	Unit cost of operation	:	Rs. 4.50 lakhs
V	Status of commercialization	:	Yes/No, if Yes
	Addresses of Licensees or Manufacturer	:	M/s. Farm Steel Products, PD 17 & 18, Industrial Estate, Vijayawada- 520 007, Krishna Dist. Ph: 0866-2553958; 9246497258
VI	Contact address for further details	:	Principal Scientist & Head Post Harvest Technology Centre Agricultural Campus Bapatla Guntur (District) Pin- 522101

ANGRAU TECHNOLOGIES			
	Category of Technology	:	Post Harvest Engineering & Technology
I	Name of the Technology	:	ANGRAU TURMERIC GRADER
II	Description of Technology	:	Grading turmeric rhizomes at miller site is labour consuming and unproductive. ANGRAU turmeric grader has hopper, sieves to grade in to different sizes and an eccentric unit to move sieves horizontally and provide opportunity for rhizomes to undergo grading.
 			
III	Application/Use	:	Grading of turmeric rhizomes in four quality grades – bulbs, fingers, polishablenali, unpolishable nali
IV	Unit cost of operation	:	Rs. 45000/-
V	Status of commercialization	:	Yes/No, if Yes
	Addresses of Licensees or Manufacturer	:	M/s Farm Steel Products, PD 17 & 18, Industrial Estate, Vijayawada- 520 007, Krishna Dist. Ph: 0866-2553958; 9246497258
VI	Contact address for further details	:	Principal Scientist & Head Post Harvest Technology Centre Agricultural Campus Bapatla Guntur (District) Pin- 522101

ANGRAU TECHNOLOGIES			
	Category of Technology	:	Post Harvest Engineering & Technology
I	Name of the Technology	:	ANGRAU TURMERIC POLISHER
II	Description of Technology	:	
			
III	Application/Use	:	Primary and secondary on-farm polishing of dried turmeric rhizomes
IV	Unit cost of operation	:	Rs. 60,000 (motorized); Rs. 20,000 (manual)
V	Status of commercialization	:	Yes/No, if Yes
	Addresses of Licensees or Manufacturer	:	M/s Farm Steel Products, PD 17 & 18, Industrial Estate, Vijayawada- 520 007, Krishna Dist. Ph: 0866-2553958; 9246497258
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ANGRAU TECHNOLOGIES			
	Category of Technology	:	Post Harvest Engineering & Technology
I	Name of the Technology	:	ANGRAU MULTIPURPOSE POLYHOUSE SOLAR DRYER
II	Description of Technology	:	The dryer consists of an arch type polyhouse to hold chillies on two different tiers. The whole frame structure is covered with UV stabilized 150 gsm cross laminated, multi layered semi-transparent polyethylene sheet with suitable ventilators both at the bottom and top to facilitate movement of air. The capacity of the dryer is 30 or 120 q ripe chillies. Drying time is reduced to 7-9 days in polyhouse dryer in comparison to 15-18 days to dry chilli under sun in open yard
 			
III	Application/Use	:	December- March: Drying of ripened chillies from moisture content 80% to 10% (w.b.) April-June: Production of coriander using shadenet July-September: Raising of chilli nursery
IV	Unit cost of operation	:	Rs.1.3 lakhs (30 Quintal); Rs. 5.8 lakhs (120 Quintal)
V	Status of commercialization	:	Yes/No, if Yes
	Addresses of Licensees or Manufacturer	:	M/s ArfaAgro Products, D.No.: 25-11-31, G.T. Road, Guntur-4
VI	Contact address for further details	:	Principal Scientist & Head Post Harvest Technology Centre Agricultural Campus Bapatla Guntur (District) Pin- 522101

ANGRAU TECHNOLOGIES			
	Category of Technology	:	Post Harvest Engineering & Technology
I	Name of the Technology	:	MOBILE TURMERIC STEAM BOILER
II	Description of Technology	:	The burner works with diesel. The burner heats the water in the boiler directly and converts it into steam. Better color development and quality. Operating pressure: 2-3 kgf/cm² Capacity of each drum: 125 kg Capacity of boiler: 1.60 m³
			
III	Application/Use	:	Curing/cooking of fresh turmeric rhizomes using steam
IV	Unit cost of operation	:	Rs. 4.75 lakhs (2 Drum); Rs. 6.5 lakhs (4 drum)
V	Status of commercialization	:	Yes/No, if Yes
	Addresses of Licensees or Manufacturer	:	M/S Srivani Engineering Industries, Plot No. 31, Vivekanandanagar Society, Tarakarama Nagar road, Beside golden tobacco, Mangalagiri road, Guntur – 522 101. Ph: 8790843434, 9849085463
VI	Contact address for further details	:	Principal Scientist & Head Post Harvest Technology Centre Agricultural Campus Bapatla Guntur (District) Pin- 522101

ANGRAU TECHNOLOGIES			
	Category of Technology	:	Post Harvest Engineering & Technology
I	Name of the Technology	:	CENTRIFUGAL DEHULLER FOR MILLETS
II	Description of Technology	:	Dehusking of minor millets (foxtail millet, proso millet, barnyard millet, little millet and finger millet)
 The image shows a man in a green shirt and purple pants standing on a wooden stool, pouring yellow millet grains from a red plastic bowl into the top of a large, blue, cylindrical centrifugal dehuller. The machine has a black base and a small control panel on the side. A red tray is placed on the ground in front of the machine to catch the output. The entire scene is set against a plain white background.			
III	Application/Use	:	Dehusking of minor millets (foxtail millet, proso millet, barnyard millet, little millet and finger millet)
IV	Unit cost of operation	:	
V	Status of commercialization	:	Yes/No, if Yes
	Addresses of Licensees or Manufacturer	:	M/s Srivani Engineering Industries, Plot No. 31, Vivekanandanagar Society, Tarakarama Nagar Road, Beside Golden Tobacco, Mangalagiri Road, Guntur – 522 101. Ph: 8790843434, 9849085463
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ANGRAU TECHNOLOGIES			
	Category of Technology	:	Post Harvest Engineering & Technology
I	Name of the Technology	:	COMPACTION-CUM-BAGGING UNIT FOR DRIED CHILLIES
II	Description of Technology	:	Conventional method of dried chilli compaction and bagging is normally done by farm labourers, with one person continuously trampling the dried chillies. Productivity of the conventional method by employing three labourers is 8 bags/h and by mechanical compaction and bagging of dried chillies produces 18 bags/h. The cost of operation of conventional and mechanized compaction and bagging is worked out to be Rs.30 and Rs.18.28 per bag, respectively.
			
III	Application/Use	:	Reduces the drudgery involved in the compaction-cum-bagging of the dried chillies and to improve productivity
IV	Unit cost of operation	:	Rs. 1.5 lakhs
V	Status of commercialization	:	Yes/No, if Yes
	Addresses of Licensees or Manufacturer	:	M/s Srivani Engineering Industries, Plot No. 31, Vivekanandanagar Society, Tarakarama Nagar Road, Beside Golden Tobacco, Mangalagiri Road, Guntur
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