Technology Profile for Production of Instant Ginger Candy

1	**Name of the Institute**	ICAR Research Complex for NEH Region, Umiam, Meghalaya-793103
2	**Address**	Street: Umroi Road City: Shillong Pin Code:793103 Telephone: 0364-2570678 Facsimile number: Electronic mail:bidyutdeka@yahoo.com
3	**Description of technology**	Harvest uniform size ginger rhizomes Cv. Nadia or any suitable local variety 180-210 days after planting. Wash thoroughly with clean water to remove dirt and other undesirable particles from the surface and also to reduce the microbial load causing contamination. Dry the rhizomes in room for few hours and peel manually. Make slices of 10-15 mm thickness with the help of SS knife. Blanch the slices in boiling water for 25-30 minutes followed by dipping in 40°B and 75°B sugar solutions containing 2.0% citric acid for 1 and 2 hours at 95ºC respectively. Take out the slices from the syrup as soon as the retention time is complete and dry the materials in laboratory tray drier at 60°C for 1 hour. After drying slices are either to be cooled and packed in suitable packaging materials or coated with sugar powder and pack in containers.
4	**Flow chart of technology/process**	Freshly harvested uniform size ginger rhizomes ⇩ Washing with clean water ⇩ Peeling ⇩ Cutting into slices of 10-15 mm thickness ⇩ Blanching in boiling water (25-30 minutes with 2.0% citric acid) ⇩ Dipping in 40°Brix sugar syrup with 2.0% citric acid for 1 hr at 95ºC ⇩ Dipping in 75°Brix sugar syrup with 2.0% citric acid for 2 hrs at 95ºC ⇩ Draining and drying at 60 ºC for 1 hour ⇩

		Cooling and packing
5	**Area of application**	Value addition in Ginger
6	**Patent number & Date of filing**	Not filed
7	**If patent is not filed, mention in which year the technology was developed?**	Technology was developed during 2009-2010
8	**Did any entrepreneur have shown interest on this technology? If yes, please provide the name, address of the entrepreneur**	Ms Lynden, Lynden Industries, Umsning, Meghalaya
9	**Equipment required**	Machinery: Washer, peeler and slicer
10	**Space requirement**	100X100 feet room
11	**Plant set up cost**	Rs. 5.0 lakhs (approx.)
12	**Raw material and production cost**	Total production cost of Rs. 50.00 per kg final product
13	**Risks/opportunities involved in adopting the technology**	Good market
14	**Cost of available alternate technologies to similar products**	Higher cost involved in traditional method i.e. more than Rs. 80 per kg final product
15	**Expected cost of technology (Royalty/Equity/Revenue mode**	Rs. 1.0 lakh
16	**Any suggestion from Project leader for commercializing this technology**	Very simple process technology which does not require much technical skills

Persons involved in technology development (names, designation & Signature)

1. Amit Nath, Sr. Scientist, Div. of Horticulture

2. Bidyut C. Deka, PS & Head, Div. of Horticulture