
Cereal Based Functional Breakfast Food from the Underutilized Crops of North-East India

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| <i>Salient features</i> | <ul style="list-style-type: none">➤ Functional food product from the underutilized crop of north-east India.➤ Three variety of rice, Lingkang taker ame (LA), Umling ame (UA) and Pungpo taker ame (PA) were used for the development of rice based functional breakfast cereal.➤ Twin screw extrusion process for the development functional breakfast.➤ Extrusion process with temperature of 98.10°C, screw speed of 250 rpm and feed moisture content of 26.63%.➤ Functional breakfast cereal with 11.250 expansion ratio, 7.931 of water solubility index, 133.469 mg GAE/100g of total phenolic compounds and 67.146% of DPPH antioxidant activity and 4 types of phenolic acid |
| <i>Advantages</i> | <ul style="list-style-type: none">✓ Use of underutilized crop of north-east India |
| <i>Process Technology / product developed by</i> | <p>Dr. Amit Baran Das, Department of Food Engineering and Technology Tezpur University, Napaam, Tezpur, Assam E mail: amittu@tezu.ernet.in Prof. Sankar Chandra Deka, Department of Food Engineering & technology, Tezpur University, Napaam, Tezpur, Assam</p> |
| <i>Year</i> | 2013-14 |
| <i>Source of funding</i> | MoFPI |
| <i>More information</i> | <p>Status of commercialization / Patent / Publication</p> <p>Duyi, S., Deka, C.S. and Das, B.A. 2015. Phytochemical and antioxidant profile of pigmented and non-pigmented rice cultivars of Arunachal Pradesh. International Journal of Food Properties. http://dx.doi.org/10.1080/10942912.2015.1055761.</p> <p>Duyi, S., Deka, C.S. and Das, B.A. 2015. Evaluation of physical, thermal, pasting and mineral characteristics of pigmented and non-pigmented rice cultivars. Journal of Food Processing and Preservation.</p> <p>Duyi, S., Deka, C.S. and Das, B.A. 2014. Studies on physicochemical properties of some selected underutilized rice cultivars of Arunachal Pradesh. 7th International Food Convention, CFTRI, Mysore.</p> |



Fig.1 Three rice cultivar a) Umiling ame (b) lingkang taker ame (c) Pungpo taker ame



(a)



(b)



(c)



(d)



(e)



(f)

Fig.2. Passion fruit different forms (a) Ripe passion fruit (b) pulp and seed (c) pulp (d) Pulp mixed with methyl cellulose (e) Dried foam mat powder of (f) dried

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Duyi, S., Deka, C.S. and Das, B.A. 2015. Effect of different pH and temperature on the stability of anthocyanidin content of red rice. Innovative Prospects in Food Processing: Integration of Engineering and Biological Sciences, Tezpur University, 27-28, March.