On Farm Trial-4

Discipline : Home Science

Title : Assessment of Drying Techniques for Production of Banana Flour

Problem: Post harvest loss is up to 30 - 40% and hence preservation is necessary to make it available to the consumers without any loss and to make the farmers to get the better price.

Year of Start: 2025 (1st Year)

Source of technology: TO_1: TNAU, Coimbatore TO_2: ICAR- NRCB, Trichy

Treatment	Technology
FP	Sun drying without pre treatments
TO_1	Blanching + Pre treatment with KMS (1 %) + Solar drying
TO_2	Blanching + Pre treatment with KMS (1%) + Sun drying
Result	**TO_1 (Blanching + 1% KMS + Solar Drying)** produced good quality banana flour compared to **TO_2** and the **farmer's practice**. The combined effect of blanching and KMS effectively reduced enzymatic browning, while solar drying ensured faster and more uniform drying. TO_1 recorded better appearance & colour, texture, Aroma, overall sensory acceptability, longer shelf-life, and higher economic returns. Therefore, **TO_1** is recommended as the most suitable technology for producing high-quality banana flour under farmers' conditions.

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Technological Option	Appearance & Colour	Texture	Aroma	Overall Acceptability (5-point Hedonic Scale)	Dehydration Ratio	Timing of drying (hours)	Shelf Life (Month)
FP	3.3	3.1	3.2	3.2	0.12	10	5
TO_1	**4.6**	**4.6**	**4.5**	**4.6**	**0.18**	**8**	**8**
TO_2	4.2	4.2	4.0	4.1	0.16	10	6











