

EVALUATION OF SOME CULINARY VARIETIES OF BANANA

During the past, 18 varieties of banana were recommended for commercial cultivation in Kerala (Anon, 1982). Though the most adapted and relished varieties like Nendran, Palayankodan, Poovan etc. cannot be easily replaced by a new variety the advantage of a new variety lies more in creating a change in the accepted types. Moreover, with regard to culinary types, only four varieties have been suggested so far for popularisation among farmers. At present there is a good collection of culinary varieties of banana at the Banana Research Station, Kannara. In this study an attempt was made to select the best varieties out of this collection.

Eight varieties of banana belonging to the genomic group. 'ABB' which were noted for their culinary properties, were subjected to evaluation for three years commencing from 1980-81. The varieties were Ashy Bathees, Karimbontha, Pacha Bontha Bathees, Walha, Booditha Montha Bathees, Malai Monthan, Nalla Bontha Bathees and Burharia. Three plants were selected in each of the varieties to carry out the various observations. Growth parameters like height and girth of pseudostem, number of functional leaves, number of suckers and area of third leaf were recorded at the time of flowering. Leaf area was measured by taking the length and width and multiplying with the factor 0.8 as suggested by Murray (1960). The total duration of the crop was also recorded. At harvest, observations such as weight of bunch, number of hands and fingers, number of fingers per hand, and length, girth and weight of finger were recorded. Cooking quality was judged with the aid of a score card. Each character was assigned a maximum score of 5 and a comparative evaluation was made by 14 persons. The observations recorded were subjected to statistical analysis as per the methods suggested by Federer (1967).

Data relating to the growth parameters of the varieties studied are presented in Table 1. Of the characters studied, only the girth and the duration differed significantly. Girth of pseudostem was maximum in Burharia (76.33 cm) which was significantly superior to Karimbontha, Ashy Bathees and Malai Monthan and on par with the rest. The girth was least in the case of Malai Monthan (65.67 cm). With respect to the duration of the crop, Nalla Bontha Bathees and Malai Monthan were the latest (362 days each). They were on par with Burharia and significantly superior to others.

Data collected on the bunch and finger characters are presented in Table 2. All the characters showed significant differences. Maximum bunch weight was recorded by Burharia (18.92 kg) and was on par with Booditha Montha Bathees (18.17 kg) and Walha (17.67 kg). The bunch weight was minimum in Karimbontha (12.83 kg). With regard to the number of fingers and number of hands, Walha recorded the highest values (17.83 and 247.67 respectively). It was on par with Booditha Montha Bathees in the number of hands (17.17) and with Booditha Montha Bathees and Ashy Bathees in the number of fingers (240.66 and 215.50 respectively).

Table 1
Growth parameters of the varieties

Sl. No.	Name of Variety	Height (cm)	Girth (cm)	No. of leaves	Area of 3rd leaf (m ²)	No. of suckers	Duration (days)
1	Ashy Bathees	352.00	68.00	9.33	1.10	8.00	332.00
2	Karimbontha	377.67	68.67	12.00	1.26	10.00	338.33
3	Pancha Bontha Bathees	369.67	71.00	16.00	1.26	14.67	332.00
4	Walha	362.00	74.50	12.67	1.15	8.67	332.00
5	Booditha Montha Bathees	358.00	72.50	12.33	1.32	10.33	342.67
6	Malai Monthan	341.33	65.67	7.33	1.29	8.67	362.00
7	Nalla Bontha Bathees	379.67	71.33	9.67	1.24	8.33	362.00
8	Burharia	374.33	76.33	15.67	1.35	8.33	355.67
CD (0.05)		NS	6.24	NS	NS	NS	16.77

Table 2
Bunch and finger characters of the varieties

Sl. No.	Name of Variety	Weight of bunch (kg)	Number of hands	Number of fingers	Length of finger (cm)	Girth of finger (cm)	Weight of finger (g)
1	Ashy Bathees	13.83	14.17	215.50	17.0	12.8	132.3
2	Karimbontha	12.83	6.33	76.83	20.7	14.3	156.0
3	Pacha Bontha Bathees	13.00	6.00	65.00	19.0	15.0	210.0
4	Walha	17.67	17.83	247.67	18.0	12.8	135.7
5	Booditha Montha Bathees	18.17	17.17	240.66	20.0	13.0	180.0
6	Malai Monthan	15.48	6.50	74.00	20.0	14.0	203.0
7	Nalla Bontha Bathees	14.17	14.50	168.33	16.3	13.1	126.3
8	Burharia	18.92	9.50	147.67	16.7	13.7	141.0
CD (0.05)		2.42	3.15	46.14	1.69	1.07	3.17

Table 3
Evaluation of cooking quality of the varieties

Sl. No.	Name of variety	Cooking time (min)	Score (each out of 5)				Total score (out of 20)
			Appearance	Texture	Flavour	Taste	
1	Ashy Bathees	10	2.71	3.29	2.86	2.71	11.57
2	Karimbontha	8	2.71	2.86	3.29	3.00	11.86
3	Pacha Bontha Bathees	9	2.57	3.14	2.71	2.57	10.99
4	Walha	11	3.14	2.86	3.29	3.29	12.58
5	Booditha Montha Bathees	10	2.86	2.86	2.57	2.86	11.55
6	Malai Monthan	13	3.14	3.43	2.57	2.86	12.00
7	Nalla Bontha Bathees	10	2.57	2.71	2.29	2.00	9.57
8	Burharia	11	3.29	2.86	3.29	2.71	12.15

Pacha Bontha Bathees recorded the minimum number of hands and fingers (6.00 and 65.00 respectively). With regard to the length of finger, that of Karimbontha was the longest (20.7 cm), which was closely followed by Booditha Montha Bathees and Malai Monthan (20.0 cm, each). Nalla Bontha Bathees had the minimum length (16.3 cm). Girth of finger was maximum in Pacha Bontha Bathees (15.0 cm) and was on par with Karimbontha (14.3 cm) and Malai Monthan (14.0 cm). Ashy Bathees and Walha had the minimum girth (12.8 cm, each). Pacha Bontha Bathees had the maximum finger weight (210.7 g) and was on par with Malai Monthan (203.0 g). These two varieties were significantly superior to all others. Minimum weight (126.3 g) was recorded by Nalla Bontha Bathees.

Data pertaining to the comparative evaluation of cooking quality are presented in Table 3. With regard to the time taken for cooking, Karimbontha required the minimum (8 minutes) and Malai Monthan the maximum (13 minutes). In appearance and flavour Burharia scored the maximum points (3.29 out of 4.00 in both) and in flavour it shared the first place with Karimbontha and Walha (3.29, each), the latter being the first in taste also with a score point of 3.29. In texture, Malai Monthan scored the maximum (3.43) and Nalla Bontha Bathees the minimum (2.71). Walha emerged first with regard to total score (12.58 out of 20.00) followed by Burharia (12.15). Least score was secured by Nalla Bontha Bathees (9.57).

Based on the study, three varieties, namely, Burharia, Booditha Montha Bathees and Walha can be recommended for popularisation among farmers. These varieties had good culinary properties too.

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