

Research Note

Peyaraphuli Variety of Mango in West Bengal Deserves Attention

Keywords: Mango, Peyaraphuli variety.

West Bengal holds a pride position in the mango scenario of India (Gandhi, 1955 ; Singh, L. B., 1960 ; Singh, R., 1969 ; Singh, R.N., 1990), at least since the regime of the Nawabs in Murshidabad who encouraged introduction of many choice varieties from different parts of India and many excellent hybrid mango varieties were also evolved during that period. Unfortunately, some of the super-excellent varieties of those days are believed to have gone into complete extinction having no single tree in existence at present. However, although mango is now grown all over the State barring the Himalayan region in the north, two zones are distinctly conspicuous, which are (i) Maldah-Murshidabad region and the (ii) Hooghly district and surrounding areas, which not only have a high coverage of mango orchards but most of the famous varieties are also in existence there. Mention may be made that plenty of mango varieties that are grown in West Bengal ranging from very early-maturing ones like Golap Khas, Bhuto Bombai etc. which starts giving fruits from the 1st week of May or still earlier to those, viz., Jhumko Fazil, Lata Bombai, Bharati, Lakhan Bhog, Dudhkumar etc. in which, maturity period extends upto the middle or end of August. A variety, viz., Bhaduria is worth mentioning in having maturity still later. It is believed that the name, Bhaduria has been ascribed from the *Bhadra* month of its maturity.

Himsagar is beyond doubt, considered by many as the best variety in the whole of West Bengal but it is worthily pointed out that many other choice varieties are also grown in the two regions of the State as stated above. Unfortunately, some of these varieties have however, missed adequate attention of the mango scientists. One of such varieties is *Peyaraphuli*, which is largely grown in the Hooghly district, i.e., central part of the State. The fruits of this variety, characterized by relatively small size and somewhat elongated

in shape do not although make so great appeal as with other choice varieties grown in the State, viz., Bhuto Bombai, Safdar Pasand (syn. Bira), Golap khas, Ranipasand, Himsagar, Kishanbhog, Enayat Pasand, Jhumko Fazli etc., but undoubtedly deserves keen interest at least for the following four attributes : (1) Fruits having a typical aroma of the flowers of guava which is with greater exactness when in ripe condition and hence, it is named as *Peyaraphuli* (In Bengali, *peyara* means guava and *phuli* refers to *phool*, i.e., flowers). (2) Moderate sweetness and lower level of acidity in fruits which start from early stage of their growth and hence, it is also locally called as *Kancha-Mithe* (Hindi equivalent : *Kachcha-Mitha*, i.e., sweet in unripe condition). (3) Shelf-life of the fruits is relatively high, owing to peel being somewhat thicker and pulp not of soft texture. (4) Early maturity of the fruits, i.e., attainment of harvest-maturity within 1st week of May or sometimes earlier. In having the above qualities, the variety may even be exploited as a suitable parent for hybridization with other varieties to aim at securing the desirable traits in the offspring.

For determining some qualitative constituents of the fruits from their early stage of growth, i.e., after about a month of fruit-set to harvest-maturity condition, samples were collected at interval of 7 – 10 days from the trees grown in the Hooghly district to conduct the analysis, which was done on the same day of harvest, following conventional methods (Mazumdar and Majumder, 2003) and average results of all five replications have been presented in Table 1.

For moderate sweetness at early maturity condition, the growers generally have a tendency to pluck about half of the fruits borne by a tree, starting from early stage of their growth in order to fetch return over an extended period and the remaining half is harvested at their full

Table 1. Qualitative value of fruits of Peyaraphuli variety of mango at development stages.

Date of harvest	Wt. fruit ⁻¹ (g)	Wt. Stone ⁻¹ (g)	Total sugars (%)	Total titr. acidity (Citric acid equivalence) (%)	Ratio of sugars and acidity	Vitamin C (mg 100 g ⁻¹)
April 2-5	68.76	2.68	2.98	0.40	7.45	Not done
April 8-11	78.55	8.44	4.17	0.30	13.45	Not done
April 16-19	89.06	12.29	5.29	0.26	20.34	22
April 22-24	90.26	13.67	7.81	0.21	37.19	25
May 3-5	91.67	14.33	9.28	0.18	51.55	28
May 7-10	98.69	15.21	10.40	0.17	61.17	29

maturity. Harvested fruits are largely marketed as such, without artificial ripening by placing on leaves (*pal* medium) or straw. Some fruits were however, brought to the laboratory after harvest on attaining harvest-maturity and those were incubated for four days placing on straw in single layer in a ventilated room under ambient condition. On analysis after two and four days, the samples were noted to have raised sugar levels by 8.9 and 9.3 %, lowered acidity by 11.9 and 12.2 % and lowered vitamin C by 12 and 15 % respectively.

LITERATURE CITED

- Singh, R.N. (1990).** *Mango*. Publ. & Infor. div., I.C.A.R., New Delhi.
- Gandhi, S.R. (1955).** *The Mango in India*. Farm Bulletin No. 6, I.C.A.R., New Delhi.
- Singh, L. B. (1960).** *The Mango: Botany, Cultivation and Utilization*. Leonard Hill (Books) Ltd. Interscience Publ. Inc., New York.
- Singh, R. (1969).** *Fruits*. National Book Trust, New Delhi.
- Mazumdar, B.C. and Majumder, K. (2003).** *Methods on Physico-Chemical Analysis of Fruits*. Daya Publ. House, Daryaganj, New Delhi 110 002.

Department of Horticulture
Institute of Agricultural Sciences
Calcutta university

B C Mazumdar

(Received on 13.07.2007 and revised on 22.08.2007)