

Physico-Chemical Quality of Himsagar Variety of Mango Borne by Trees in Central Part of West Bengal

Fully mature fruits of the Himsagar variety of mango were procured from a number of trees grown in the South 24 – Paraganas district in West Bengal. These were ripened in room temperature for three days and analyzed for physico-chemical constituents. Constituents were studied in two consecutive years and average results are presented.

Central part of West Bengal comprising the districts of South and North 24-Paraganas, Hugli and Nadia was an important mango growing zones, next to Murshidabad – Maldah and adjoining tract in the State. Quite a number of excellent varieties are grown in this belt and some of these may be named as Peyaraphuli, Bhuto Bombai, Golapkhass, Tollygunge Golapkhass, Sorikhas, Meghlanthan, Himsagar, Kishanbhog, Chhunchophuli, Lakkhanbhog etc. (Banik *et al.*, 1982 ; Mukherjee *et al.*, 1984 ; Mazumdar, 2008, 2015) and among these, Himsagar and Lakkhanbhog have usually a greater demand in the market.

In the present study, fully mature mangoes of the Himsagar variety were procured through agents from several parts in the South 24-Paraganas district within 100 km of the Kolkata city during 2nd to 3rd week of June. On ripening at room temperature for 3 days, fruits or their pulp were analyzed. Constituents were studied over two consecutive years following standard procedure (Mazumdar and Majumder, 2003). Average results of all years of the study are presented.

Physico-chemical observations of the study revealed the following.

(i) Ground colour: Light yellow with green patches at shoulders. (ii) Smell: Highly pleasant without pungency or alcoholic smell. Pineapple-jackfruit flavour was obtained in some fruits. (iii) Shape: Ovate to ovate-oblique with oblique to flattened base. (iv) Length: 9-11 cm from uppermost part of apex to lower most part of base. (v) Diameter: 8-9 cm at maximum bulge. (vi) Stalk: Slightly sunken. (vii) Shoulder: Ventral shoulder highly raised and in some fruits, it is very high. Dorsal shoulder oblique. (viii) Apex: Tapering to almost roundish. (ix) Beak: Almost flattened and in some fruits, slightly prominent. (x) Peel surface: Smooth. (xi) Oil gland: Few and more on ventral surface. (xii) Weight per fruit: 217.2 – 223.6g. In some cases, up to 305g. (xiii) Specific gravity: 1.04- 1.07. (xiv) Pulp colour: Yellowish orange. In some fruits, orange. (xv) Fibre: Almost nil. (xvi) Total titratable acidity as equivalence of citric acid: 0.18 – 0.21 percent. (xvii) TSS (degree Brix): 18.8 – 20.1. (xviii) Stone weight: 20.6 – 25.3 g., furrow: 6 – 8, shape: Obovate. (xix) Seed weight: 14.6 – 16.8 g, length: 3.8 - 4.9 cm.

Results are indicates that the performance of the ripen fruits of the Himsagar variety appear to be not on par with those that are grown in the agro-climatic zone of the Maldah-Murshidabad region, which is considered as the most important mango growing area in the State.

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Received on 25.03.2021 and Accepted on 26.06.2021