

Studies on physico-chemical characteristics of Carambola (*Averrhoa carambola* L.) fruit

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ABSTRACT : Carambola (*Averrhoa carambola* L.) belongs to the family Oxalidaceae. The present investigation was, therefore, undertaken to study the physico-chemical characteristics and textural properties of Carambola (*Averrhoa carambola* L.) fruits at unripe, semi-ripe and riped stages. The average lengths for ripened, semi-ripened and green fruits were 8.98, 8.84 & 8.69 cm and average diameter were 4.83cm, 4.79 cm and 4.62, respectively. The average weight of ripened, semi-ripened and green fruits was 74.07, 72.49 and 70.27g, respectively. The average number of seeds per fruit varied from 2 to 7 in ripe fruit. It is found that fruit has high edible portion (97.59%). Carambola fruit has a moisture content of 92.1 % (db) and juice has TSS of 6 °Brix, Ascorbic acid 16.8 mg/100g, Reducing sugar 5.68 %, Non-reducing sugar 2.042 % and total sugar 7.17 %. The hardness and fracture force value of unripe, semi-ripe and ripe Carambola are (203N & 160N); (163N & 67N) and (120N & 6N), respectively.

Key Words: Carambola, ascorbic acid, hardness, fracture force.