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PHYSICO-CHEMICAL CHARACTERISTICS OF FRUITS OF SOME POPULAR SWEET ORANGE (CITRUS SINENSIS L.) CULTIVARS GROWN IN DERA ISMAIL KHAN

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ABSTRACT

To study the physico-chemical characteristics of sweet orange fruit, the samples of eight cultivars of sweet orange were collected from the Horticulture (Promology) Section of D. I. Khan. As a whole ten samples were collected at random and analysed. The results show that Hamlin is having the largest and heaviest fruit. Moreover, the ascorbic acid values were the highest in Hamlin when compared to other cultivars. Whereas the percent acidity was lowest in Hamlin, and Nitrogen percentage is more in Succari & Golden Nugget. Total sugar percent was more in Hamlin thus showing best cultivar for this area.

INTRODUCTION

Sweet orange (<u>Citrus sinensis</u> L.), a member of family rutaceae, is one of the most important berry fruit. Sweet oranges play an important role in human nutrition. They are a good source of vitamin C and contain other minerals. They also contain phosphorous, calcium, magnesium, iron, Vitamin A, Vitamin B6, thiamine and niacine. Sweet oranges are liked for their distinctive colour, taste and flavour.

As no scientific data was available on various physico-chemical characteristics of different cultivars of sweet oranges, grown in D. I. Khan, which in turn may have been useful in the selection of the most promising cultivars for multiplication and creation of new cultivars, so the present investigation was based on a more comprehensive data and is aimed to screen the best cultivar of sweet oranges grown in D. I. Khan.

Ahmad & Din [1] reported the differences in the physical and chemical characteristics of oranges due to their relative position on a tree and exposure to sunlight. Collin [2] found the