



Research Paper

Article history :

Received : 15.10.2011

Revised : 21.05.2012

Accepted : 10.06.2012

Study on different quality parameters of different type of mandarin (*Citrus reticulata* L. Blaneo) orange orchards in lower Dibang Valley district of Arunachal Pradesh

■ PIJUSH KANTI BISWAS AND N.S. TEOTIA¹

Members of the Research Forum

Associate Author :

¹Birla Govt. Dairy Farm, PILANI (RAJASTHAN) INDIA

Author for correspondence :

PIJUSH KANTI BISWAS
Department of Horticulture,
Singhania University, Pacheribari,
JHUNJHUNU (RAJASTHAN)
INDIA
Email : pijushhorti@gmail.com

Abstract : This study was undertaken to know the quality parameters of the different type of mandarin orange gardens at Lower Dibang Valley district of Arunachal Pradesh. A baseline survey was done prior to the investigation and likewise twenty four gardens were selected randomly from the region and grouped into three gardens viz., small, medium and large garden. Observations were taken on quality parameters of the gardens. It was observed that among the different types of garden small garden recorded highest indifferent quality parameters.

Key words : Mandarin, Quality parameters, TSS, Pulp weight, Peel weight

How to cite this article : Biswas, Pijush Kanti and Teotia, N.S. (2012). Study on different quality parameters of different type of mandarin (*Citrus reticulata* L. Blaneo) orange orchards in lower Dibang Valley district of Arunachal Pradesh, *Asian J. Hort.*, 7(1) : 148-150.

Among the different fruits grown in India, citrus is the third most important fruit crop after Mango and Banana. Citrus occupies about 961.1 thousand hectares of land and produces annually 9452.1 thousand metric tones of fruits in India (NHB, 2010). Among the different species of citrus grown in India, Mandarin Orange occupies the major portion. The mandarin growing belts of the country may be divided into four regions viz., Punjab where mostly kinnow oranges is dominating, Nagpur belt where mostly Nagpur oranges are grown. next is the eastern foot hills of Nilgiri (Coorg region) where Coorg mandarin are grown. Lastly, Meghalaya, Arunachal Pradesh, Assam and surrounding foothills where Khasi Mandarin are predominantly grown. In Arunachal Pradesh major Khasi Mandarin growing belts are the East Siang, West Siang and Lower Dibang Valley district. The total area covered by citrus in Arunachal Pradesh is 25000 hectares and produced 37780 tonnes of fruits of which Lower Dibang Valley occupies 2780 hectares of land under citrus out of which orange area is 762 hectares under bearing and 1456 hectares under nonbearing and produces 5715 tonnes (Anonymous, 2010). In the Lower Dibang Valley district Roing area is well known for the production of mandarin, a few pockets of mandarin growing belts are also prevailing around Balek.

RESEARCH METHODS

A base line survey was conducted during 2010-2011 in predominantly citrus growing tracts of Lower Dibang Valley district. The existing gardens of those tracts were divided into three groups based on the number of plants existed in each garden as follows:

- Large garden : More than 200 plants
- Medium garden: 50-199 plants
- Small garden: Less than 50 plants

From each categories of the gardens, 8 gardens of similar age i.e. 24 gardens of three strata were selected for the study. From each of the selected gardens 10 plants were selected randomly for different observations. 240 numbers of plants in total were selected from all type of garden for the study. Main items of observation were pulp weight, peel weight, pulp-peel ratio, juice percentage (%) and TSS percentage (%). The sampling design for this experiment was stratified random sampling.

RESEARCH FINDINGS AND DISCUSSION

Results of the present studies revealed that there was significant difference among the various types of the gardens.

Different quality characters of different types of garden