

Poster

CHANGING FRUIT SHAPE OF WATER MELON USING WOODEN BOXES

R.L. SENANAYAKE

Field Crops Research and Development Institute, Mahalluppallama, Sri Lanka

ABSTRACT

Watermelon shape is mainly governed by the genetics of the crop. Standard watermelon shapes are oblong, oval and round. The market determines the desired shape. Fruit that is asymmetrical is of lower quality. Occasionally melons of any variety may be deformed because they just lie on uneven ground or deformed due to water stress or physical injuries while the size could be different. At present, world watermelon producers are looking for changing the shapes of watermelon as a way of value addition. In Japan, the first cube-shaped watermelon has been growing for over 30 years. The fruit in its natural shape could fetch a very high price. These different shape watermelons are not only used for consumption, but also used as ornamentals or gift items since these fruits can be stored for 3-4 weeks without deteriorating the quality. An experiment was conducted to change the fruit shape of watermelon at the Field Crops Research and Development Institute (FCRDI), Mahalluppallama in 2014. In the first season plastic material was used to have a 5 x 5 x 5 inches box and the fruit was inserted in to it 2 weeks after the fruit set. But as the growth progresses, the fruit box collapsed and resulted a deformed fruit. In the 2nd season, 6 x 6 x 6 inch and 5 x 5 x 5 inch wooden boxes were made using one inch thick wooden flanks and fruits were inserted 2 weeks after fruit set and tightly bound with a GI wire. 40 days after inserting to the boxes fruits were harvested. At the same time, 3 fruits in the open field were also harvested and TSS and peel thickness were measured. There was no significant difference in TSS and peel thicknesses between fruits in the open field and fruits in boxes. There was no difference in the quality of the fruit at the harvest.