

QUALITY RETENTION AND ACCEPTABILITY OF DICED PEPPERS

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Abstract. In order to try and stimulate increased utilization of fresh peppers, studies were initiated to make them available in more convenient form. Calwonder and Avelar peppers were cored and wall tissue was diced into 3/8 inch

sections. Thick walled cultivars are more desirable for dicing.

Of the Calwonder types, 20 per cent of the weight consists of the core and seeds. Dicing reduced the volume of the pepper by 50 per cent. Dicing also allows recovery of sound portions of pods having some defects.

Diced and packaged peppers remained in acceptable condition 2, 4, 8, and 24 days at 15, 10, 5, and 0°C, respectively. Chemical treatments for spoilage suppression were ineffective.

Fresh and frozen samples of diced peppers were distributed to consumers and returned questionnaires indicated product was highly acceptable.

IRRIGATION OF CITRUS WITH CITRUS PROCESSING WASTE WATER

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Abstract. Several citrus scion-rootstock combinations were grown in the greenhouse for 3 years with treated waste water from 2 citrus processing plants in central Florida. No harmful effects were observed from the use of treated citrus waste water. Supplemental fertilization was necessary to sustain the trees because treated citrus waste water was low in nutrients.

Observations of young and mature citrus trees irrigated with untreated waste water under field conditions indicated quantity was more critical than quality of the waste water applied. Cultural practices in the grove should be modified to compensate for the changed environment.

Soil in the citrus grove serves as a filtering system to the waste water. A marked reduction in the BOD, COD, and N contents were observed

as the waste water percolates through the soil profile. The results were similar to that obtained by biological aeration treatment of citrus waste water.

Citrus processing is a multimillion dollar industry in the United States and about 80% of the industry is located in Florida. Quantities of waste materials from processing operations are quite formidable. The industry has made substantial progress in solving its waste problem through recovery of such valuable by-products as peel, pulp, citrus molasses, essential oils, and more recently by recycling of water. However, it was reported in 1965 that the Florida citrus processing plants discharged about 130 mgd (million gallon per day) of waste water with a 5-day BOD (biological oxygen demand) loading equivalent to a population of some 2 million people (2).

Irrigation is widely used in Florida for disposing of waste waters from citrus processing plants. It would be a welcomed circumstance if this waste water could be utilized in the production of citrus crops. Early observations of disposition of citrus waste water through irrigation showed grass and weeds were destroyed with no immediate visible effects on pine trees (5).

Florida Agricultural Experiment Stations Journal Series No. 5155.

This study was financed by a grant from the Florida Water Resources Research Center (A-016-Fla). The author is indebted to Coca Cola Corporation, Foods Division and Citrus World Incorporated for providing the material and assistance which made this study possible.