

## **Carotenoids and their geometry isomers in selected tropical fruits**

### **Abstract**

This study determined the carotenoids content in cherry tomato, pink guava, and red grapefruit pulps and juices. Cherry tomato pulp exhibited the highest  $\beta$ -carotene content whereas pink guava pulp had the highest lycopene content. However,  $\beta$ -carotene and lycopene contents in the studied fruit juices were lower than their pulps in the same sample portion. Interestingly, six to twelve cis-isomers of carotenoids were identified in the fruit pulps and juices studied. A higher number of trace amounts of cis-carotenoids was found in fruit pulps as compared to juices. Therefore, consumption of whole fruit is recommended as the studied fruit juices have lower carotenoids content.

**Keyword:** Cherry tomato; Red grapefruit; Pink guava;  $\beta$ -Carotene; Lycopene