

CHAPTER 3

DETERMINATION OF SUGAR AND ORGANIC ACID PROPERTIES OF CHINOTTA (*CITRUS MYRTIFOLIA*) AND BERGAMOT (*CITRUS BERGAMIA*) VARIETIES

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1. INTRODUCTION

Citrus fruits, which are systematically in the Aurantoideae sub-family of the Rutaceae family, are located in tropical, semitropical and subtropical climate zones. It is known that citrus fruits naturally spread in the region from Eastern Arabia to the Philippines and from the south of the Himalayas to Indonesia-Australia. It is believed that Northeast India and Northern Burma are the origin centers of citrus fruits in this area, but according to recent findings, these regions are important as homeland due to the presence of many citrus species in different parts of China, Northeast India, Burma and Yunnan province of China. (Davies and Albrigo, 1994; İncesu, 2011). Citrus fruits, Citrus lemon (lemon), *C. aurantifolia* (lime), *C. aurantium* (bitter orange), *C. sinensis* (sweet orange), *C. reticulata* (mandarin, satsuma), (Bergamot) *C. Bergamia*, Chinotta (*C. Myrtifolia*) includes species belonging to the genus Citrus such as *C. grandis*

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organic acids and sugar ratios in citrus juices depend on the species, culture and horticultural practice and can be considered as an active parameter for the determination of authenticity. In this study, the sugar and organic acid contents of two citrus varieties were determined. It has been observed that the organic acids and sugar ratios in citrus juices depend on the species, culture and horticultural practice and can be considered as an active parameter for the determination of authenticity. In this study, which was carried out to determine the sugar and organic acid content of the fruit juices of citrus varieties, it was determined that the Chinotta variety had higher values than the Bergamot variety. Therefore, it is thought that the examined citrus varieties are important in terms of health and will be protective against many diseases and contribute at the same time.

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