

Turkish Journal of Agriculture and Forestry

Turkish Journal

of

Agriculture and Forestry

Main Organic Acid Distribution of Authentic Citrus Juices in Turkey

Feryal KARADENİZ*

Ankara University, Faculty of Engineering, Department of Food Engineering, Campus
of Agricultural Faculty, Dışkapı 06110, Ankara - TURKEY

 [Keywords](#)
 [Authors](#)



agric@tubitak.gov.tr

[Scientific Journals Home Page](#)

Abstract: Nineteen authentic citrus juice samples (6 tangerine, 4 sweet orange, 4 grapefruit, 4 lemon and 1 sour orange) were investigated with respect to organic acid distribution. Average citric, malic and fumaric acid contents of tangerine juices were 9.22 g l^{-1} , 5.29 g l^{-1} and $368 \mu\text{g l}^{-1}$, respectively. These values for orange juices were 13.28 g l^{-1} , 7.79 g l^{-1} and $373 \mu\text{g l}^{-1}$, respectively. The citric acid concentration in lemon juices, having the highest acidity, varied between 48.54 and 60.32 g l^{-1} . It was followed by grapefruit juices with an average 19.61 g l^{-1} citric acid content. In all citrus juices, the most abundant organic acid was citric acid, ranging from 6.05 to 60.32 g l^{-1} , with the exception of one tangerine variety. Malic acid was the second most abundant acid (1.27 - 12.15 g l^{-1}), followed by fumaric acid (0 - $807 \mu\text{g l}^{-1}$). Grapefruit, lemon and sour orange juices did not contain fumaric acid.

Key Words: organic acid, orange, grapefruit, lemon, tangerine

Turk. J. Agric. For., **28**, (2004), 267-271.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Agric. For., vol.28, iss.4.](#)