

# RESEARCH ORGANIC ACIDS OF CARICA PAPAYA L. FRUIT PULP

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**Introduction.** The papaya (papaw) is flowering plant belonging to the family Caricaceae, genus *Carica* and species *Carica papaya* L. The plant is endemic to countries of Central and South Americas. It is cultivated in over 50 different countries of the world (Sri Lanka, India, Malaysia, Indonesia, China, and Peru). Papaya is also grown in tropical Africa countries (Nigeria, Congo, Morocco, Zimbabwe, Cameron, and Tunisia). Brazil and India are the world's biggest producers of papaya, followed by Mexico, Indonesia, Nigeria and other countries [1, 2, 4].

Papaya is one of major tropical fruits of the world (after banana, mango, and pineapple). *Carica papaya* L. fruits are widely used in medicine due to the rich composition of biologically active substances. These fruits contain an enzyme called papain, protein, fat, dietary fibre, carbohydrates, amino acid, vitamins (vitamin C, thiamine, riboflavin,  $\beta$ -carotene), organic acids, flavonoids, tannins, macro- and microelements (calcium, phosphorus, iron, magnesium and potassium), volatile compounds etc. [1, 2, 3].

Papain enzyme helps to digest the protein in food. The fruits of *Carica papaya* L. have antioxidant, laxative, antifungal, anti-inflammatory, hypoglycemic, hypolipidemic, antifertility, abortifacient, hepatoprotective, antihypertensive, antitumor and other effects [1, 3].

The aim of our work was to study organic acids in fruit pulp of *Carica Papaya* L. by chromatography.

**Materials and methods.** The presence of organic acids in fruit pulp of *Carica papaya* L. was determined using the paper chromatography method. The study was performed in solvent system: ethyl acetate – glacial acetic acid – formic acid – water (100:11:11:25) with reliable (standard) samples of organic acids. The chromatogram was processed with reagent – 0,3% ethanolic solution of bromotymol blue.

**Results and their discussion.** In the fruit pulp of *Carica papaya* L., citric acid, malic acid, succinic acid, tartaric acid and oxalic acid were identified in comparison with standard samples.

## References:

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