

Studying hydroxycinnamic acids of *Passiflora Ligularis* fruits

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Introduction. Genus *Passiflora*, which is known as passion fruit, has about 42 plant species with edible fruits, but only nine of them possess economic importance in national and international markets. One of these plants is *Passiflora ligularis* Juss. of *Passifloraceae* family.

Passiflora ligularis (Sweet granadilla) is native to such countries of North America as Mexico, Panama, Costa Rica, El Salvador, and the countries of South America (Bolivia, Brazil, Venezuela, Colombia, Ecuador, and Peru). The natural habitat of Sweet granadilla is tropical and subtropical mesic or humid forests (especially tropical highland forests). It is the most cultivated *Passiflora* species in the Andes because this plant can be grown at high altitudes (900-2700 m above sea level). *Passiflora ligularis* plants are widely cultivated in many countries of the world due to ornamental, beautiful, large, and fragrant flowers, as well as delicious fruits (second only to *Passiflora edulis*). Fresh fruits and concentrated juice of *Passiflora ligularis* are imported to European countries (such as the Netherlands, Belgium, and Germany), the United States, Japan, etc.

Materials and methods of research.

The qualitative composition of hydroxycinnamic acids was studied by

paper chromatography method in the solvent system: 2 % acetic acid and 15 % acetic acid. Identification was carried out in comparison with standard samples of hydroxycinnamic acids.

The quantitative determination was carried out by the spectrophotometric method according to the State Pharmacopoeia of Ukraine at 525 nm wavelength in terms of chlorogenic acid and absolute-dried plant raw material.

Research results. During the chromatographic study, at least five substances had a blue fluorescence of varying intensity, which was enhanced under the UV light after processing chromatogram with ammonia vapors. As a result, chlorogenic, neochlorogenic, p-coumaric, and ferulic acids were identified in *Passiflora ligularis* fruits.

The received data of quantitative determination were processed statistically. The content results of hydroxycinnamic acids in *Passiflora ligularis* fruits were $1,09 \pm 0,02$ %.

Conclusion. The results obtained will be used to standardize medicinal plant raw materials and develop new medicines based on *Passiflora ligularis* fruits.

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