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Tracking of Linarin from the Ethyl Acetate Fraction of Melinjo (Gnetum gnemon L.) Seeds Using Preparative High Performance Liquid Chromatography

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Abstract : Introduction: Resveratrol is a class of bioactive chemicals found in melinjo, which has a wide range of biological actions. The purpose of this study is to determine the linarin content of the melinjo fraksi by using preparative-high-performance liquid chromatography (prep-HPLC). Method: Extraction used the soxhletation method with 96% ethanol solvent. Fractionation used ethyl acetate and ethanol in a ratio of 1:1. Tracing of linarin compound used prep-HPLC with a mobile phase ratio of distilled water: methanol (55: 45, v/v). The presence of linarin was detected using a wavelength of 215 nm. Fourier Transform Infrared (FTIR) was used to identify the functional groups of compound. Result: The retention time required to elute the ethyl acetate fraction was 2.601 minutes. Compound separation identification using Fourier Transform Infrared Spectroscopy - Quest Attenuated Total Reflectance (FTIR - QATR) has a similarity value range with standards from 0 to 1000. The elution results of the ethyl acetate fraction have similar values with the standard compounds linarin (668), resveratrol (578), and catechin (455). Conclusion: Tracing for active compound in the ethyl acetate fraction of Gnetum Gnemon L. using prep-HPLC showed a strong suspicion of the presence of linarin compound.

Keywords : Gnetum gnemon L., linarin, prep-HPLC, fraction ethyl acetate
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