

Study of Chemical Compounds of Garlic

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Abstract : The phytosubstance from garlic was obtained by extraction with liquid carbon dioxide under critical conditions. Methods of processing raw materials are proposed, and the chemical composition of garlic is studied by gas chromatography and mass spectrometry. The garlic extract's composition was determined using gas chromatography (GC) and gas chromatography-mass spectrophotometry (GC-MS). The phytosubstance had 54 constituents. The extract included the following main compounds: Manool (39.56%), Viridifrolol (7%), Podocarpa-1,8,11,13-tetraen-3-one, 14-isopropyl-1,13-dimethoxy- 5,15 percent, (+)-2-Bornanone (4.29%), Thujone (3.49%), Linolic acid ethyl ester (3.41%), and 12-O-Methylcarn.

Keywords : allium sativum, bioactive compounds of garlic, carbon dioxide extraction of garlic, GS-MS method

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