Divinyl ethers – bioactive products of linoleic acid metabolism

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Abstract

The divinylethersynthase (DES) activity and divinyl ethers have been detected in the species of Asparagales: iris (Iris germanika L.), gladiolus (Gladiolus comunis L.), crocus (Crocus vernus L.) and hyacinth (Hyacinthus orientalis L.). Exogenous linoleic acid was metabolized by roots and bulbs of the species predominantly into the divinyl ethers - etheroleic and colneleic acids. The products in the form of methyl esters of trimethylsilyl derivatives (Me TMS) were analyzed by gas chromatography-mass spectrometry. Testing the etheroleic acid on antiaggregatory activity showed hight effect on the platelets.