

Variation of Fatty Acids Composition at Storage

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We have investigated the dependency of methyl esters mixture composition of the fatty acids extracted from the oil of *Capsicum annuum* seeds on the sample storage duration. The content of polyunsaturated acids determining F-vitamin activity of oils decreases considerably if the sample is stored in room temperature for more than 10 days. This is caused by oxidation to carbonyl and carboxyl compounds, the main being 9-oxononanic acid, previously discovered in a number of vegetable oils. We have established that it is absent from freshly extracted samples of *Capsicum annuum* seeds oil. The results obtained with combined GLC and mass spectrometry are presented in a table and a graph.

| Sample storage duration, days | C16:0/C18:2 | C18:0/C18:2 | Content of 9-O-9:0, % | Content of sum of main oxygenated products |
|-------------------------------|-------------|-------------|-----------------------|--|
| 0-5 | 0.17 | 0.05 | 0.00 | 0.00 |
| 5-10 | 0.33 | 0.10 | 0.60 | 1.30 |
| 10-20 | 2.70 | 1.25 | 6.10 | 20.00 |
| 20-30 | 18.00 | 3.00 | 10.30 | 22.90 |
| 30-50 | 100.00 | 30.00 | 11.80 | 28.20 |

