

EVALUATION OF THE OXIDATIVE STABILITY OF ROSEHIP (*Rosa Canina*) LIPOPHILIC EXTRACTS

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There is an increased interest for sources of natural antioxidants in order to enrich oils towards reducing lipid oxidation [1,2]. The rosehip and rosehip berries are natural concentrate of vitamins (C, P, B1, B2, E, K), carotenoids, folic acid, volatile oil, etc [3].

Results obtained through analysis of different methods of research has found that lipophilic extract samples enriched with natural antioxidants are characterized by a higher antioxidant capacity compared to samples that were not enriched with natural antioxidants.

The value for rosehip extract ($PV=4,13 \pm 0,13 \text{ m}_{\text{echiv}} \text{ O}_2/\text{kg}$) shows that due to biologically active compounds in analyzed lipophilic extract the oxidation process is slowing down. The obtained values do not exceed the acceptable limits according to normative documents (max. $10 \text{ m}_{\text{echiv}} \text{ O}_2/\text{kg}$ according to [4]). Acid value for rosehip extract ($AV=0,58 \pm 0,04 \text{ mg KOH/g}$) also indicates a decrease compared to blank sample which is explained by the oxidative degradation decrease.

Besides that, the antioxidant capacity of rosehip lipophilic extract ($HPSA=73,2 \pm 1,2\%$) which is explained by the concentration of biologic active compounds extracted which naturally can be found in rosehip berries.

This research demonstrates the possibility to use rosehip lipophilic extract in the food products production. This way food products enriched with natural antioxidants will be safe and healthier for consumption.

Keywords: *rosehip, lipophilic extracts, oxidation, antioxidants.*

References

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