



The iodine index evolution of some nonrefined oils, under the influence of storage conditions

M. AVRĂMIUC, Ana LEAHU – Universitatea "Stefan cel Mare" Suceava

This work tries to evidence, comparatively, the evolution of the iodine index of some maize and sunflower nonrefined oil samples stored under certain conditions (temperature, light, addition of caroten) during 60 days.

The material for experiment was represented by raw oil samples, whose iodine index has been determined at once after processing, as well as at 5, 30 and 60 days of keeping at +4°C (in dark) and at +20-22°C (in dark and light). Beside thermal and light regime, in some oil samples has been also used an addition of caroten (10% carrot fresh juice) to evidence if these provitamins have an antioxydant role. The analyse of iodine index values in all samples stored 5, 30 și 60 days, under above mentioned conditions, has evidenced the least decrease of this index in samples stored at +4°C, and the highest ones in samples kept at +20-22°C, 60 days, in light conditions and with caroten addition. 30 days of storage at +20-22°C has led to very close values of iodine index in the both types of oil. After 60 days, this index has registered higher values (a less decrease) in sunflower oil kept in dark conditions. After 60 days of exposure to light, the sunflower crude oil has registered a more marked decrease of iodine index than maize oil. The caroten addition, to avert or to slow down the oxydation process of fatty acids from the both types of oils, has had good results only at +4°C, and less at +20-22°C, under dark conditions.