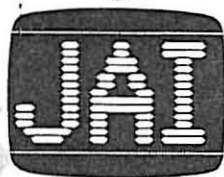


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OLIVE OIL QUALITY VERSUS STORAGE OF VARIETAL OLIVES (FATTY ACID PROFILE, ACIDITY AND PEROXIDE VALUE)

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Three varietal olives (Cobrançosa, Madural and Verdeal) from the same geographical origin (Trás-os-Montes, Portugal) were kept during fifteen days at the same conditions of temperature. At T0, T7 and T14 days of storage, olive oils were prepared in pilot scale in "Abencor " equipment. Fatty acid profiles, acidities and peroxide values are the chosen parameters to study the effects of the time of storage in the quality of oils.

Fatty acids were determined by HRGC as methyl esters by transesterification with BF_3 /methanol, after saponification with methanolic KOH. The fatty acid patterns was performed with a Chrompack CP9001 chromatograph equipped with a split-splitless injector, a FID and a 50m x 0,25 mm i.d. fused silica capillary column coated with a 0,19 μm film of CP-Sil88 (Chrompack). The temperatures of injector, detector and oven were 230, 185 and 250°C, respectively. Acidity and peroxide value were determined by described methodologies in NP-903 (1987) and NP-904 (1987).

The statistical analysis and the discussion of results are presented. Significant differences among the patterns of fatty acids of the three varieties were observed. The hydrolysis and the peroxidation affected the glicerides of the three varietal oils in different intensities, being better recognised in the verdeal olive oil.