P 1. DETERMINATION OF FATTY ACID PROFILE OF SOME EXTRA VIRGIN OLIVE OIL BY GC-FID

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ABSTRACT: Olive oil, differently from most vegetable oils, is a natural product obtained from olive fruits. It is a natural juice and can be consumed without further treatments, so it has been produced by mechanical extraction without chemicals and any treatment (Boskou, 2006). Environmental and seasonal effects, as well as the olive oil processing methods (Di Vaio et al., 2013), has been reported to affect olive oil composition and to create different categories of olive oil that has been established by the international organizations. Among the different types of olive oil, extra virgin olive oil which is the most valuable olive oil category. In this study, an automated gas chromatography system for determination of fatty acid profile of some extra virgin olive oils was used. It was seen that olive oil species analysed have high amounts of oleic acid mostly. The biggest oleic acid ratio was %72,25 in extra virgin olive oils analysed. With this study, the olive oils to be obtained from different regions of our country have been examined by chromatographic method and their results have been compared. With the results obtained, it is aimed to draw attention to the changes in the olive oil profile of our country and make important contributions to the literature.

Keywords: Extra virgin olive oil, fatty acid profile, gas chromatography

REFERENCES

Boskou, D., 2006, Olive Oil: Chemistry and Technology, Second Edition, *AOCS Press*, Champaign Illinois.

Di Vaio, C., Nocerino, S., Paduano, A., and Sacchi, R., 2013, Influence of some environmental factors on drupe maturation and olive oil composition, *J Sci Food Agric*, 935, 1134-1139.