

## FLAVONOIDS OF THE LEAVES OF *Olea europaea*

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We have studied preparatively the flavonoids of the leaves of *Olea europaea* L. (common olive), family Oleaceae. An ethanolic (70%) extract of the leaves, after treatment with chloroform, was separated on columns of polyamide (water → ethanol). Four compounds of flavonoid nature not reported previously [1] and 4',5,7-trihydroxyflavone (apigenin) with mp 185-186°C,  $\lambda_{\max}$  270 (300), 336 nm, were isolated.

Two amorphous flavonoids had  $R_f$  0.45 and 0.50 in 15% acetic acid. Their acid hydrolysis (10% sulfuric acid, 100°C, 1 h) yielded apigenin and D-xylose. An intermediate glycoside in stepwise acid hydrolysis and also the yield of aglycone (approximately 50%) showed the presence of two carbohydrate components. UV spectroscopy [ $\lambda_{\max}$  265, 338 nm;  $\lambda_{\max}^{\text{KOH}}$  270 (301), 385 nm;  $\lambda_{\max}^{\text{CH}_3\text{COONa}}$  267, 340 (380) nm] showed the probable substitution of C<sub>7</sub> of apigenin. The two compounds were characterized as 7-di-O-D-xylosides of apigenin. On the basis of qualitative reactions, the fourth compound has been provisionally assigned to the flavanone group.

### LITERATURE CITED

1. H. Bočkova, J. Holubek, and Z. Čekan, Collection Czech. Chem. Commun., 29, No. 6, 1484 (1964).

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