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ISOEVONINE: A NEW ALKALOID FROM THE SEEDS OF *EUONYMUS EUROPAEA**

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Key Word Index—*Euonymus europaea*; Celastraceae; alkaloid; isoevonine.

Plant. Euonymus europaea L. collected in South Slovakia, Czechoslovakia. *Previous work.* On *Euonymus* alkaloids.[1-5]

The dried seeds of *E. europaea* L. were extracted with heptane. The heptane extract was taken into 2% HCl. After basification of the aqueous layer, the alkaloids were extracted with Et_2O. The residue from the Et_2O extract was crystallized from C_6H_6–Et_2O affording evonine. Isoevinine was obtained from the mother liquors by chromatography on silica gel.

Evonine, $C_{36}H_{43}NO_{17}$, [m.p. 183–188° (EtOH); $[\alpha]_D$ +21·1° (EtOH); M^+ 761, significant peaks at *m/e* 206, 178] was identified by spectra and comparison with the authentic sample.

Isoevonine, $C_{36}H_{43}NO_{17}$ (amorph); $[\alpha]_D$ +30·5° (EtOH); M^+ 761, significant peaks at 206, 178; UV_{max} at 224, 271 nm (EtOH); IR bands at 1750 (sh), 1780, 3780 cm^{-1} (CCl_4); ORD: $[\Phi]_{310}$ +7850° (max), $[\Phi]_{290}$ 0°, $[\Phi]_{267}$ −12 610° (min), $[\Phi]_{249}$ −5690° (max), $[\Phi]_{237}$ −9630° (min), $[\Phi]_{221}$ +2850° (max).

Although the sesquiterpenic moiety of both alkaloids was proved to be identical, isoevonine differs from evonine by the nature of the esterifying acid. Upon methanolyses, isoevonine afforded methyl 2-[3-(methoxy-carbonyl) butyl]-nicotinate, identified by physicochemical methods,[6] whereas evonine gave methyl 2-[1-methyl-2-(methoxycarbonyl) propyl]-nicotinate under the same reaction conditions.[5]

* Part I in the projected series "Alkaloids of *Euonymus europaea*".

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