(J(c/s) = 6·2), for H at C-3; 5·95 d (J = 6·2), for H at C-1; 5·41 d (J = 6·2), for H at C-4; 4·53 d (J = 2·0), for H at C-6; 4·05 d (J = 2·0), for H at C-7; 2·95 d (J = 6·2), for H at C-9; 1·95 s, for 3 H at C-10.

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MONOCOTYLEDONAE

ORCHIDACEAE

ISOQUERCITRIN FROM *ORCHIS SAMBUCINA*

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Abstract—A flavonoid pigment of *Orchis sambucina* is isolated and identified as 3-*O*-β-D glucoside of quercetin (isoquercitrin).

Plant. Orchis sambucina L. (syn.: *Dactylorchis sambucina* L., *Dactylorhiza sambucina* (L.) Soò).[1]

Material. Air-dried flowers of yellow *O. sambucina*, collected at Colle di Tenda (Piemonte, Italy), about 1700 m above sea level, Summer 1969.

Previous works. No information on chemical constituents of this species. The congenerial *O. mascula* is referred as containing cyanidin 3,5-diglucoside.[2]

Uses. The roots of several Orchidaceae, probably including *O. sambucina*, furnish Tubera Salep, forming a water-jelly highly nutritious and also used as an industrial starch.[3]

Isolated flavonoid. Isoquercitrin (3,3′,4′,5,7-pentahydroxyflavone 3-*O*-β-D glucoside), from the 20% MeOH extract of the defatted flowers by polyamide column[4] and preparative paper chromatography. Identified by UV spectra,[5–7] R_f values,[8] and hydrolysis. The PMR spectrum of the compound acetate (pyridine, acetic anhydride; 24 hr) agree with the

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unpublished data on isoquercitrin acetate.[9] IR spectra of isoquercitrin and its acetate, together with all the above referred values of the mentioned compounds are confirmed via direct comparison with authentic specimens.

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