

Flavonoids and Cyclitol from *Vinca herbacea*

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(Received December 10, 1997)

Quercetin, rutin and dambonitol (1,3-*O*-dimethyl-*myo*-inositol) were isolated from the dried leaves of *Vinca herbacea*.

Keywords: *Vinca herbacea*; Apocynaceae; flavonoid; quercetin; rutin; cyclitol; dambonitol

A Genus *Vinca* (Apocynaceae) plant, *V. herbacea* Waldst et Kit. is indigenous to southern Europe and southern Russia.¹⁾ In a continuation of our studies on the constituents of *Vinca* leaves, the present paper describes the isolation of flavonoids and cyclitol from *V. herbacea*.

Dried leaves of *V. herbacea* (200g) collected in Ankara, Turkey in July 1994, were extracted with hot MeOH. The MeOH extract was extracted successively with Et₂O, AcOEt and BuOH as described previously.^{2,3)} Quercetin (18mg) was isolated from the Et₂O extract, rutin (417mg) from the AcOEt and BuOH extracts and dambonitol (1,3-*O*-dimethyl-*myo*-inositol) (1.6g) from the remaining residue of the MeOH extract after successive extraction with organic solvents. These compounds were identified by direct comparison with respective authentic samples.

Differences in sugar moieties were noted among the species of the Genus *Vinca* and related species. Rutin from *V. herbacea* is a 3-*O*-glycoside as the flavonol glycosides from *Catharanthus roseus* (L.) G. Don (= *Vinca rosea* L.), whereas the flavonol glycosides from *V. major* and *V. minor* are a 3,7-di-*O*-glycoside.^{2,3)}

On the other hand, dambonitol is a common cyclitol in the Genus *Vinca* plants, whereas the equivalent cyclitol is (+)-bornesitol (1-*O*-methyl-*myo*-inositol) in *C. roseus*.⁴⁾

These differences are interesting from a viewpoint of chemotaxonomy.

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