

# C-GLYCOSYLFLAVONOIDS FROM *PASSIFLORA FOETIDA* VAR. *HISPIDA* AND *P. FOETIDA* VAR. *HIBISCIFOLIA*

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In our continuing chemical analysis (1-5) of *Passiflora* species, we report here the flavonoids of two geographically disjunct varieties of *Passiflora foetida*.

## EXPERIMENTAL<sup>1</sup>

**PLANT MATERIALS.**—The rootstock of *Passiflora foetida* var. *hispida* (DC ex Triana and Planch.) Killip ex Gleason was collected from Australia, Queensland, Brisbane Mt. Koot-tha Botanical Garden. Vouchers of the plants grown from seed used for the chemical studies are deposited in the Herbarium at Duke University and the University of Texas at Austin (MacDougal No. 1466). *P. foetida* var. *hispiscifolia* (Lam.) Killip was collected from Mexico, State of Oaxaca, District of Tehuantepec, and grown from seeds at Duke University. Vouchers (MacDougal) are deposited in the herbaria noted above as well as in Mexico (Chapa) and ENCB.

**EXTRACTION AND ISOLATION OF FLAVONOIDS.**<sup>2</sup>—Dried leaves of *P. foetida* var. *hispida* (250 g) and var. *hispiscifolia* (200 g) were worked up by standard procedures (1-5). The compounds obtained from *P. foetida* var. *hispida* were chrysoeriol (5 mg), apigenin (5 mg), isovitexin (16 mg), vitexin (150 mg), 2"-xylosylvitexin (20 mg), 2"-xylosylisovitexin (7 mg), luteolin 7- $\beta$ -D-glucoside (12 mg), kaempferol (3 mg), luteolin (15 mg), a mixture of isoschaftoside and vicenin 2 (5 mg), glucose (10 mg), galactose (8 mg), and saccharose (17 mg). *P. foetida* var. *hispiscifolia* yielded isovitexin (225 mg), vitexin (110 mg), 2"-xylosylvitexin (50 mg), 2"-xylosylisovitexin (15 mg), apigenin 7- $\beta$ -D-glucoside (3 mg), schaftoside (7 mg), vicenin-2 (2 mg), a mixture of isoschaftoside and vicenin-2 (5 mg), luteolin 7- $\beta$ -D-glucoside (15 mg), as well as glucose (150 mg), saccharose (110 mg), and galactose (10 mg).

All flavonoids were identified by standard spectral and hydrolytic data, as well as by authentic sample comparison and color-reaction procedures (1-5). The structures of 2"-xylosylvitexin and 2"-xylosylisovitexin were further clarified by pmr of their acetyl derivatives. In addition, the per methyl derivatives of schaftoside, isoschaftoside and vicenin-2 were compared with authentic standards on Si gel tlc plates in chloroform-ethyl acetate-acetone (5:4:1).

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<sup>1</sup>Spectra were recorded with the following instruments: uv, Varian Techtron model 635; pmr, Varian 90 MHz; ms, DuPont 21-491 and AEI MS 902 instrument. Adsorbants for tlc and cc were from E. Merck. Sephadex LH-20 was from Pharmacia.

<sup>2</sup>Full details of the isolation and identification of the compounds are available on request to the senior author.