

6,8-DI-C- $\beta$ -D-ARABINOPYRANOSYL APIGENIN FROM *THEA SINENSIS*  
VAR. *MACROPHYLLA*

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*Thea chinensis* Sims var. *macrophylla* Sieb. (Theaceae) under the name of "Tuocha" or "Tuo Cha Yunan" Tea is used in Chinese folk medicine for antilipidic properties. Previously *T. chinensis* varieties were investigated for C-glycosyl flavones; C-glucosyl-8 apigenin, di-C-glucosyl-6,8-apigenin (1, 2) and saponarin (3) were isolated.

In the current study, from the *n*-BuOH extract one di-C-glycosyl flavone was isolated and identified by means of standard uv and ms techniques and chromatographic comparisons against authentic markers. This compound is 6,8-di-C- $\beta$ -D- arabinopyranosyl apigenin. The ms spectra of the permethylated derivative demonstrated the expected fragmentation.

This is the first time that the 6,8-di-C-arabinosyl apigenin has been found in the *Thea* genus.

## EXPERIMENTAL

GENERAL EXPERIMENTAL PROCEDURES.—Ms were recorded with an AEI ms 902; uv spectra were measured with a Beckman 25 spectrometer.

PLANT MATERIAL.—*T. sinensis* var. *macrophylla* (black tea) was collected and fermented in China. Leaves were compressed in "swallow's nest;" a voucher specimen was deposited in the Herbarium of the Laboratory of Botany, Faculty of Pharmacy of Lyon. The drug was supplied by Distrifrance, an import society for China's products.

EXTRACTION AND ISOLATION.—Leaves (500 g) were extracted with MeOH-H<sub>2</sub>O (7:3). The MeOH was removed under reduced pressure, and the aqueous concentrate was extracted with Et<sub>2</sub>O, EtOAc, and *n*-BuOH.

The BuOH extract was fractionated on a Sephadex LH-20 column to give three fractions. By repeated chromatography of the fraction 3 with a polyamide SC 6 column, the compound was isolated (10 mg).

IDENTIFICATION.—Standard uv (4) and ms methods of the permethylated compound (5, 6), including comparisons with an authentic sample were employed for the identification. This compound is 6,8-di-C- $\beta$ -D-arabinopyranosyl apigenin.

Full details of the isolation and identification are available from the senior author.

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