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6-METHOXY FLAVONIDS FROM ACANTHOSPERMUM AUSTRALE

S. DEBENEDETTI, V. MARTINO, P. PALACIOS, and J.D. COUSSIO*

IQUIMEFA (Instituto de la Química y Metabolismo del Fármaco), UBA-CONICET,
Cátedra de Farmacognosia, Departamento de Farmacología, Facultad de Farmacia y Bioquímica,
UBA, Junín 956, 1113 Buenos Aires, Argentina

Continuing with our phytochemical investigation of Argentine medicinal plants from the Compositae, flavonoids from *Acanthospermum australe* (Loefl) O. Kuntz were studied.

This plant is widespread all over America from Massachusetts to central Argentina (1). It is commonly known as "yerba de la oveja" or "tapekue" and is used in decoctions by the rural populations of Paraguay for regulating fertility (2). Flavonoids, phenols, steroids, alkaloids, tannins, and amino acids have been detected in the aerial parts (3). Furthermore, diterpene and sesquiterpene lactones and melampolides have been reported (4-6).

In this paper we report the isolation and identification of four 6-methoxy flavonoids: 5,4'-dihydroxy-3,6,7-trimethoxy flavone (penduletin), 5,3',4'-trihydroxy-3,6,7-trimethoxy flavone (chrysosplenol D), 5,7,4'-trihydroxy-3,6-dimethoxy flavone, and 5,7,3',4'-tetrahydroxy-3,6-dimethoxy flavone (axillarin).

EXPERIMENTAL

PLANT MATERIAL.—Aerial parts were collected at Misiones Province, Argentina. A voucher specimen (No 1030) is deposited at the University Herbarium, Museo de Botánica, Facultad de Farmacia y Bioquímica, University of Buenos Aires.

EXTRACTION AND ISOLATION.—Air dried, powdered aerial parts were extracted successively with *n*-hexane, CH₂Cl₂, Me₂CO, and MeOH. The CH₂Cl₂ extract was submitted to several chromatographic procedures, including preparative tlc and column chromatography on Si gel and Sephadex LH 20. From this extract four flavonoids were isolated.

IDENTIFICATION OF THE COMPOUNDS.—Standard chromatographic and spectroscopic techniques (7-9) as well as comparison with authentic samples were employed for the identification of the isolated compounds.

Full details of the isolation and identification of the compounds are available on request to the senior author.

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