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IRIDOID GLUCOSIDES FROM *BARLERIA LUPULINA*

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Barleria lupulina Lindl. (Acanthaceae) (1), locally known as "Slaed Pang Pawn," is a shrub widely used in folk medicine as an anti-inflammation agent and for relieving pain from insect bites (2). It has also been claimed as a remedy for snake bites (3). Investigations on the ethanolic extracts of the aerial parts of *B. lupulina* resulted in the isolation of three iridoid glucosides: shanzhiside methyl ester (4), barlerin, and acetyl barlerin (5).

EXPERIMENTAL

PLANT MATERIAL.—The plant material was collected in Bangkok and was identified by Associate Professor Payow Maunwongyathi, Faculty of Pharmacy, Mahidol University, Bangkok. A voucher specimen (BKF No. 82474) has been lodged at the Forest Herbarium, Royal Forest Department, Ministry of Agriculture and Cooperatives, Bangkok.

EXTRACTION AND ISOLATION.—The fresh aerial parts of *B. lupulina* (950 g) were extracted with 95% EtOH (5 liters). The concentrated aqueous ethanolic extract (300 ml) was washed twice with hexane (2×150 ml); the lower phase evaporated in vacuo and chromatographed on a silica gel column using $\text{CH}_2\text{Cl}_2/\text{MeOH}$, with a gradually increasing concentration of MeOH. The CH_2Cl_2 -MeOH (90:10) fractions gave a mixture of acetyl barlerin and barlerin, together with colored materials. The CH_2Cl_2 -MeOH (80:20) fractions gave shanzhiside methyl ester and a minor quantity of barlerin.

Column chromatography of the less polar fractions, followed by repeated short column chromatography, gave acetyl barlerin (721 mg) and barlerin (505 mg). Shanzhiside methyl ester was obtained (450 mg) by similar treatments of the more polar fractions. Physical (mp of the acetates) and spectroscopic (uv, ir, ^1H and ^{13}C nmr) comparisons with the reported data (4,5) revealed the identities of these iridoids.

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

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