

## ACKNOWLEDGMENTS

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FLEMISTRICIN-B: A CHALCONE FROM THE SEEDS OF *LONCHOCARPUS SERICEUS*

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*Lonchocarpus sericeus* (Poir.) H.B. & K. (Leguminosae, Papilionoideae) is a small forest tree found in both West Africa and the neotropics (1). In a previous investigation of seeds of Ghanaian origin the chalcones lonchocarpin, derricin, derricidin (cordoin), isocordoin, and 4-hydroxylonchocarpin, and the flavanone isolonchocarpin were reported (2). An examination of the roots of material of South American origin yielded all of the above with the exception of the last two named chalcones (3).

A re-examination of seeds from this species yielded four chalcones, three of which were characterized as the previously recorded lonchocarpin, derricin, and isocordoin and the fourth as the dihydrofuranochalcone, flemistricin-B, which had not previously been reported from *Lonchocarpus* but only from another papilionaceous taxon, *Flemingia stricta* (4). The <sup>13</sup>C-nmr spectrum of flemistricin-B is reported for the first time.

## EXPERIMENTAL

**PLANT MATERIAL.**—*L. sericeus* seeds were collected in Ghana. A voucher specimen has been lodged in the Carpological Collection of the Herbarium of the Royal Botanic Gardens, Kew.

**EXTRACTION AND ISOLATION.**—Ground seeds (31 g) were extracted successively with petroleum ether (60–80°), CHCl<sub>3</sub>, and MeOH. Fats were removed by column chromatography over Si gel, eluting with petroleum ether. Elution of the column with petroleum ether-EtOAc (19:1) gave a mixture that was subsequently separated by centrifugal preparative tlc (Si gel; toluene) to yield lonchocarpin (42 mg) and derricin (6 mg). Further elution of the column with petroleum ether containing increasing amounts of EtOAc gave, with 10% EtOAc, derricin (8 mg), with 20% EtOAc, isocordoin (42 mg), and with 25% EtOAc, flemistricin-B (18 mg).

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IDENTIFICATION OF COMPOUNDS.—Identical with literature data, lonchocarpin (5), derricin (5), and isocordoin (4). *Flemistricin-B*.—orange needles, mp 132° [lit. (4) 135°];  $M^+$  324.1316,  $C_{20}H_{20}O_4$  requires 324.1363; uv  $\lambda$  max (MeOH) 345 nm; ir  $\nu$  max (KBr) 3475, 1640  $cm^{-1}$ ;  $^1H$  nmr (90 MHz,  $CDCl_3$ )  $\delta$  1.26, 1.32 (2 $\times$ s, 2 $\times$ 3H, 2C(Me) $_2$ ), 3.15 (d, 2H,  $J=9$  Hz,  $CH_2-1''$ ), 4.75 (t, 1H,  $J=9$  Hz, H-2''), 6.42, 7.75 (ABq, 2H,  $J=9$  Hz, H-5', H-6'), 7.40 (m, 3H, H-3, -4, -5), 7.48, 7.87 (ABq, 2H,  $J=17$  Hz, H- $\alpha$ , H- $\beta$ ), 7.60 (m, 2H, H-2, -6), 13.34 (s, 1H, OH-2');  $^{13}C$  nmr (90.56 MHz,  $CDCl_3$ ) 23.9, 25.8 (2 $\times$ q, 3'-Me $_2$ ), 27.3 (t, C-1''), 71.8 (s, C-3''), 91.7 (d, C-2''), 101.7 (d, C-5'), 113.7, 114.9 (2 $\times$ s, C-1', C-3'), 120.6 (d, C- $\alpha$ ), 128.4 (d, C-3, -5), 128.9 (d, C-2, -6), 130.4 (d, C-4), 131.8 (d, C-6'), 134.8 (s, C-1), 144.1 (d, C- $\beta$ ), 161.4 (s, C-4'), 166.7 (s, C-2'), 191.9 (s, C=O); ms  $m/z$  (rel. int.) 324 ( $M^+$ , 100), 309 (4), 291 (24), 266 (72), 189 (36), 162 (42).

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#### ERRATUM

Bruce K. Cassels has requested the following erratum: On the paper entitled "Artavenustine, a Catecholic Berbine from *Artabotrys venustus*," *J. Nat. Prod.*, **49**, 602 (1986), the name of author K.C. Khan should be changed to K.C. Chan.