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METHYLATED FLAVONOIDS FROM *ARTEMESIA LINDLEYANA*

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Previous investigations of *Artemesia* have indicated that the genus is a rich source of methylated flavonoids (1-4). A CH_2Cl_2 extract of the aerial parts of *Artemesia lindleyana* Bess. in Hook. (Compositae) yielded eleven methylated flavonoid aglycones: artemetin, bonanzin, euapalitin, jaceidin, isokaempferide, axillarin, eupafolin, hispidulin, spinacetin, 3,6-dimethoxy apigenin, and chrysosplenol D.

EXPERIMENTAL

PLANT MATERIAL.—Plants were collected along the rocky shore of Mabel Lake, east of Enderby, British Columbia, in August 1979 and 1980. A voucher is deposited in the UBC herbarium (Bohm, #1260).

EXTRACTION AND ISOLATION.—Air-dried aerial parts (500 g) of *A. lindleyana* were extracted with CH_2Cl_2 overnight. The concentrated extract was partitioned between n-hexane and aqueous MeOH. The concentrated aqueous layer was extracted with CH_2Cl_2. This extract was evaporated to dryness and chromatographed on a Polyclar AT column using CH_2Cl_2-MeOH (3:1) and increasing amounts of MeOH.

Artemetin, bonanzin, and eupalitin were eluted as a mixture. Artemetin (30 mg) was isolated by cc (silica gel) using toluene. Bonanzin (40 mg) and eupalitin (30 mg) were separated on tlc (polyamide DC 6.6) using ethyl formate-cyclohexane-n-BuOH-HCOOH (50:25:23:2). The remaining compounds isolated from the Polyclar column were: jaceidin (80 mg), isokaempferide (30 mg), axillarin (80 mg), hispidulin (30 mg), spinacetin (30 mg), 3,6-dimethoxy apigenin (50 mg), chrysosplenol D (30 mg), and eupafolin (5 mg). All compounds were cleaned over LH-20 columns (MeOH) prior to spectral analysis. The compounds were identified on the basis of uv, ^1H nmr of their trimethylsilyl derivatives (CCl_4 and C_6D_6), ms and co-chromatography with standard compounds. Full details of the spectral data are available upon request from the authors.

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