B117 Synthesis of diterpene glucosides from kaurenoic acid

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The diterpene *ent*-kaur-16-en-19-oic acid (kaurenoic acid) occurs abundantly in some Brazilian Asteraceae and Annonaceae species. Several biological activities, such as antiviral, antimicrobial, trypanosomicidal, antiinflamatory, anti-hypertensive, miracidicidal and growth hormonal, have been reported for this acid and related compounds (1). Moreover, natural kaurane glycosides such as wedeloside, atractyloside and carboxyatractyloside have been shown to be as toxic as strychnine causing specific inhibition of ADP-ATP transport through mitochondrial membrane (1,2). Aiming to synthetise new potentially bioactive kaurane glycosides, we firstly prepared the methyl *ent*-kaur-16-en-19-oate (methyl kaurenoate ester) by methylation of kaurenoic acid. The alcohols *ent*-kaur-16-en-19-ol and methyl *ent*-17-hidroxi-16α-kauran-19-oate were obtained by reduction and hydroboration-oxidation of the methyl kaurenoate ester, respectively. The glucosidation of the alcohols, followed by de-*O*-acetylation, afforded novel *O*-glucosyl derivatives. All the obtained compounds were characterized by spectroscopic methods (^{1}HNMR, ^{13}CNMR, MS).

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B118 Lignans from *Linum meletonis*

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Lignans constitute a widely distributed class of natural products with a wide range of physiological functions and of great medicinal importance. Plants belonging to the genus *Linum* are known to contain lignans (1-5). In the present work, the lignans of *Linum meletonis* Hand.-Mazz. collected in Turkey were analyzed using a GC-MS method developed by us (6). Dried and powdered aerial parts of *L. meletonis* (100 mg) were sonicated with 80 % methanol for 1 h. Then 4 ml of dichloromethane and 4 ml of water were added. The tube was closed, mixed and centrifuged at 1000 g for 6 min. One and a half ml of the organic layer was evaporated, the residue was re-dissolved in 1.5 ml of methanol and subjected to GC-MS analysis, using a WCOT fused-silica CP-Sil 5CB column. Compounds were identified by comparison of MS and retention times with those of authenticated standards and also by comparison with published MS data. Seven lignans were identified in the aerial parts of *L. meletonis*: isojusticidin, podophyllotoxin, 6-methoxypodophyllotoxin, polygamain, hinokinin, morelensin and bursehernin. This is the first report of the lignans from this species, and the four last lignans were not previously described from any *Linum* species.

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