

Chemical Constituents of *Coutaportla ghiesbregthiana*: Co-Crystallization of Two *ent*-Nor-Kaurene Diterpenes

Hortensia Parra-Delgado^a, Rubén A. Toscano^a, Aída N. García-Argaez^b, and Mariano Martínez-Vázquez^a

^a Instituto de Química, Universidad Nacional Autónoma de México, Circuito Exterior, Ciudad Universitaria, Coyoacán C. P. 04510, México DF

^b Facultad de Ciencias, Universidad Nacional Autónoma de México, Circuito Exterior, Ciudad Universitaria, Coyoacán C. P. 04510, México DF

Reprint requests to Dr. Mariano Martinez-Vazquez. Fax : +(52) 55 56162203.
E-mail: marvaz@servidor.unam.mx

Z. Naturforsch. **60b**, 548 – 554 (2005); received October 26, 2004

The known *nor*-diterpene (16R)-*ent*-17-hydroxy-19-*nor*-kaur-4-en-3-one and the new *nor*-diterpene (16R)-*ent*-19-*nor*-kaur-4-en-3-oxo-17-oic acid were obtained as a crystalline mixture from roots of *C. ghiesbregthiana*. Their structures were deduced by spectroscopic means and confirmed by a X-ray diffraction study of the crystalline mixture. Additionally, ursolic and betulinic acids, skimmin, and sucrose were isolated. This is the first chemical study of a member of the *Coutaportla* genus.

Key words: *Coutaportla ghiesbregthiana*, (16R)-*ent*-17-Hydroxy-19-*nor*-kaur-4-en-3-one, (16R)-*ent*-19-*nor*-Kaur-4-en-3-oxo-17-oic Acid, Triterpenes, Skimmin