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DITERPENES FROM *SIDERITIS LAGASCANA* AND *SIDERITIS VALVERDEI**

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Key Word Index—*Sideritis lagascana*; *Sideritis valverdei*; Laboatac; *ent*-15-kaurene, *ent*-16-kaurene and *ent*-15-beyerene derivatives.

Plants. *Sideritis lagascana* Willk. and *Sideritis valverdei* Borja (Hybrid *S. leucantha* Cav. X *S. tragoriganum* Lag.). *Source.* Reduced areas in the S.E. of the Iberian Peninsula. *Previous work.* None. *Present work.* The diterpenic constituents of the two species quoted above have been investigated. *S. lagascana* yield eight compounds previously described: *ent*-16-kaurene-3 β ,7 α ,18-triol (foliol),[†] *ent*-15-kaurene-3 β ,7 α ,18-triol (isofoliol), *ent*-3 β -acetoxy-16-kaurene-7 α ,18-diol (sidol), *ent*-3 β -acetoxy-15-kaurene-7 α ,18-diol (isosidol), *ent*-18-acetoxy-16-kaurene-3 β ,7 α -diol (linearol), *ent*-18-acetoxy-15-kaurene-3 β ,7 α -diol (isolinearol),¹ *ent*-16-kaurene-3 β ,7 α ,14 β ,18-tetraol (leucanthol) and *ent*-15-kaurene-3 β ,7 α ,17,18-tetraol (isoleucanthol).² *S. valverdei* gave six diterpenic compounds also known: *ent*-14 β -acetoxy-15-beyerene-3 β ,18-diol, *ent*-7 α -acetoxy-15-beyerene-14 β ,18-diol, *ent*-7 α -acetoxy-15-beyerene-3 β ,14 β ,18-triol,³ *ent*-15-beyerene-7 α ,14 β ,18-triol (pusillatriol), *ent*-15-beyerene-3 β ,14 β ,18-triol (isopusillatriol) and *ent*-15-beyerene-3 β ,7 α ,14 β ,18-tetraol (pusillatetrol).⁴

All compounds have been characterized by their physical and spectroscopic (IR, NMR and MS) data and by comparison with authentic samples.

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* Part XV in the series "Constituents of *Sideritis*". For part XIV see VON CARSTENN-LICHTERFELDE, C., RODRIGUEZ, B. and VALVERDE, S. *Anal. Quim.* in press.

† Nomenclature is based on *The Common and Systematic Nomenclature of Cyclic Diterpenes*, third revision, February 1969, available from Dr. J. W. Rowe, U.S. Forest Products Laboratory, Madison, Wisconsin 53705, U.S.A.

¹ DE QUESADA, T. G., RODRIGUEZ, B., VALVERDE, S. and HUNECK, S. (1972) *Tetrahedron Letters* 2187.

² DE QUESADA, T. G., RODRIGUEZ, B. and VALVERDE, S. (1972) *Anal. Quim.* **68**, 1467.

³ IDEM (1973) *Ibid.* **69**, 1201.

⁴ DE QUESADA, T. G. (1974) Doctoral Thesis, University of Madrid.