B077 Bonabilins, unique tropane alkaloids from *Bonamia spectabilis* (Convolvulaceae)

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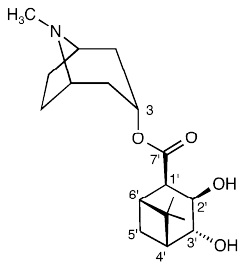
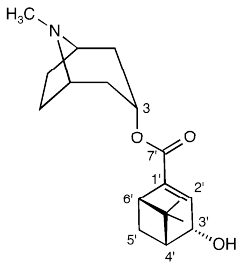
The Convolvulaceae family comprises about 1750 species mostly distributed in tropical and subtropical parts of the world. As a clear characteristic, it synthesizes a wide variety of tropane alkaloids, especially esters of 3α– and 3β-tropanol with simple aliphatic acids or substituted benzoic acids such as veratric, vanillic or kurameric acid (1, 2).

During our continuous studies on secondary metabolites of the Convolvulaceae, *Bonamia spectabilis* (Choisy) Hall. F., a twining shrub endemic to Madagascar and the tropical parts of East Africa, was investigated. The GC-MS analysis of the crude alkaloid fraction of the roots gave hints to the occurrence of so far unknown tropane alkaloids. Giving a positive reaction with Dragendorff´s reagent two major alkaloids were isolated by means of preparative TLC and their structures elucidated using ^{1}H-NMR, H,H-COSY, ^{13}C-NMR, C,H-COSY, HMBC, EI-MS, and HR-MS measurements.

They turned out to be tropan-3α-ol esters which we named Bonabilin A (**1**) and Bonabilin B (**2**). Their acyl moieties are rather unusual monoterpenoic acids, unique as acyl residues of tropanol derivatives.



1 (rel. config.)



2 (rel. config.)

References: 1. Orechoff, A., Konowalowa, R., (1934) Ber. Dtsch. Chem. Ges., 67, 1153-1156. **2.** Weigl, R. et al., (1992) Planta Med., 58, Supplement A 750.

B078 The diterpenoids of *Teucrium polium* subsp. *polium*

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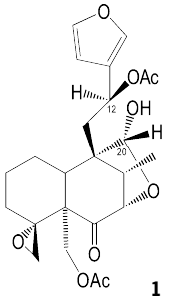
The genus *Teucrium* (Labiatae) is known as a rich source of neoclerodane diterpenoids (1). The species *T. polium* was object of several studies, but the samples harvested for these investigations in different countries were not sufficiently described, provided that no indication of the possible subspecies was given. As the section *Polium* is very complex, we decided to investigate a sure specimen of *T. polium* subsp. *polium*, collected in Southern France at Traviargues (Anduze-Gard).

Extraction of the dried aerial parts (acetone) and extensive column chromatography led to the isolation of three neoclerodane diterpenoids: the already known capitatin and auropolin, and the new 20-epi-auropolin **1**. The known products were identified by conventional ^{1}H-NMR and ^{13}C-NMR spectra. The structure of the new natural product was elucidated by the use of MS, ^{1}H-NMR, ^{13}C-NMR, NOE and ROESY NMR spectra.



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References: 1. F.Piozzi et al. (1998) Heterocycles 48, 2185 and bibliography therein.