## p-HYDROXYACETOPHENONE DERIVATIVES FROM DORONICUM GRANDIFLORUM

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In the course of a chemical study of stems and leaves of *Doronicum grandiflorum* Lam. (Compositae) we obtained two known compounds, I and II, which are two *p*-hydroxyacetophenone derivatives previously described in the literature. Compound I was isolated from *Ageratina altissima* and *Trichogonia graziela* (1), and II, from *Trichogonia graziela* only (2). These two compounds belong to the same biosynthetic chain, and II is formed from I. This is the first report of the occurrence of these compounds in the *Senecioneae* Tribe.

## EXPERIMENTAL

GENERAL EXPERIMENTAL PROCEDURES.—Spectra were recorded with the following instruments: Ms, AEI, MS 902; <sup>1</sup>H nmr, CAMECA 350. Adsorbant for tlc and cc were Kieselgel 60H obtained from Merck and Sephadex LH-20 obtained from Pharmacia.

PLANT MATERIALS.—D. grandiflorum was collected in the Alps (France) in July 1982. A voucher is retained in our laboratory (Faculty of Pharmacy, Lyon).

EXTRACTION AND ISOLATION OF THE TWO COMPOUNDS.—Dried and powdered stem and leaf material of *D. grandiflorum* were extracted with CHCl<sub>3</sub>. The extracts were fractioned on a Sephadex LH-20 column and further purified by silica gel tlc. Two compounds (I and II) were isolated and identified by ms and nmr (before and after acetylation for II). Compound I was: 2-senecioyl-4-(1-hydroxyethyl)-phenol, and compound II was 2,2 dimethyl-6-(1-hydroxyethyl)-chroman-4-one. Our <sup>1</sup>H nmr and ms data were in agreement with literature values (1,2).

Full details of isolation and identification of the two compounds are available on request to the senior author.

## LITERATURE CITED

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## ISOLATION OF PROVINCIALIN FROM AGERATINA CRONQUISTII

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A known sesquiterpene lactone, provincialin (1), was isolated as the main constituent of the CH<sub>2</sub>Cl<sub>2</sub> extract of the aerial parts of Ageratina cronquistii King and Robinson (Eupatorieae, Asteraceae). This compound was previously isolated from Liatris provincialis Godfrey, another member of the tribe Eupatorieae

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