

T. C.
MARMARA ÜNİVERSİTESİ
ECZACILIK FAKÜLTESİ
KÜTÜPHANESİ

DAPHNE PONTICA L. ÜZERİNDE FİTOKİMYASAL ARAŞTIRMALAR II.

PHYTOCHEMICAL INVESTIGATION OF DAPHNE PONTICA L. II.

Solmaz DOĞANCA*

SUMMARY

As an addition to the compounds which were reported in previous investigations, daphnoretin was isolated from the ethanol extract of *Daphne pontica L.* and identified.

ÖZET

Daha önceki çalışmalarda elde edilmiş maddelere ilave olarak *Daphne pontica L.*'nin etanol ekstresinden *daphnoretin* izole edilmiş ve teşhisi yapılmıştır.

INTRODUCTION

Daphne species have shown a variety of pharmacological actions (1). In order to find new active compounds we initiated a phytochemical study with *Daphne pontica L.* grown in Turkey. We reported previously the structure of the crystalline compounds obtained from petroleum ether and chloroform extracts of *D. pontica L.* as were α -*amyrine acetate*, α -*amyrine* and β -*sitosterol* (2). The ethanol extract of the plant was also previously investigated and *daphnin* and *saccharose* were isolated and identified (3).

In this study *daphnoretin* was isolated for the first time from *Daphne pontica L.* and the structure of this compound was established by comparing with authentic sample.

EXPERIMENTAL

The plant material was collected from Bolu in April 1984 and was identified by Ertan Tuzlacı**. A specimen is deposited in the

* M. Ü. Eczacılık Fakültesi Farmakognozi Anabilim Dalı, Nişantaşı/İSTANBUL.

** M. Ü. Eczacılık Fakültesi Farmakognozi Anabilim Dalı.

Herbarium of the Faculty of Pharmacy, University of Istanbul (ISTE 55184).

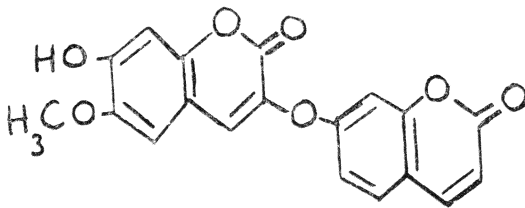
The air-dried above ground parts of *Daphne pontica* L. was extracted with petroleum ether, chloroform and ethanol respectively. We reported previously the structure of the compounds obtained from petroleum ether and chloroform extracts of *Daphne pontica* L. (2).

In this study the concentrated ethanol extract (5g) was fractionated on Si gel column Merck 0.063-0.200 mm) by eluting with C_6H_6 , $CHCl_3$ and EtOH. 126 fractions 50 ml of each were collected and examined by thin layer chromatography (Kieselgel 60 HF₂₅₄ Merck) under ultraviolet light and with cerium sulphate reagent. *Daphnoretin* was obtained from the $CHCl_3$ fractions (fraction number 45-47, 60 mg) and the substance was identified by comparing with the authentic sample with respect of chromatographic behaviour (Solvent system - $CHCl_3$ - EtOH 9 : 1; $R_f=0.41$) and IR spectra.

RESULTS AND DISCUSSION

In this study *daphnoretin* was isolated from the ethanol extract of the plant and identified.

Daphnoretin (I) m.p. 255 - 257°C (EtOH): IR (ν_{max}^{KBr} cm^{-1}): 3250, 1740, 1620, 1550, 1400, 1270, 1120, 1070, 1030, 840 (4).



(I)

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