

GEISSOSCHIZOL IN *PESCHIERA LAETA*

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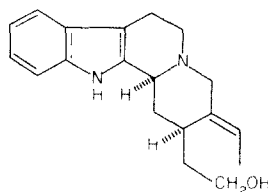
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Key Word Index *Peschiera laeta*, Apocynaceae, indole alkaloids, geissoschizol

Plant. *Peschiera laeta* MART. *Uses* None. *Previous work.* None, but species of *Peschiera* are known to be sources of indole alkaloids¹

Extraction and isolation Ground dried leaves and twigs of *Peschiera laeta* (material supplied by Smith, Kline and French, Philadelphia) (33 kg) were percolated with EtOH at room temperature. Evaporation of the solvent at diminished pressure left a black viscous solution (2900 g), which was diluted with CHCl₃-MeOH (1:1—5800 ml). Celite was added (2900 g), the mixture was evaporated to dryness *in vacuo* and the basic portion taken up in dil. citric acid. Alkaloids were liberated by basification with ammonia and extracted with CHCl₃ to yield 106 g (0.32%). Distribution of the alkaloid mixture between CHCl₃ and both aqueous NaOH and McIlvain buffer solutions gave eight fractions (pH 14, 6.5, 6.0, 5.0, 4.0, 3.0, 1 and residue)

Identification Alkaloids identified by spectrometric methods (UV, IR, MS, PMR) and comparison with authentic specimens: affinine, conodurine, geissoschizol, tombozine, voacamine and vobasine.



(1)

Geissoschizol (**1**) (102 mg) was separated from the combined fractions of pH 6.5 and 6.0 by chromatography over alumina. M.p. 216 (MeOH-CHCl₃-*n*-heptane). Spectral data are in accordance with those reported earlier²⁻⁴

¹ NEUSS, N. R. (1970) *Chemistry of the Alkaloids* (S. W. PALLITT, ed.), p. 235, Van Nostrand Reinhold, New York.

² POUSSET, J. L. (1967) *Traité de Matière Médicinale, Pharmacologie, Faculté de Pharmacie, Paris* **52**, 13.

³ SPITELLER, G. and SPITELLER-FRIEDMANN, M. (1963) *Monatsh. Chemie* **94**, 779.

⁴ DASTOOR, N. J., GORMAN, A. A. and SCHMID, H. (1967) *Helv. Chim. Acta* **50**, 213.

The occurrence of geissoschizol was so far described only in *Rauwolfia vomitoria*² and *Aspidosperma oblongum*.³ The remaining alkaloids were already reported to be constituents of *Peschiera affinis*⁵ and *Peschiera lundii*.⁶

⁵ WEISBACH, J. A., RAFFAUF, R. F., RIBEIRO, O., MACKO, E. and DOUGLAS, B. (1963) *J. Pharm. Sci.* **52**, 350

⁶ HWANG, B., WEISBACH, J. A., DOUGLAS, D., RAFFAUF, R., CAVA, M. P. and BESSHO, K. (1969) *J. Org. Chem.* **34**, 412

Phytochemistry, 1974, Vol. 13, pp. 2881 to 2882. Pergamon Press. Printed in England.

(-)-*cis*-CHRYSANTHENOL *O*- β -D-GLUCOPYRANOSIDE.
A NEW MONOTERPENE GLUCOSIDE FROM *DICORIA CANESCENS*

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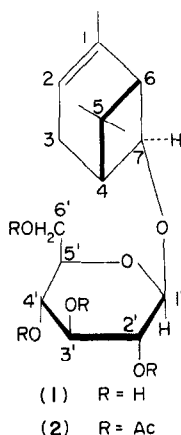
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Key Word Index—*Dicoria canescens*, Compositae, monoterpene glucoside, (-)-*cis*-chrysanthenol *O*- β -D-glucopyranoside

We report the isolation and structure determination of the first glucoside of (-)-*cis*-chrysanthenol. Chloroform extracts from air-dried and ground *Dicoria canescens* collected in Arizona, August 1970, afforded in 0.21% yield the new glucoside, C₁₆H₂₆O₆, m.p. 136–137°. The evidence presented below established that the compound is (-)-*cis*-chrysanthenol *O*- β -D-glucopyranoside (**1**).



β -Glucosidase hydrolysis of the new glucoside afforded the known (-)-*cis*-chrysanthenol,¹ indicating a C_{1'}- β anomeric configuration. This result was consistent with the

¹ PINHEY, J. T. and SOUTHWELL, I. A. (1971) *Australian J. Chem.* **24**, 1311