Flavonoids and Terpenoids from the Resinous Exudates of *Madia* Species (Asteraceae, Helenieae)

Eckhard Wollenweber^{a*}, Marion Dörr^a, Marco Dörsam^a, Abu El-Hamed Hassan^{b,d}, Ahmed A. Ahmed^c, M. F. Hegazy^c, and Klaus-Peter Zeller^d

Klaus-Peter Zeller
 a Institut für Botanik der Technischen Universität, Schnittspahnstrasse 3, D-64287 Darmstadt, Germany. Fax: 0049-6151/164630. E-mail: Wollenweber@bio.tu-darmstadt.de

b Department of Chemistry, Aswan-Faculty of Science, South Valley University, Aswan, Egypt
c Department of Chemistry, Faculty of Science, El-Minia University, El-Minia 61519, Egypt

d Institut für Organische Chemie, Universität Tübingen, D-72076 Tübingen, Germany

* Author for correspondence and reprint requests

Z. Naturforsch. 58c, 153–160 (2003); received October 10/November 14, 2002

The resinous material accumulated on aerial parts of *Madia* species is shown to consist mainly of diterpenes, containing a series of flavonoid aglycones. A6- and/or 8-O-substitution is characteristic for many of these flavonoids. Three known rare diterpenes were found and the structure elucidation of a diterpene with a new carbon skeleton, named madiaol, is reported.

Key words: Madia, Flavonoid Aglycones, Diterpenes