

Cuticular Waxes and Flavonol Aglycones of Mistletoes

Klaus Haas^{a*}, Markus Bauer^b, and Eckhard Wollenweber^b

^a Universität Hohenheim, Institut für Botanik 210, Garbenstrasse 30, D-70593 Stuttgart, Germany. Fax: 0049-711/4593355. E-mail: haaskls@uni-hohenheim.de

^b Institut für Botanik der Technischen Universität, Schnittpahnstrasse 3, D-64287 Darmstadt, Germany

* Author for correspondence and reprint requests

Z. Naturforsch. **58c**, 464–470 (2003); received February 24, 2003

Cuticular waxes of *Viscum album* subspecies and of *V. cruciatum* have been examined for their micromorphology and chemical composition. Wax crystalloids occur preferably as irregular platelets and rodlets, while deviant structures are found in small areas. Among the triterpenoids forming the wax layer, oleanolic acid is prevailing with some 80 %. The quantitative composition of the long-chain aliphatics, which comprise several classes, is rather variable. Flavonoid aglycones, occurring as very minor components of the cuticular waxes, comprise the flavonols kaempferol and quercetin and a series of their methyl derivatives, in some taxa also the flavanone naringenin. Neither the crystalloid structures nor the chemical composition of the wax allow to discriminate the 2 species, or male and female plants, or plants grown on conifers or on dicotyledoneous hosts.

Key words: *Viscum*, Cuticular Wax Chemistry, Micromorphology