

A New Triterpenoid Saponin from *Ononis spinosa* and Two New Flavonoid Glycosides from *Ononis vaginalis*

Kamel H. Shaker^b, Katja Dockendorff^a, Mirko Bernhardt^a, and Karlheinz Seifert^a

^a University of Bayreuth, Organic Chemistry, NW II, D-95440 Bayreuth, Germany.

^b National Research Centre, Laboratory of Natural Products, Dokki-Cairo, Egypt

Reprint requests to Prof. Dr. K. Seifert. Fax: 49-921-555358.

E-mail: karlheinz.seifert@uni-bayreuth.de

Z. Naturforsch. **59b**, 124 – 128 (2004); received October 21, 2003

The new triterpenoid saponin 3-*O*-[α -L-rhamnopyranosyl-(1 \rightarrow 2)- β -D-xylopyranosyl-(1 \rightarrow 2)- β -D-glucuronopyranosyl]-3 β ,22 α -dihydroxyolean-13-en-11-one has been isolated from *Ononis spinosa*. The new flavonoid glycoside 3-*O*-[2-*O*-(*E*)-*p*-coumaroyl- β -D-galactopyranosyl]-7-*O*- β -D-glucopyranosylkaempferol and the new pterocarpin glucoside 3,4-di-*O*- β -D-glucopyranosyl-4-hydroxymedicarpin have been obtained from *Ononis vaginalis*. The structures were determined primarily by NMR spectroscopy. The assignment of NMR signals was performed by means of ¹H-¹H COSY, ROESY, TOCSY, HMQC HMQC-COSY and HMBC experiments.

Key words: *Ononis spinosa*, *Ononis vaginalis*, Triterpenoid Saponin, Flavonoid Glycosides