

A New Flavonoid C-Glycoside from *Solanum elaeagnifolium* with Hepatoprotective and Curative Activities against Paracetamol-Induced Liver Injury in Mice

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Z. Naturforsch. **68c**, 19–28 (2013); received December 3, 2011/December 20, 2012

A new flavonoid C-glycoside, kaempferol 8-C- β -galactoside, along with twelve known glycosidic flavonoids was isolated from the aqueous methanolic extract of *Solanum elaeagnifolium* Cav. (Solanaceae), by conventional chromatographic methods; their structure elucidation was achieved using UV, ESI-MS, and NMR spectral analyses. Groups of six mice were administered *S. elaeagnifolium* extracts at 25, 50, and 75 mg/kg body weight (BW) prior to or post administration of a single dose of paracetamol (500 mg/kg BW). The extract showed significant hepatoprotective and curative effects against histopathological and histochemical damage induced by paracetamol in liver. The extract also ameliorated the elevation in glutamate oxaloacetate transaminase (GOT), glutamate pyruvate transaminase (GPT), and alkaline phosphatase (ALP) levels. These findings were accompanied by a nearly normal architecture of the liver in the treated groups, compared to the paracetamol control group. As a positive control, silymarin was used, an established hepatoprotective drug against paracetamol-induced liver injury. This study provides the first validation of the hepatoprotective activity of *S. elaeagnifolium*.

Key words: *Solanum elaeagnifolium*, Flavonoids, Hepatoprotective