Pharmaco-Toxicological Study of Kageneckia oblonga, Rosaceae

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Z. Naturforsch. **57c**, 100–108 (2002); received August 13/October 9, 2001

Kageneckia oblonga, Antipyretic, Antiinflammatory, Analgesic Properties, Cucurbitacins

The probable antipyretic, antiinflammatory, analgesic and antioxidant properties of *Kageneckia oblonga*, Rosaceae, were investigated and the major compounds of its active extracts were isolated. The study comprised the acute toxicity of the extracts of global methanol, hexane, dichloromethane and methanol. The cytotoxicity of global methanol extract was studied in three tumoral cell lines. All the extracts exhibited the pharmacological activities under study. Methanol and dichloromethane were the most toxic extracts. From the global methanol extract, isolations were performed of prunasin, 23,24- dihydro-cucurbitacin F, and a new cucurbitacin, 3β -(β -D-glucosyloxy)- 16α ,23 α -epoxycucurbita-5,24-diene-11-one. The cytotoxicity of both cucurbitacins on human neutrophils at the assayed concentrations was not statistically significant. In-vitro assays showed that both cucurbitacins can be partly responsible for the analgesic, antipyretic, and anti-inflammatory activities.

Evaluation was done of the cytotoxicity of global methanol extract, 23, 24-dihydrocucurbitacin F, aqueous extracts and prunasin against P-388 murine leukaemia, A-549 human lung carcinoma and HT-29 colon carcinoma. Since global methanol extract presented a strong cytotoxicity against P-388 murine leukaemia, A-549 human lung carcinoma, and HT-29 cell lines, it is highly probable that this extract contain one or more cytotoxic compounds that could be investigated for their potential use as an agent against cancer.