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Evaluation of Hypoglycemic Potential and Pre-Clinical Toxicology of *Morus nigra* L. (Moraceae)

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SUMMARY. The hypoglycemic potential of crude ethanolic extract of leaves (CEE-Mn) of the Morus nigra L. (Moraceae) was evaluated in normoglycemic rats. CEE-Mn (200 and 400 mg/kg) and metformin (500 mg/kg) were tested on the glucose tolerance oral test. The acute toxicity of CEE-Mn was performed 2.0 g/kg intraperitoneally and 5.0 g/kg orally in Swiss mice. Blood was removed after seven days for laboratory analysis of hematological and biochemical parameters. In the glucose tolerance oral test, only metformin was able to reduce the glucose-induced hyperglycemia. Regarding acute toxicity no mortality and no toxicity signs were observed, indicating low toxicity of the extract. In the evaluation of hematological and biochemical parameters no alteration was observed. In conclusion, the CEE-Mn can be considered of low toxicity but did not produce the expected hypoglycemic effect in the model used.

KEY WORDS: Acute toxicity, Hipoglycemic activity, Moraceae, Morus nigra L.

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