Tribulus terrestris an anti-hyperglycemic agent or an anabolic enhancer?

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Tribulus terrestris (TT) is a very controversial plant, used for many purposes, mainly for its presumed anabolic effects, but with inconclusive scientific results. The aim of our study was to evaluate the effects of TT in diabetic male rats. Diabetes was induced by a single intra peritoneal injection with 60 mg/kg streptozotocin. Rats received Tribulus terrestris extract for twelve weeks. Glucose level, body weight, cataract development and sexual behavior were monitored during the experiment. In the fourth week of the experiment oral glucose tolerance test was performed. Sexual behavior with receptive females was monitored (mount and intromission frequencies). At the end of the experiment sperm parameters like morphology and motility were evaluated. TT treated group had a significant increase in body weight and a significant decrease in blood glucose. Differences were observed in sexual behavior in TT treated group compared with the diabetic control group. Evaluation of sperm parameters revealed a number of differences in treated group but with no statistical significance. In conclusion, our study suggests the possibility of including Tribulus terrestris in supplements for diabetic male patients, but further studies are necessary for elucidating the presumed mechanisms of actions.

Biography

Ruxandra Stefanescu (Braic) is pursuing PhD from the University of Medicine and Pharmacy in Targu Mures. Currently, she is working as an Assistant Professor in the Department of Pharmacognosy and Phyto-therapy at the Faculty of Pharmacy, University of Medicine and Pharmacy, Targu Mures, Romania. Her research is focused on the phytochemical and pharmacological analysis of natural products with possible beneficial effects in diabetes and diabetic complications.

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