Evaluation of Hirsutella sinensis on anti-fatigue function by running test

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Abstract

Many studies has been reported that a great number of chemical components of Hirsutella sinensis contain functional properties and miraculous efficacies inclusive of anti-fatigue, anti-oxidant and anti-cancer properties these days. Since the anti-fatigue use of Hirsutella sinensis in herbal medicines are, studies to confirm the function of Hirsutella sinensis are warranted. Forty male Sprague-Dawley were supplied and were six weeks of age at the beginning of the study. The animals were acclimated for at least 2 weeks prior to testing. Animals were randomized and allocated into control and experimental (second to fourth groups) groups of ten animals each. Group 2, 3 and 4 were orally administrated with high (132.5mg /1.5cc/ Kg/day), medium (53mg /0.6cc/ Kg/day) and low (26.5mg/0.3cc./Kg/day) doses of Hirsutella sinensis daily for 8 weeks. At the end of this experiment, animals were put on Jogs machine at the speed of 20 m/min using a programmed motor-driven wheel cage. Motivation was provided by an electric shock compartment at the rear. When animals were shock three times and were unable to proceed to run, we determine the strength already used up. We record the time periods from beginning
to use up. Blood was collected from vein for biochemistry tests. There were no mortalities and emaciations being found during the study and all animals appeared active and healthy during the course of the study. After high dose treatment, animals promote exercise endurance to run. No significant differences were found in serum biochemistry parameters among the control and treatment groups but treated animals showed a gradual decrease of total cholesterol serum concentration which was statistically significant. (p<0.05) In conclusion, the present findings indicate that Hirsutella sinensis contributes to enhancement of exercise endurance.

Key Words

Hirsutella sinensis