

Abstract

To study the efficacy of ethanolic extract of *B. monosperma* bark in cafeteria, atherogenic diet fed rats and monosodium glutamate (MSG) obese rats. Anti-obese activity was studied using various parameters included body weight, daily food intake, locomotor activity, body temperature, biochemical parameters (serum glucose, cholesterol and triglycerides levels), internal organs (i.e. heart, kidney, liver and spleen) and uterine fat pad weights were measured and the results were compared with obese groups. The different doses (200, 400 and 800 mg/kg) of ethanolic extract of *B. monosperma* bark was tested and it showed dose dependently decrease in body weight, daily food intake, glucose, lipids, internal organs' weight and fat pad weight in cafeteria, atherogenic diet fed rats and monosodium glutamate obese rats. Thus *B. monosperma* has showed significant anti-obese activity.

Key words: Atherogenic diet, obese, *Butea monosperma*, cafeteria diet, monosodium glutamate.