



ANTIHYPERLIPIDEMIC POTENTIAL OF EREMURUS HIMALAICUS BAKER IN RATS FED WITH HIGH FAT DIET

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ABSTRACT

Eremurus himalaicus is a plant which is commonly used in case of anaemia; as a galactagogue; in the treatment of migraine with insomnia etc. Also, it has been found to possess hepatoprotective and hypoglycaemic activities. However, its antihyperlipidemic potential is yet to be evaluated. The present study was intended to explore the antihyperlipidemic potential of *Eremurus himalaicus* extracts in cholesterol induced hyperlipidemia in rats. High cholesterol diet induced significant increase in serum total cholesterol, triglycerides, low density lipoprotein- cholesterol, very low density lipoprotein- cholesterol and significant decrease in high density lipoprotein-cholesterol. Also, it induced weight gain in rats. Treatment with *Eremurus himalaicus* extracts significantly decreased the serum levels of these biochemical parameters. The weight gain was also prevented in comparison to the positive control group. Highest activity was shown by Ethyl acetate group for which the AI was 1.89, which was almost equal to the normal group (1.73) and lower than the AI of standard (2.13), which indicates EHE is highly antihyperlipidemic in nature. The AI of EHM and EHA was 2.64 and 2.50 respectively. The LDL-C/HDL-C ratio increased in the order toxic < EHM < EHA < standard < EHE < normal, with the respective values of 3.87, 1.74, 1.70, 1.48, 1.30 and 1.17. Thus, *Eremurus himalaicus* significantly prevents hyperlipidemia in rats and can be used as a good antihyperlipidemic food.

Keywords: Anthrogenic index, *Eremurus himalaicus*, Hyperlipidemia, Lipoprotein, Triglycerides