EVALUATION OF PHYTOCHEMICAL AND ANTIHYPERLIPIDEMIC ACTIVITY OF ETHANOLIC EXTRACT OF Allium tuberosum ROTTLER LEAVES IN HYPERLIPIDEMIC WISTAR RATS

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ABSTRACT

Hyperlipidemia is one of the major risk factors for coronary heart diseases. In this study was to evaluate the phytochemical standardization of the dried leaves powder was done with respect to ash values, extractive values and moisture content and antihyperlipidemic activity of ethanolic extract of leaves of Allium tuberosum Rottler (EEAT). EEAT was administered at doses of 100, 150, and 200 mg/kg body weight (b.w.) to an endogenous (propylthiouracyl 0.01%) and exogenous manners induced hyperlipidemic in rats. Simvastatin was used as reference drug. Fasting serum lipid concentrations were determined using cholesterol esterase/peroxidase (CHOD-PAP) enzymatic method for total cholesterol and its fractions (HDL-LDL) and lipase glycerol kinase (GPO-PAP) enzymatic method TG evaluation. The EEAT which suspended in PGA 2% were given orally every day at doses of 100mg/kg BB, 150 mg/kg BB, and 200 mg/kg BB for twenty one days. The result of the study indicated that ethanol extract of chieve, at twenty one day can decrease total cholesterol, triglyceride, and LDL-cholesterol also HDL-cholesterol was increased level significantly (α = 0.05 dan α = 0.01). These results indicate that EEAT has significant anti-hyperlipidemic effects on endogenous (propylthiouracyl 0.01%) and exogenous manners induced hyperlipidemic in rats.

Keywords: Allium tuberosum Rottler, phytochemical, antihyperlipidemic activity, standardization