

A173 Hypolipidaemic effect of *Clerodendron colebrookianum* Walp in rat

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Clerodendron colebrookianum (CC) has been traditionally used against hypertension in the NE region of India (1). The methanol extract of the aerial parts of this plant has been shown to possess hypolipidaemic effect in normolipidaemic and hyperlipidaemic rats (2). On the other hand Mg has plays significant role against cardiac ailments. Thus it has been designed to evaluate the Mg quantity in the aerial parts and seeds of CC and their possible effect in induced atherosclerotic rats. The extract was made in methanol and the presence of glycoside was confirmed qualitatively. The effective dose was scaled at 200 mg per kg of body weight. The Mg concentration in the CC and serum was determined by the method of Kahnke (1966) using AAS (3). The lipid profile i.e. triglycerides (TG), total cholesterol (TC), HDL and the LDL were determined following the procedure of enzymatic (CHOD-PAP) and GPO method .The findings indicate the increase of HDL (90%) and depletion of TG (30%), TC (49%) as well as LDL (90%). The results were compared with normal control as well as clofibrate given rats. The results were subjected to ANOVA and over all percent reduction tests. The Mg quantity was at higher side (70%) in CC and the same was enhanced by 45% in the serum of CC given rats. The results suggest the presence of hypolipidaemic glycosides and its potentiality is enhanced in presence of Mg.

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A174 In vivo gastrointestinal activity of *Crinum glaucum* aqueous extract

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Crinum glaucum A. Chev. (Amaryllidaceae) is used in South West Nigeria in the treatment of cough, asthma, and convulsions and as an antispasmodic. We had earlier reported the smooth muscle relaxant activity (1), analgesic/anti-inflammatory (2), anti-anaphylactic and anti-allergic (3) effects. This present study is designed to determine the *in vivo* activity of the aqueous extract on the gastrointestinal tract using the intestinal transit time, castor oil-induced diarrhoea and enteropooling in mice and rats. The extract (25-200 mg/kg) significantly ($P<0.01$) reduced the intestinal transit of charcoal meal in fasted mice with increasing doses producing, progressively, lower inhibitions. The peristaltic indices for control, 25, 50, 100 and 200 mg/kg of orally administered extract were 80.02 ± 1.99 , 16.46 ± 0.19 , 23.03 ± 0.73 , 33.55 ± 0.47 and 47.88 ± 0.79 , respectively. The effect of the extract was antagonized by yohimbine (1 mg/kg) and phentolamine (1 mg/kg), but not prazosin (1 mg/kg). Atropine (100 µg/kg) did not alter the effects of the extract. The extract also significantly ($P<0.05$) reduced the castor oil-induced enteropooling and diarrhoea in rats and mice, respectively, and these effects were inhibited by yohimbine.

The data obtained suggest that the extract produces inhibitory actions on gastrointestinal motility and secretion, and these effects are mediated via the α_2 -adrenergic receptors. The data confirm the usage of the extract as an antispasmodic.

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