

**Abstract:**

In order to scientifically apprise some of the anecdotal, folkloric, ethnomedical uses of *Berberis aristata*, the present study was undertaken to examine the analgesic, anti-inflammatory, antipyretic and antidiarrhoeal properties of hydro alcoholic extract of roots of *Berberis aristata*. The analgesic effects of *Berberis aristata* were evaluated by hot-plate and tail-flick method. Anti-inflammatory effect was evaluated by carrageenan induced paw edema, antipyretic effect was evaluated by yeast induced pyrexia. While anti-diarrhoeal effect was evaluated by castor oil induced diarrhoea, gastro intestinal motility test and PGE<sub>2</sub> induced diarrhoea. Tramadol (30 mg/kg), Celecoxib (30 mg/kg), Diclofenac (40 mg/kg), loperamide (3 mg/kg) and atropine (5 mg/kg) were used as standard drugs for comparison. Hydro alcoholic extract of roots of *Berberis aristata* was used in 100 and 400 mg/kg. Extract produced significant analgesic effects against thermally induced pain. It also significantly inhibited carrageenan induced acute inflammation and Granuloma formation. Also produced antipyretic effect. And caused dose related anti-diarrhoeal effect. Results suggest that it may act centrally and may inhibit the PGE<sub>2</sub> to give anti-inflammatory, antipyretic and anti-diarrhoeal effects. Result of charcoal meal test also suggests its anti-muscarnic activity.

**Key words:** *Berberis aristata*; hot-plate; tail-flick; paw edema; cotton pellet Granuloma; yeast induced pyrexia; castor oil diarrhea; charcoal meal; PGE<sub>2</sub>;