



## Evaluation of Phytochemical and Pharmacological Properties of *Aegiceras corniculatum* Blanco (Myrsinaceae) Bark

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**SUMMARY.** The methanol extract of the dried barks of *Aegiceras corniculatum* Blanco (Myrsinaceae) was investigated for its possible antinociceptive, cytotoxic and antidiarrhoeal activities in animal models. The preliminary studies of *A. corniculatum* bark showed the presence of alkaloids, glycosides, steroids, flavonoids, saponins and tannins. The extract produced significant writhing inhibition in acetic acid-induced writhing in mice at the oral dose of 250 and 500 mg/kg body weight ( $P < 0.001$ ) comparable to the standard drug diclofenac sodium at the dose of 25 mg/kg of body weight. The crude extract produced the most prominent cytotoxic activity against brine shrimp *Artemia salina* ( $LC_{50} = 5.5 \mu\text{g/ml}$  and  $LC_{90} = 9.3 \mu\text{g/ml}$ ). The extract showed antidiarrhoeal activity on castor oil induced diarrhoea in mice, it increased mean latent period and decreased the frequency of defecation significantly at the oral dose of 250 and 500 mg/kg body weight ( $P < 0.01$ ) comparable to the standard drug Loperamide at the dose of 50 mg/kg of body weight. The obtained results provide a support for the use of this plant in traditional medicine and its further investigation.

**KEY WORDS:** *Aegiceras corniculatum*, Antidiarrhoeal, Antinociceptive, Cytotoxic, Phytochemical study.

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