

Original Article

Phenolic Content and Antioxidant Activities of *Goniothalamus umbrosus* Extracts

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Received 12.11.2009; accepted 4.02.2010

Abstract

Objectives: Phenolic contents and antioxidant properties of ethyl acetate (EAE) and methanol extracts (ME) of *Goniothalamus umbrosus* leaves were examined.

Methods: Phenolic contents (TPC) were determined by using Folin-Ciocalteu method and HPLC-DAD aided with reference compounds. The antioxidant capacity of these extracts was studied using DPPH (2, 2-diphenyl-2-picrylhydrazyl hydrate), beta-carotene and ferrous reducing antioxidant property (FRAP) methods.

Results: TPC was 340 ± 28.4 and 400.5 ± 10.3 mg/g GAE (Gallic acid equivalent) for EAE and ME, respectively. HPLC-DAD revealed the existence of *p*-coumaric acid in EAE and (+) catechin, chlorogenic acid, hydroxybenzoic acid, syringic acid, *p*-coumaric acid, vanillin and ferulic acid in ME.

Conclusion

The results revealed that the extracts showed high antioxidant activity when tested using DPPH, beta-carotene and FRAP. Such versatile encouraging activities demonstrated by *Goniothalamus umbrosus* might be due to the presence of high amounts of phenolic compounds.

Keywords: *Goniothalamus umbrosus*; Anti-oxidant; Phenolic compounds; HPLC-DAD.