

21st International Conference on

Past and Present Research Systems on Green Chemistry

August 27-28, 2018 | Boston, USA

Phytochemical screening of leaves and roots of *stylochiton borumensis*: A medicinal plant

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The aim of this study was to find out phytoconstituents present in various extracts of *Stylochiton borumensis* roots and leaves and to determine the total phenolic, flavonoids and tannins content in different plant extracts. Total phenols, flavonoids, and tannins content were determined by folinciocalteu assay, aluminum chloride colorimetric assay and ferric chloride colorimetric assay respectively. Different extracts of *S.borumensis* showed the presence of alkaloids, sterols/ triterpenoid, flavonoids, tannins, and coumarins. The phenolic, flavonoids and tannins contents of plant extracts using gallic acid ($Y=0.0007x + 0.1078$, $r^2 = 0.9997$), quercetin ($Y=0.0007x + 0.053$, $r^2=0.9984$) and tannic acid ($Y=0.0009x + 0.043$) as standards. The total phenolic content ranged from 460 to 530 mg/l gallic acid equivalent in leaves and from 240 to 520 mg/l gallic acid equivalent in roots. The total flavonoids content was ranged from 140.870 to 360.750 mg/l quercetin equivalent in leaves and from 138.678 to 357.670 mg/l quercetin equivalent in roots. The total tannins contents ranged from 210 to 300 mg/l tannic acid equivalent in leaves and 190 to 270 mg/l tannic acid equivalent in roots. The study showed a significant amount of gallic acid, quercetin and tannic acid equivalents were present in *S.borumensis* extracts which may responsible for valuable pharmacological properties of the plant.

Biography

Hatim Hamadnalla has completed his B.Sc from University of Juba, 2002 and Master of Science from University of Bahri, 2017. He is a lecturer of Biochemistry, College of Applied Sciences and head department of laboratories.

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