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## Anti-Inflammatory Activities of Extracts from Quassia Borneensis Noot. (Simaroubaceae)

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Simaroubaceae family had been reported to possess numerous biological activities due to the presence of quassinoids. This study was carried out to assess the potential anti-inflammatory properties of extracts from *Quassia borneensis*, an unexplored indigenous plant from Sabah. Bark and root samples of *Q. borneensis* were soxhlet or macerated in methanol and partitioned with n-hexane, chloroform and water to yield hexane, chloroform and aqueous extracts, respectively. Anti-inflammatory activity was evaluated from the production of nitric oxide following treatment of extracts on lipopolysaccharide-stimulated RAW 264.7 murine macrophage cells using Griess assay. Expression of inflammatory protein was detected by immunoblotting. Results showed that the chloroform extract of *Q. borneensis* root demonstrated the most potent inhibition of nitric oxide production with  $IC_{50}$  0.3  $\mu$ g/ml. In conclusion, *Q. borneensis* possessed anti-inflammatory activity and have a potential to be further developed as chemopreventive agent.

Keywords: Quassia borneensis, Simaroubaceae, anti-inflammation, nitric oxide, Griess assay.