

Usage of LC-HRMS for compounds identification of Handroanthus ochraceus extract with antiplasmodial and leishmanicidal potential

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Poster

Abstract

Handroanthus ochraceus is a medicinal plant used for malaria. Previous study showed furanonaphthoquinones as potential antimalarial compounds afforded from chloroformic active extract (inner stem bark).¹ Other compounds have been identified from bark, but the other parts of this species have not been investigated so far.^{2,3} In this work, H. ochraceus ethanolic extract of bark revealed antimalarial potential and ethanolic extract from leaves revealed antimalarial and antileishmanial activities. Liquid chromatography-high resolution mass spectrometry (LC-HRMS) method was performed for compounds identification from leaves extracts allowing to identify nine compounds: quercetin-hexoside (1), forsythiaside I (2), luteolin (3), quercetin (4), trihydroxy-octadecenoic acid (5), alisol C (6), alisol B (7), palmitic acid (8) and betulinic acid (9). Betulinic acid (9) and quercetin (4) have showed in previous study antimalarial activity.^{4,5} Glycoside flavonoids such as quercitrin and its aglycone quercetin (4) are well known for reducing Leishmania sp. parasite in vitro and in vivo as well.⁶

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Keywords

Handroanthus ochraceus

antiplasmodial activity

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