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In vitro evaluation of *Cuscuta reflexa* Roxb. for thrombolytic, antioxidant, membrane stabilizing and antimicrobial activities

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Abstract

The key purpose of this experiment was to evaluate the thrombolytic, antioxidant, membrane stabilizing and antimicrobial potentials of crude ethanol extracts (CEE) of whole plant, organic and aqueous soluble fractions (OF & AQSF). CEE showed the highest (44.63%) clot lysis activity compared to streptokinase (64.35%). In DPPH study, petroleum ether soluble fraction (PSF) has exhibited IC₅₀ of 18.83 µg/mL while the standard ascorbic acid was 2.48 µg/mL. AQSF profoundly inhibited the lysis of erythrocytes (66.20%) which was insignificantly different ($p > 0.05$) to acetylsalicylic acid (71.98%), the reference. However, AQSF showed a significantly stronger level of protection against heat-induced hemolysis (64.80%) as compared with the acetylsalicylic acid (78.90%). CEE, OF and AQSF have displayed reasonable growth of inhibition of tested bacteria compared to negative control and standard drug (77.50 mg of GAE/g). © 2018, © 2018 Informa UK Limited, trading as Taylor & Francis Group.

Author Keywords

anti-microbial activity; antioxidant; *Cuscuta reflexa*; membrane stabilizing; thrombolytic

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