

Potential antidepressant activity of n-hexane extract from old Areca catechu Nut by reducing depressive-like state in Swiss albino male mice

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Abstract	<p>Depression is a psychological disorder caused by an imbalance of neurotransmitters that can be managed with antidepressants. One of the local plants with the potential as an antidepressant is areca nut. However, its antidepressant effects in nonpolar solvents have not been studied recently. Equipping the extract to animals sub-chronically could mimic the clinical antidepressant treatment. Thus, the current investigation studied the antidepressant action of the hexane extract of old areca nut by utilizing acute and sub-chronic FST. This research started with extracted areca nut using n-hexane and continued with phytochemical tests. During FST, the animals were treated with n-hexane extract (50 and 100 mg/kg), fluoxetine (20 mg/kg), and saline (0.1 mL/20 g). The phytochemical test of the extract showed positive results from the content of secondary metabolites, namely saponins and steroids. n-Hexane extract at a dose of 50 mg/kg gave the best action in decreasing the immobility period. After sub-chronic medication, the secondary metabolites of the extract did not induce any toxic effects. This study's findings imply that depression may be treated with conventional medicine, such as old areca nut extract.</p>
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