Isolation and identification of antiplatelet aggregatory principles from the leaves of Piper lolot

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Abstract: The methanolic extract of Piper lolot, having shown potent inhibitory activity on platelet aggregation induced by arachidonic acid (AA) and platelet activating factor (PAF), was subjected to activity-guided isolation to yield twelve new amide alkaloids, piperlotine A-L (1-12), along with twenty-nine known compounds. Their structures were elucidated on the basis of spectroscopic analysis. The isolated compounds were tested for their inhibitory activity on the rabbit platelet aggregation. The compounds piperlotine A (1), piperlotine C (3), piperlotine D (4), piperlotine E (5), 3-phenyl-1-(2,4,6-trihydroxyphenyl) propan-1-one (21), 3-(4-methoxyphenyl)-1-(2,4,6-trihydroxyphenyl)propan-1-one (22), 1-trans-cinnamoylpyrrolidine (24), sarmentine (26), pellitorine (27), methyl 3-phenylpropionate (32), and (10S)-10-hydroxypheophorbide a methyl ester (40) showed potent antiplatelet aggregation activity. ?? 2007 American Chemical Society.

Author Keywords: Antiplatelet aggregation; Piper lolot; Piperaceae; Piperlotine

Index Keywords: alkaloid; antithrombocytic agent; animal; article; chemistry; drug effect; isolation and purification; Piperaceae; plant leaf; rabbit; thrombocyte aggregation; Alkaloids; Animals; Piper; Plant Leaves; Platelet Aggregation; Platelet Aggregation Inhibitors; Rabbits; Oryctolagus cuniculus; Piper lolot; Piperaceae

Year: 2007

Source title: Journal of Agricultural and Food Chemistry

Volume: 55

Issue: 23

Page : 9436-9442

Cited by: 2

Link: Scorpus Link

Chemicals/CAS: Alkaloids; Platelet Aggregation Inhibitors

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ISSN: 218561

CODEN: JAFCA

DOI: 10.1021/jf071963l
PubMed ID: 17941696
Language of Original Document: English
Abbreviated Source Title: Journal of Agricultural and Food Chemistry
Document Type: Article
Source: Scopus
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