

Variation of the alkaloid content of *Peumus boldus* (boldo)

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Eighteen alkaloids were detected in the bark, leaves, wood and roots of *Peumus boldus*, including traces of secoboldine, N-methylsecoboldine (boldine methine), glaucine and norreticuline, not reported previously as constituents of this species. Using appropriate standards, we quantified thirteen of them by UHPLC-MS/MS. Boldine was dominant in the bark, and laurilitsine in wood and roots. The alkaloid composition of the leaves, determined for 130 individually identified trees, classified by age and sex, was highly variable, where N-methylaurotetanine, laurotetanine, coclaurine and in some cases isocorydine predominated, but not boldine. © 2018 Elsevier B.V.

Alkaloids

Herbal products

Peumus boldus

Phytochemistry

Traditional medicine

UHPLC-MS/MS

6a,7 dehydroboldine

alkaloid derivative

boldine

coclaurine

glaucine

glaziovine

higenamine

isoboldine

isocorydine

isocorydine n oxide

lauroilsine

laurotetanine

n methylcoclaurine

n methyllaurotetanine

n methylsecoboldine

norglaucine

norisocorydine

norreticuline

pallidine

peumus boldus extract

plant extract

pronuciferine

reticuline

secoboldine

sinoacutine

unclassified drug

alkaloid

aporphine derivative

boldine

glaucine

isocorydine

isoquinoline derivative

lauroitsine

laurotetanine

norreticuline

plant extract

Article

bark

drug determination

drug identification

limit of detection

limit of quantitation

Peumus boldus

phytochemistry

plant leaf

plant root

priority journal

traditional medicine

ultra performance liquid chromatography

wood

chemistry

high performance liquid chromatography

Peumus boldus

tandem mass spectrometry

Alkaloids

Aporphines

Chromatography, High Pressure Liquid

Isoquinolines

Peumus

Plant Bark

Plant Extracts

Plant Leaves

Plant Roots

Tandem Mass Spectrometry

Wood