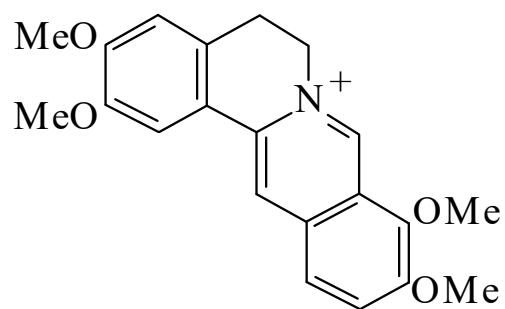




>>Entry Name: Palmatine

Synonym(s): 5,6-Dihydro-2,3,9,10-tetramethoxydibenzo[*a,g*]quinolizinium, 9Cl. Berbericinine. Gindarinine. Hindarinine



CAS Registry Number: 3486-67-7

Molecular Formula: C₂₁H₂₂NO₄⁽⁺⁾

Molecular Weight: 352.409

Accurate Mass: 352.154884

Percentage Composition: C 71.57%; H 6.29%; N 3.97%; O 18.16%

Biological Source: Quaternary alkaloid from *Jateorhiza palmata* (Menispermaceae) and a large number of other spp., mostly in *Berberis* and *Mahonia* (Berberidaceae), but spread into many families

Use/Importance: Uterine contractant. Shows bactericidal activity. Produces antiarrhythmic, inotropic, adrenocorticotropic, anticholinesterase and analgesic effects in expl. animals

>>Derivative: Chloride

CAS Registry Number: 10605-02-4

Molecular Formula: C₂₁H₂₂ClNO₄

Molecular Weight: 387.862

Accurate Mass: 387.123736

Percentage Composition: C 65.03%; H 5.72%; Cl 9.14%; N 3.61%; O 16.50%

Physical Description: Yellow needles

Melting Point: Mp 205 dec.°

>>Derivative: Iodide

Molecular Formula: C₂₁H₂₂INO₄

Molecular Weight: 479.314

Accurate Mass: 479.059357

Percentage Composition: C 52.62%; H 4.63%; I 26.48%; N 2.92%; O 13.35%

Physical Description: Orange-yellow needles

Melting Point: Mp 246°

References:

Späth, E. *et al.*, *Ber.*, 1925, **58**, 2267, (*synth*)

Haworth, R.D. *et al.*, *J.C.S.*, 1927, 546, (*synth*)

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Skerl, A.R. *et al.*, *Phytochemistry*, 1971, **10**, 2719, (*biosynth*)

Jewers, K. *et al.*, *J.C.S. Perkin 2*, 1972, 1393, (*cmr*)

Pavelka, S. *et al.*, *Coll. Czech. Chem. Comm.*, 1976, **41**, 3157, (*uv*)

Hussain, R.A. *et al.*, *Heterocycles*, 1989, **29**, 2257, (*pmr, cmr*)