



Papaveraceae (*Glaucium*, *Papaver*, *Dicranostigma*), Ranunculaceae (*Thalictrum*), Rhamnaceae (*Phyllica*), Hernandiaceae (*Hernandia*), Atherospermataceae (*Atherosperma*, *Doryphora*) and Pteridophyllaceae (*Pteridophyllum*)

Biological Use/Importance: Adrenocytic, sedative and cholinergic agent. Shows virtually no antitussive activity

Melting Point: Mp 185°

Optical Rotation: $[\alpha]_D^{23} +215$ (c, 1 in CHCl₃)

Solubility: BERDY SOL: Poorly sol. hexane

UV: [neutral] $\lambda_{\max}$ 210 (); 267 (); 302 () (MeOH) (Berdy)

Hazard & Toxicity: LD₅₀ (rat, ipr) 10.9 mg/kg

>>Derivative: Hydrochloride

CAS Registry Number: 13552-72-2

Melting Point: Mp 215-218° (dec.)

Optical Rotation: $[\alpha]_D^{20} +170$ (c, 0.5 in CHCl₃)

>>Derivative: N-Me

Synonym(s): Menisperine. N-Methylisocorydine. Chakranine

CAS Registry Number: 25342-82-9

Molecular Formula: C₂₁H₂₆NO₄⁽⁺⁾

Molecular Weight: 356.441

Accurate Mass: 356.186184

Percentage Composition: C 70.76%; H 7.35%; N 3.93%; O 17.95%

Biological Source: Quaternary alkaloid from *Bragantia wallichii*, *Cryptocarya angulata*, *Cryptocarya triplinervis*, *Fagara coco*, *Legnephora moorei* and many other spp. (Aristolochiaceae, Lauraceae, Rutaceae, Menispermaceae)

Physical Description: Prisms (EtOH)(as chloride)

Melting Point: Mp 217-218 dec.° (slow heating)(chloride). Mp 235° (rapid heating)(chloride)

Optical Rotation: $[\alpha]_D^{15} +146.3$ (c, 0.17 in CHCl₃)

>>Derivative: N-De-Me

Synonym(s): Norisocorydine. Sanjoinine Ib

CAS Registry Number: 475-70-7

Molecular Formula: C₁₉H₂₁NO₄

Molecular Weight: 327.379

Accurate Mass: 327.147059

Percentage Composition: C 69.71%; H 6.47%; N 4.28%; O 19.55%

Biological Source: Alkaloid from a variety of genera in the Annonaceae (*Annona*, *Xylopia*), Hernandiaceae (*Hernandia*), Monimiaceae (*Nemuaron*, *Peumus*), Papaveraceae (*Glaucium*), Lauraceae (*Cryptocarya*), Fumariaceae (*Corydalis*) and Rhamnaceae (*Zizyphus*)

Melting Point: Mp 203-205° (as hydrobromide)

Optical Rotation: $[\alpha]_D^{20} +158.5$ (c, 0.1 in EtOH) (hydrobromide)

Other Data: Free base unstable

>>Derivative: 4R-Hydroxy

Synonym(s): Rhopalotine. Crabbine

CAS Registry Number: 151271-85-1

Molecular Formula: C₂₀H₂₃NO₅

Molecular Weight: 357.405

Accurate Mass: 357.157624

Percentage Composition: C 67.21%; H 6.49%; N 3.92%; O 22.38%

Biological Source: Alkaloid from *Corydalis lutea* (Fumariaceae) and *Papaver rhopalothece* (Papaveraceae)

Physical Description: Cryst. (MeOH)

Melting Point: Mp 191°

Optical Rotation: $[\alpha]_D +162$ (c, 0.2 in MeOH)

>>Variant: (±)-form

CAS Registry Number: 36284-37-4

Molecular Formula: C₂₀H₂₃NO₄

Molecular Weight: 341.406

Accurate Mass: 341.162709

Percentage Composition: C 70.36%; H 6.79%; N 4.10%; O 18.75%

Melting Point: Mp 151-152°