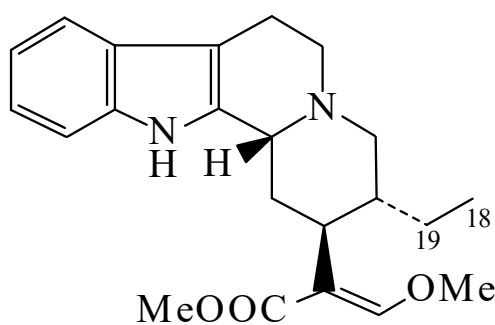




>>Entry Name: Hirsutine



CAS Registry Number: 7729-23-9

Molecular Formula: $C_{22}H_{28}N_2O_3$

Molecular Weight: 368.475

Accurate Mass: 368.209993

Percentage Composition: C 71.71%; H 7.66%; N 7.60%; O 13.03%

Biological Source: Alkaloid from *Mitragyna hirsuta*, *Mitragyna parvifolia*, *Mitragyna stipulosa*, *Cephalanthus occidentalis*, and several *Uncaria* spp., e.g. *Uncaria rhynchophylla* (Naucleaceae)

Biological Use/Importance: Ganglionic blocking agent showing long-lasting neuro blocking

Physical Description: Cryst. (Et₂O)

Melting Point: Mp 101°

Optical Rotation: $[\alpha]_D^{23} +68.6$ (c, 0.32 in CHCl₃)

>>Derivative: Methiodide

Melting Point: Mp 254°

>>Derivative: N-Oxide

Synonym(s): Hirsutine N-oxide

CAS Registry Number: 55176-58-4

Molecular Formula: $C_{22}H_{28}N_2O_4$

Molecular Weight: 384.474

Accurate Mass: 384.204908

Percentage Composition: C 68.73%; H 7.34%; N 7.29%; O 16.65%

Biological Source: Alkaloid from *Uncaria tomentosa* (Naucleaceae)

Other Data: No phys. props. reported

>>Derivative: 18,19-Didehydro

References:

- Shellard, E.J. *et al.*, *J. Pharm. Pharmacol.*, 1966, **18**, 553, (*uv, ir, pmr, struct*)
Trager, W.F. *et al.*, *Tetrahedron*, 1967, **23**, 1043, (*uv, ord, cd, abs config*)
Hemingway, S.R. *et al.*, *J. Pharm. Pharmacol., Suppl.*, 1974, **26**, 113P, (*oxide*)
Brown, R.T. *et al.*, *Chem. Comm.*, 1984, 847, (*synth*)
Lounasmaa, M. *et al.*, *Heterocycles*, 1998, **49**, 445-450, (*synth*)