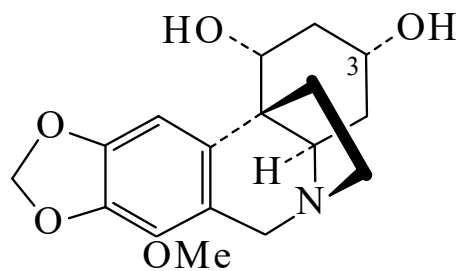




>>Entry Name: Nerbowdine

Synonym(s): Haemanthine. Hemanthine. Buphanitine



CAS Registry Number: 4673-18-1

Molecular Formula: C₁₇H₂₁NO₅

Molecular Weight: 319.357

Accurate Mass: 319.141974

Percentage Composition: C 63.94%; H 6.63%; N 4.39%; O 25.05%

Biological Source: Alkaloid from the bulbs of *Boëphone disticha*, *Nerine bowdenii*, *Crinum erubescens* and from unidentified *Brunsvigia* sp. (Amaryllidaceae)

Physical Description: Cryst. (CHCl₃/Me₂CO or EtOH)

Melting Point: Mp 230-232°. Mp 244-245 dec.° (dimorph.)

>>Derivative: Hydrochloride

Physical Description: Fine needles (EtOH aq.)

Melting Point: Mp 254-265 dec.°

Optical Rotation: $[\alpha]_D^{23} -86.1$ (c, 0.87 in H₂O)

>>Derivative: Nitrate

Melting Point: Mp 222-224°

>>Derivative: O³-Ac

Synonym(s): 3-O-Acetylnerbowdine

Molecular Formula: C₁₉H₂₃NO₆

Molecular Weight: 361.394

Accurate Mass: 361.152539

Percentage Composition: C 63.15%; H 6.41%; N 3.88%; O 26.56%

Biological Source: Alkaloid from the bulbs of *Brunsvigia disticha* and *Nerine crispa* (Amaryllidaceae)

Physical Description: Cryst. (Et₂O)

Melting Point: Mp 207-209°

Optical Rotation: $[\alpha]_D^{21} -116$ (c, 0.40 in CHCl₃). $[\alpha]_D^{21} -45$ (c, 0.395 in EtOH)

>>Derivative: Di-Ac

Molecular Formula: C₂₁H₂₅NO₇

Molecular Weight: 403.431

Accurate Mass: 403.163104

Percentage Composition: C 62.52%; H 6.25%; N 3.47%; O 27.76%

Melting Point: Mp 151-152°

Optical Rotation: $[\alpha]_D^{25} -30.5$ (c, 1.05 in CHCl₃)

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Lloyd, H.A. *et al.*, *J.O.C.*, 1962, **27**, 373, (*struct*)
Döpke, W., *Naturwissenschaften*, 1962, **49**, 469, (*deriv*)
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