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COMPARISON OF COCSULINE WITH EFIRINE, TRIGILLETINE AND N-METHYL-12'-O-DESMETHYLTRILOBIN

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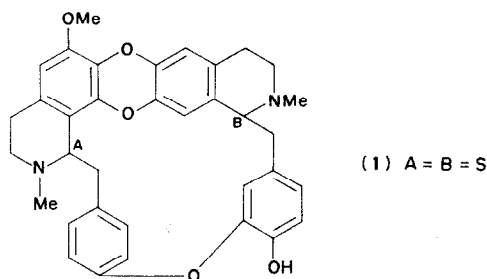
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Key Word Index—*Cocculus pendulus*; *Triclisia gillettii*; Menispermaceae; dibenzo-1,4-dioxin alkaloids; Cocsuline, Efirine, Trigillettine, N-methyl-12'-O-desmethyltrilobine.

Plant sources: *Cocculus pendulus* Diels,¹ *Triclisia gillettii* (Dewild) Staner,^{2,3} We have found that N-methyl-12'-O-desmethyltrilobine,^{4,5} efirine² and trigillettine³ are identical with cocsuline¹ (1) (Table 1). Since cocsuline has priority over efirine and trigillettine, the former name should be used.

TABLE 1. COMPARISON OF COCSULINE WITH EFIRINE, TRIGILLETINE AND N-METHYL-12'-O-DESMETHYLTRILOBINE

	Cocsuline	Efirine	Trigillettine	N-Methyl-12'-O-desmethyltrilobine
Mp	272–274° The mixed mp's are not depressed.	268.5–269.5°	272–274°	270–272°
UV	UV-spectra all identical.			
IR	IR-spectra all identical. The published IR-spectrum of Efirine ² has an OH-band at 3450 cm ⁻¹ which probably originates from KBr.			
Optical rotation [α] _D	+280° (CHCl ₃ ; c = 1%)	+298° (CHCl ₃ ; c = 0.16)	+348.2° (Pyridine; c = 1.05)	+348° (Pyridine; c = 0.66)
¹ H-NMR (τ-values)				
N-Me	7.62; 7.44	7.61; 7.43	7.61; 7.43	7.61; 7.43
O-Me	6.15	6.17	6.17	6.15
MS (m/e; rel.%)	562 (M ⁺ ; 32) 350 (36) 349 (100) 335 (38) 175 (47)	562 (M ⁺ ; 42) 350 (35) 349 (100) 335 (38) 175 (75)	562 (M ⁺ ; 39) 350 (32) 349 (100) 335 (35) 175 (70)	---
TLC	[SiO ₂ ; G (Merck); acetone-CHCl ₃ -methanol (5:4:1)] ⁴ All four have identical R _F -values.			
Derivative	All four + diazomethane = isotrilobine.			



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⁵ Dissertation N. Weber, Universität Heidelberg (1972).