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APPENDIX

Silica gel G / chloroform : acetone (5 : 4)

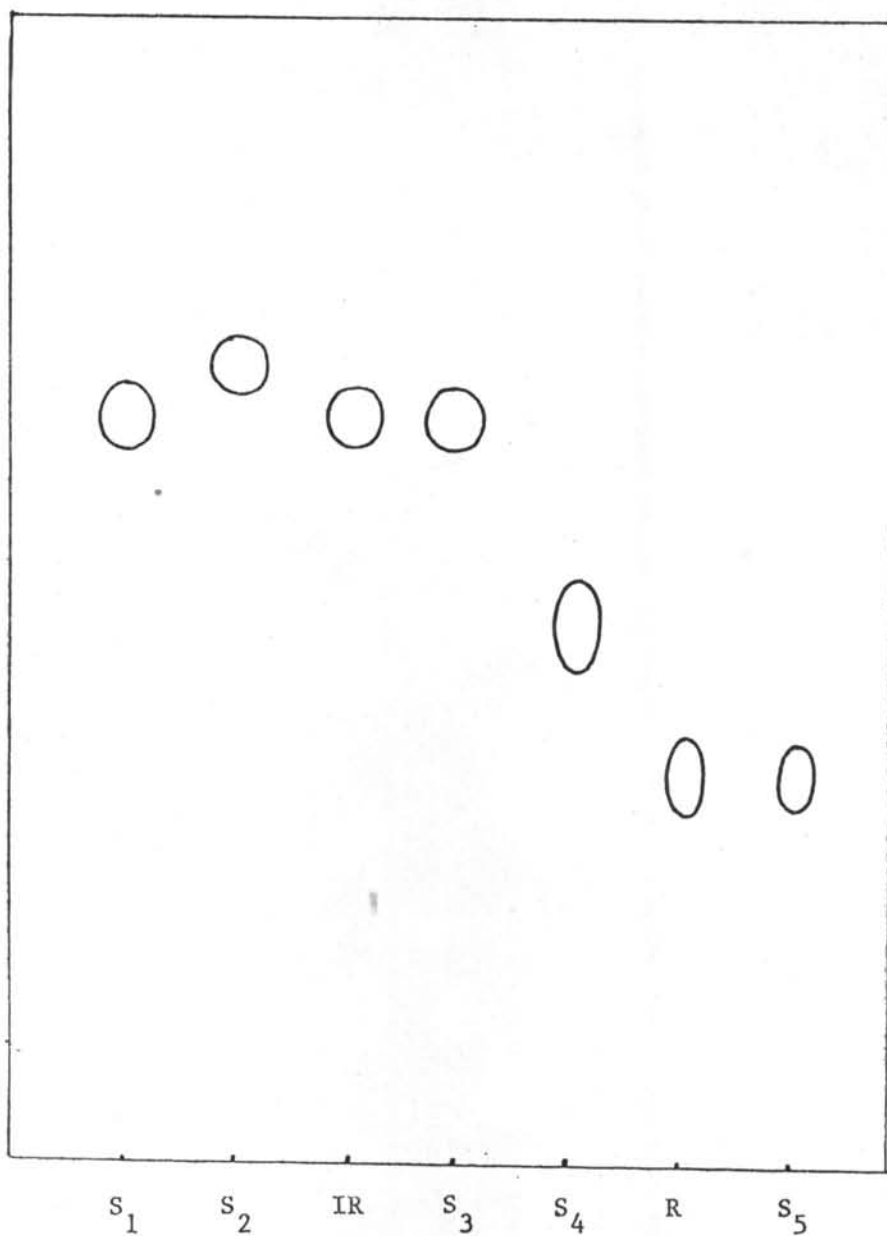


Figure I Thin layer chromatogram of alkaloid S₁ (isolated dihydrocorynantheine), S₂ (isolated corynoxine), IR (isorhynchophylline), S₃ (isolated isorhynchophylline), S₄ (isolated corynoxine B), R (rhynchophylline), and S₅ (isolated rhynchophylline).

Silica gel G / chloroform : ethyl alcohol (95 : 5)

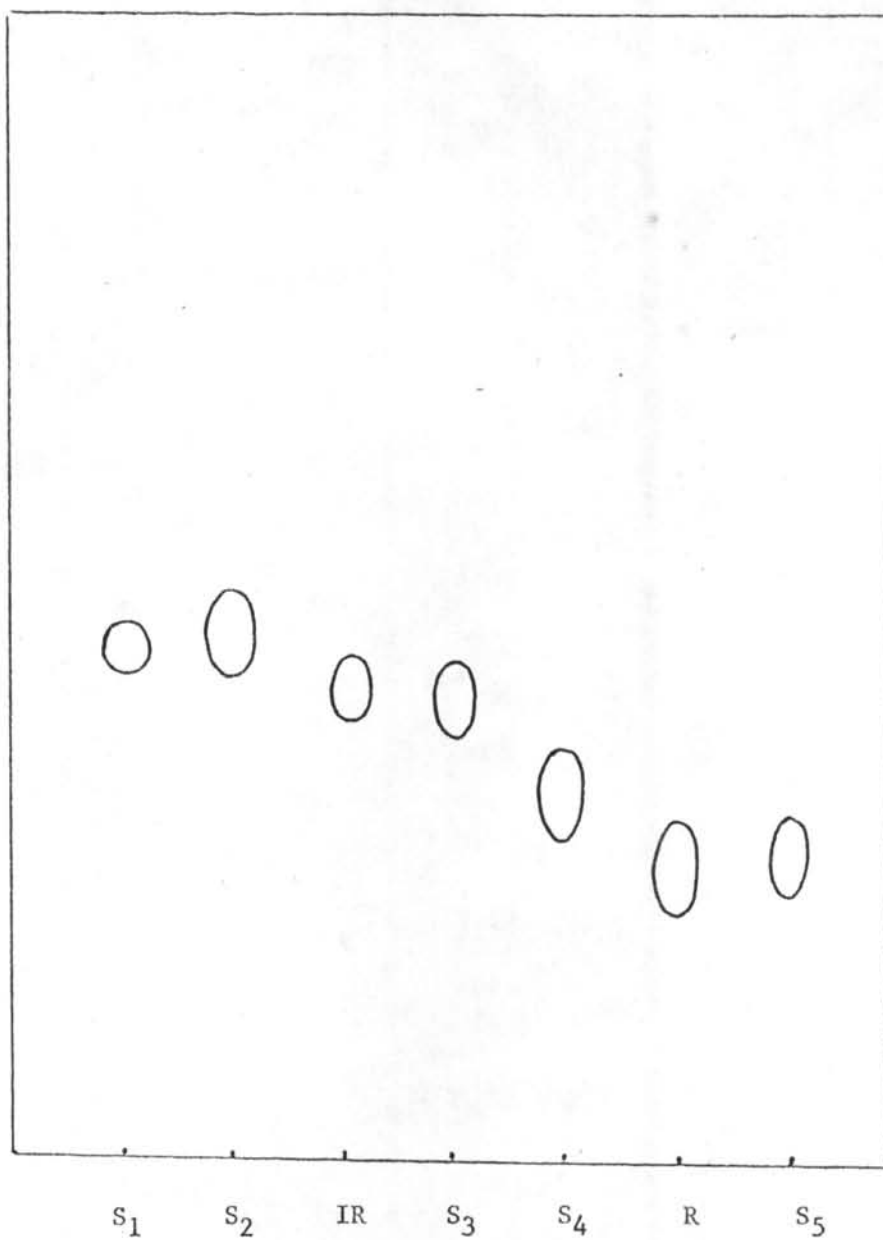


Figure II Thin layer chromatogram of alkaloid S₁ (isolated dihydro-corynantheine), S₂ (isolated corynoxine), IR (isorhynchophylline), S₃ (isolated isorhynchophylline), S₄ (isolated corynoxine B), R (rhynchophylline), and S₅ (isolated rhynchophylline).

Silica gel G / ethyl acetate : anaesthetic diethyl ether (1 : 1)

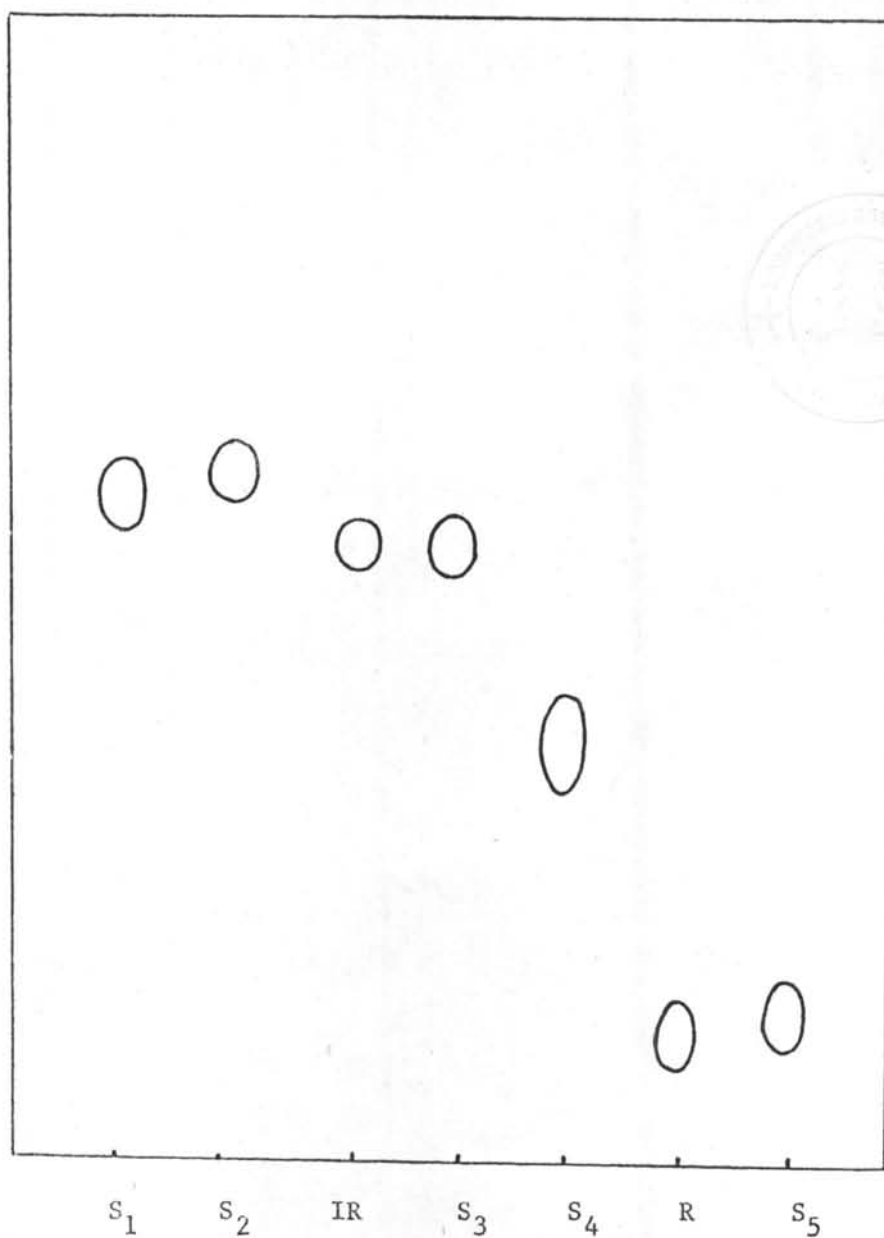


Figure III Thin layer chromatogram of alkaloid S₁ (isolated dihydro-corynantheine), S₂ (isolated corynoxine), IR (isorhynchophylline), S₃ (isolated isorhynchophylline), S₄ (isolated corynoxine B), R (rhynchophylline), and S₅ (isolated rhynchophylline).

Silica gel G / ethyl acetate : isopropyl alcohol : strong
solution of ammonium hydroxide (100 : 2 : 1)

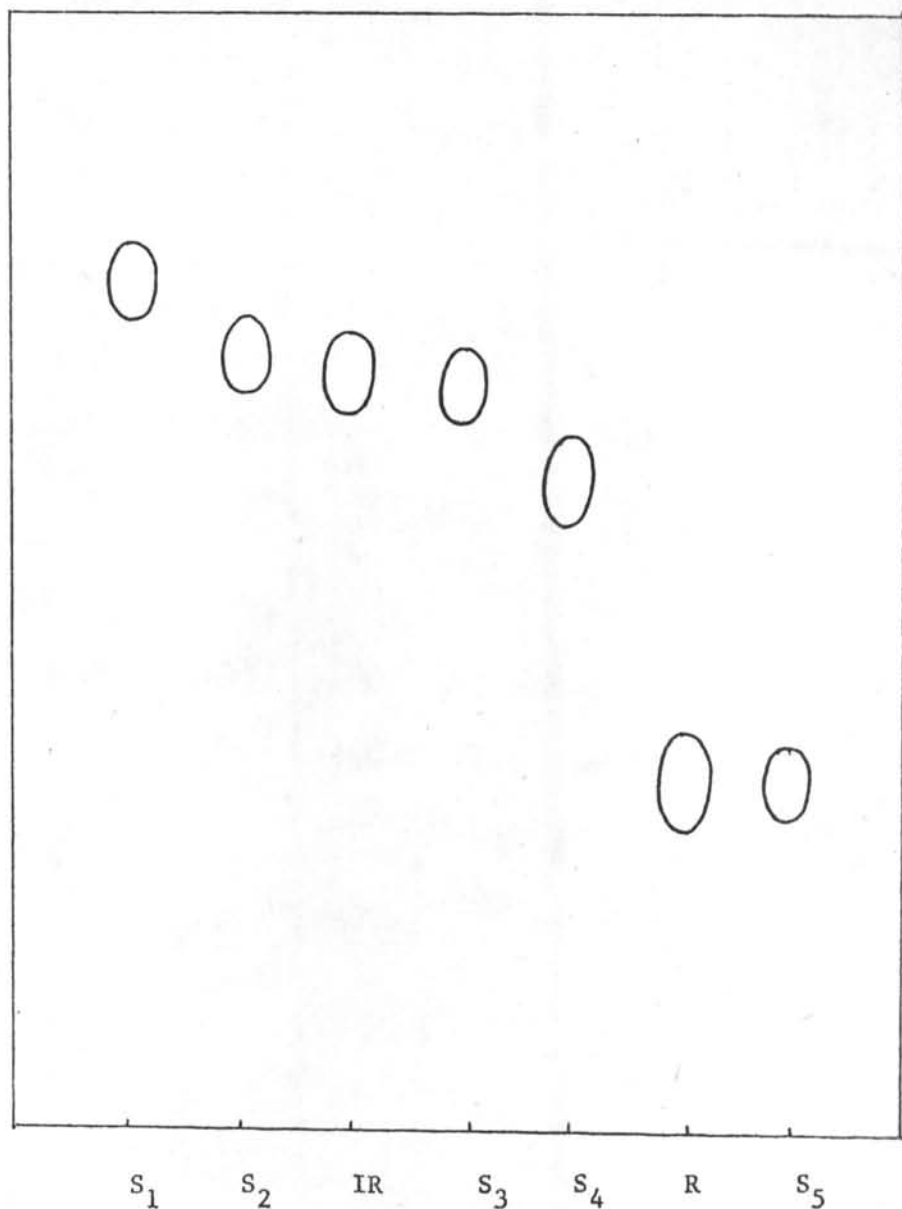


Figure IV Thin layer chromatogram of alkaloid S₁ (isolated dihydro-corynantheine), S₂ (isolated corynoxine), IR (isorhynchophylline), S₃ (isolated isorhynchophylline), S₄ (isolated corynoxine B), R (rhynchophylline), and S₅ (isolated rhynchophylline).

Alumina G / anaesthetic diethyl ether

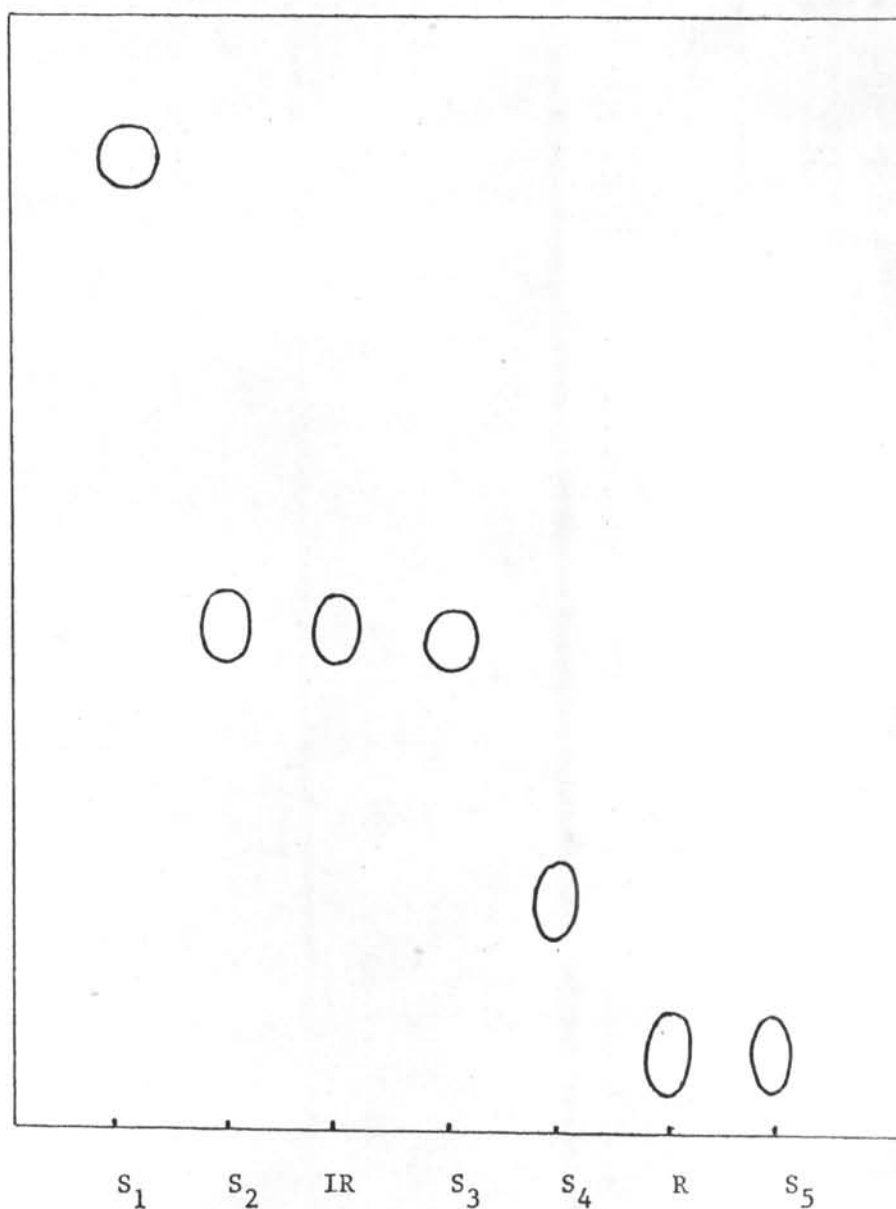


Figure V Thin layer chromatogram of alkaloid S₁ (isolated dihydro-corynantheine), S₂ (isolated corynoxine), IR (isorhynchophylline), S₃ (isolated isorhynchophylline), S₄ (isolated corynoxine B), R (rhynchophylline), and S₅ (isolated rhynchophylline).

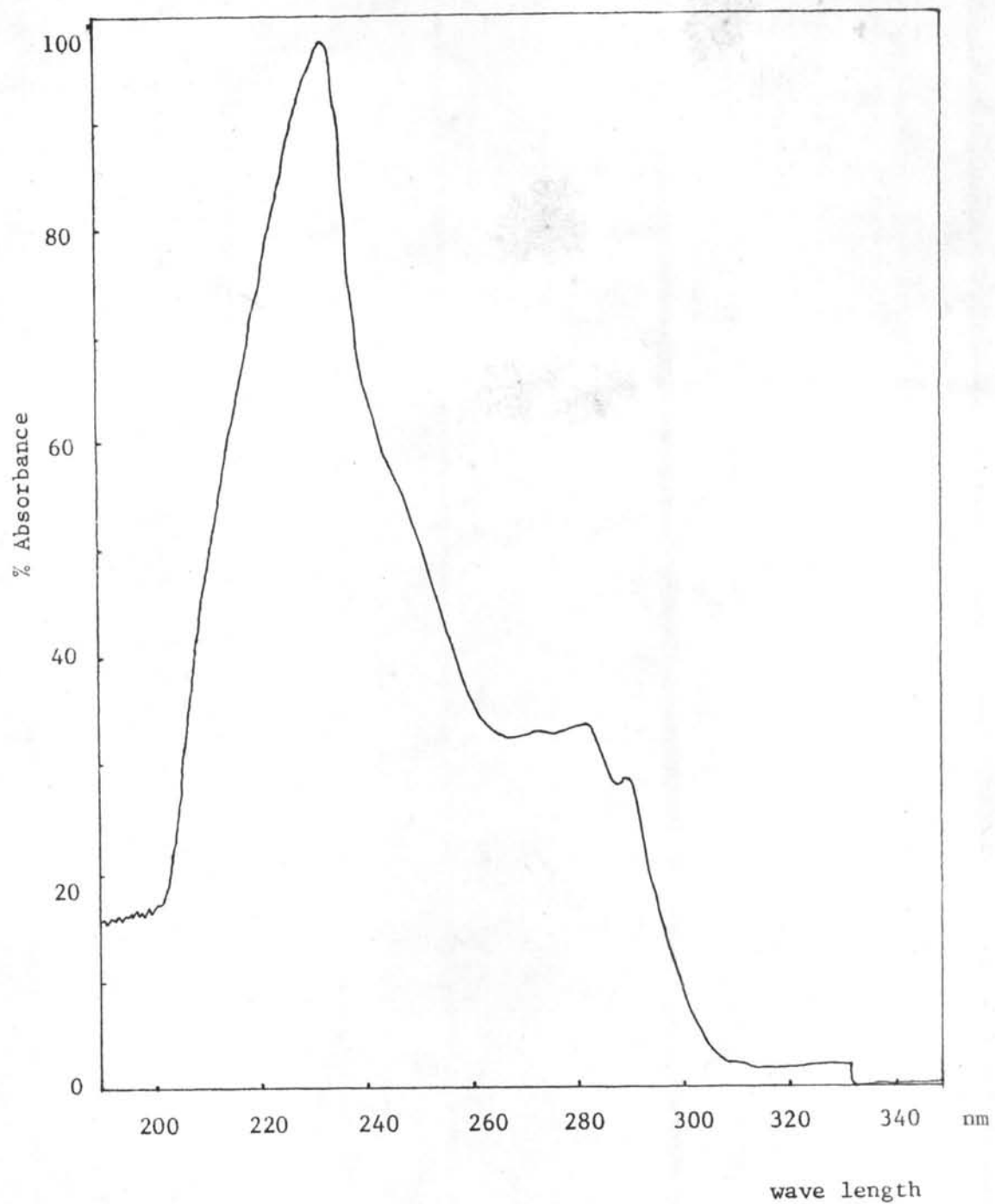


Figure VI Ultraviolet absorption spectrum of alkaloid S₁ (isolated dihydrocorynantheine) in ethyl alcohol.

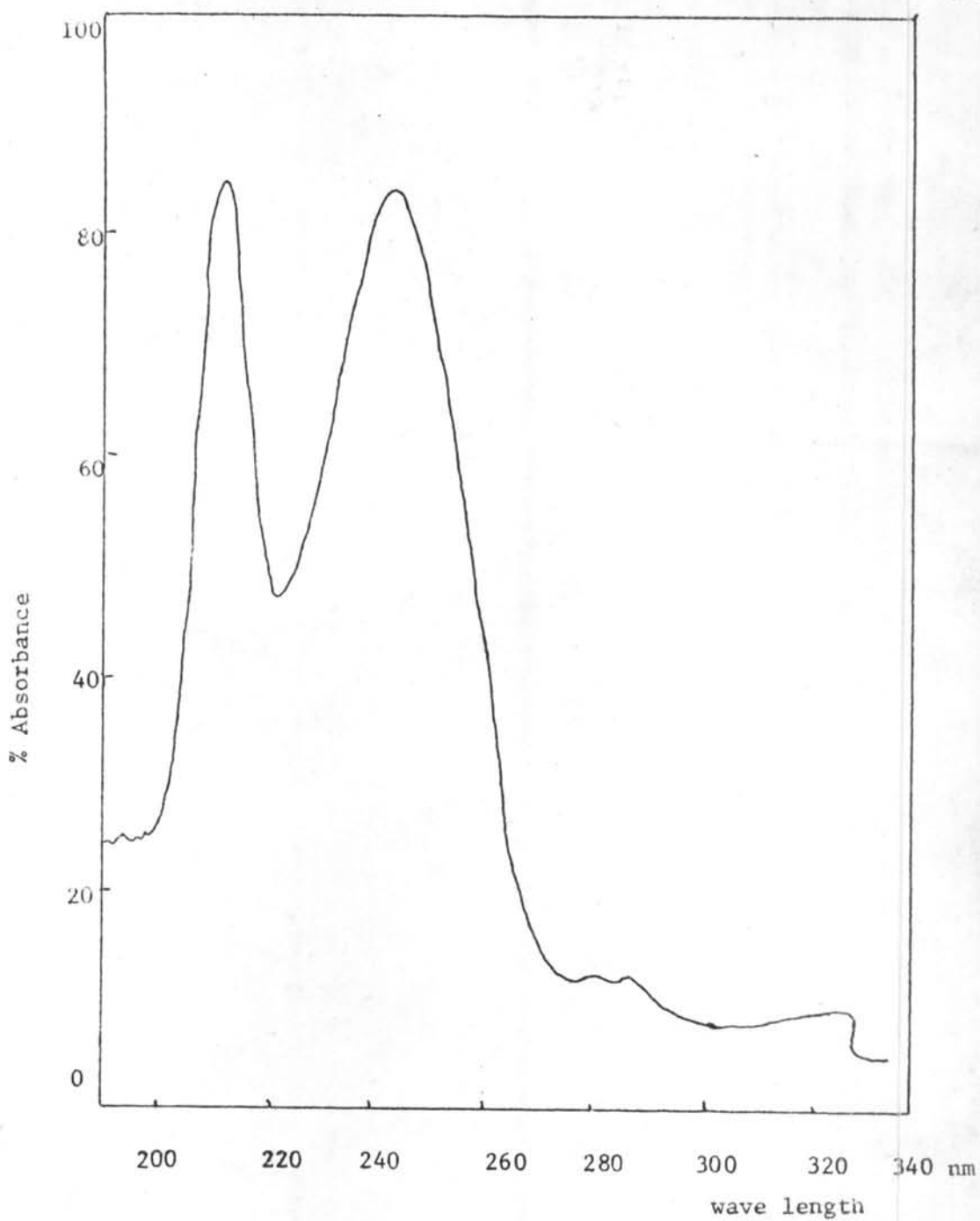


Figure VII Ultraviolet absorption spectrum of alkaloid S₂ (isolated corynoxine) in ethyl alcohol.

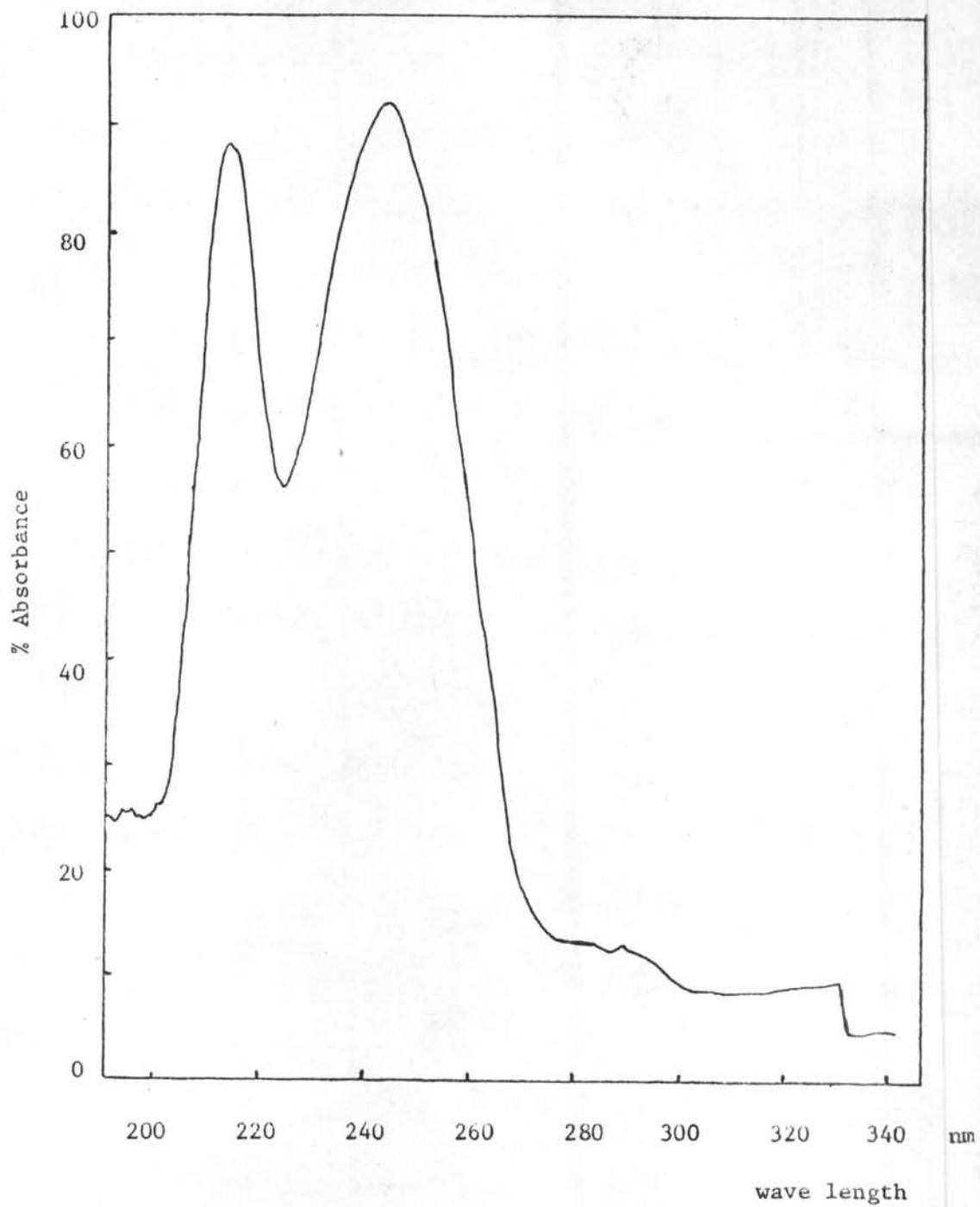


Figure VIII Ultraviolet absorption spectrum of alkaloid S₃ (isolated isorhynchophylline) in ethyl alcohol.

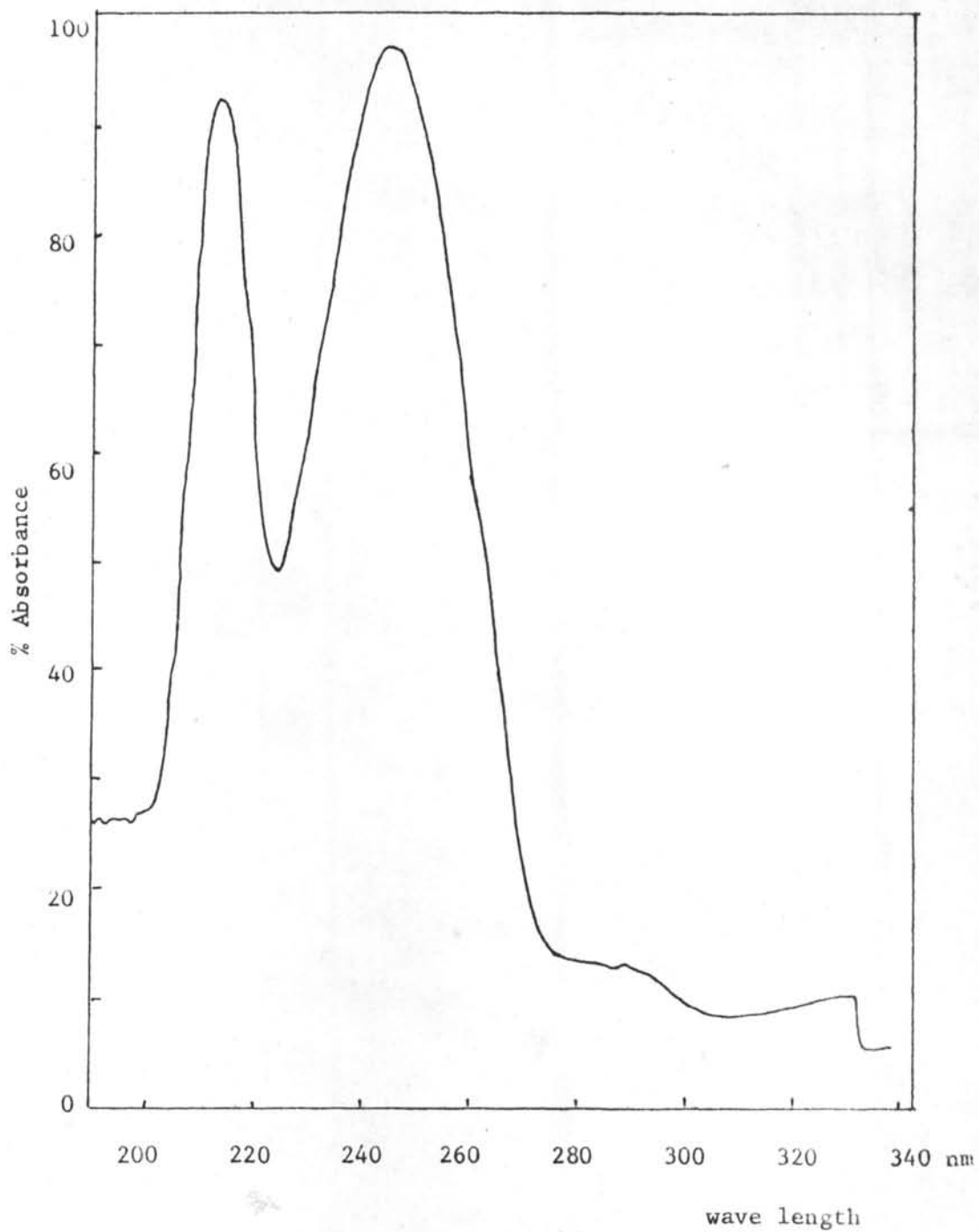


Figure IX Ultraviolet absorption spectrum of alkaloid S₄ (isolated corynoxine B) in ethyl alcohol.

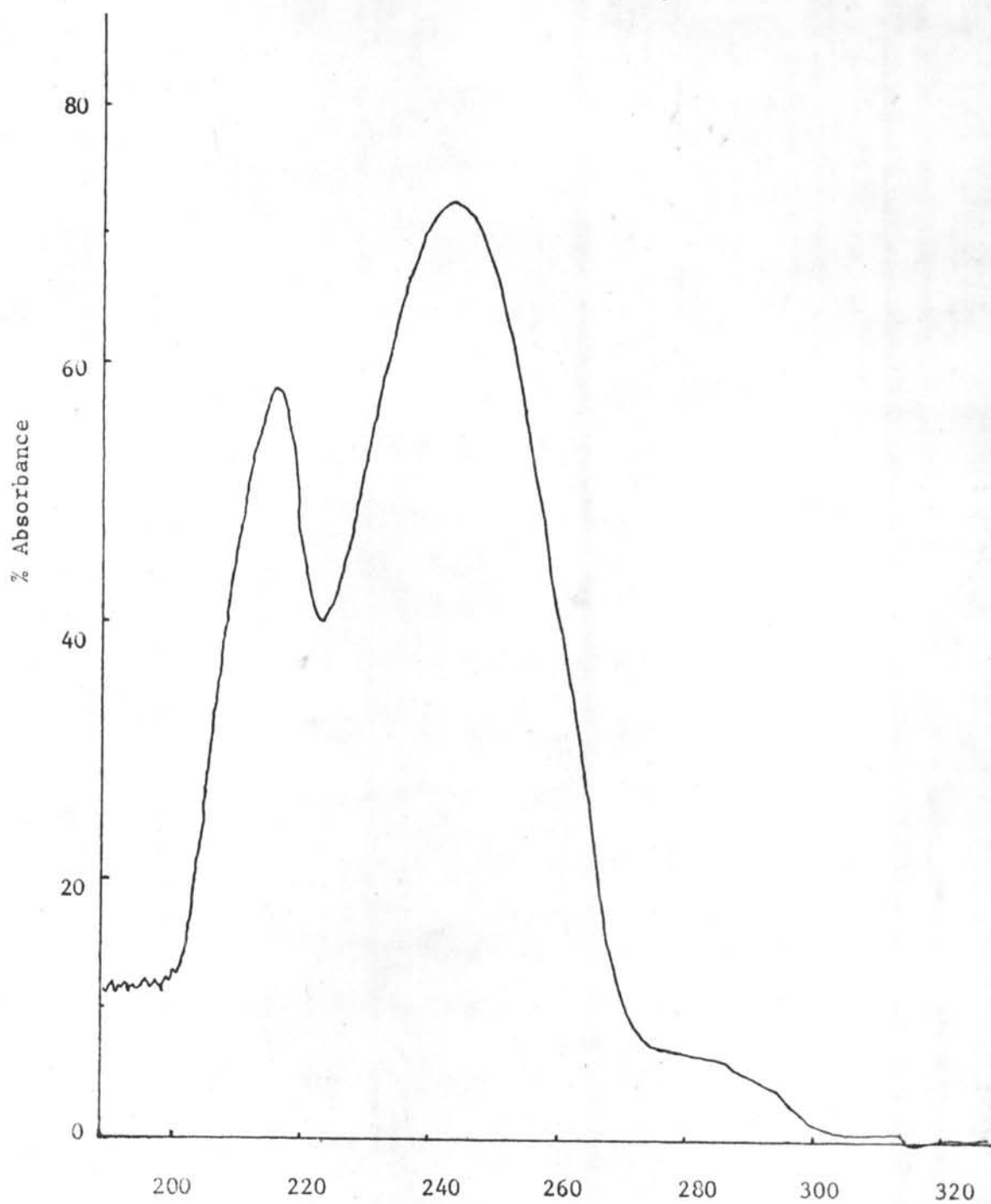


Figure X Ultraviolet absorption spectrum of alkaloid S₅ (isolated rhynchophylline) in ethyl alcohol.

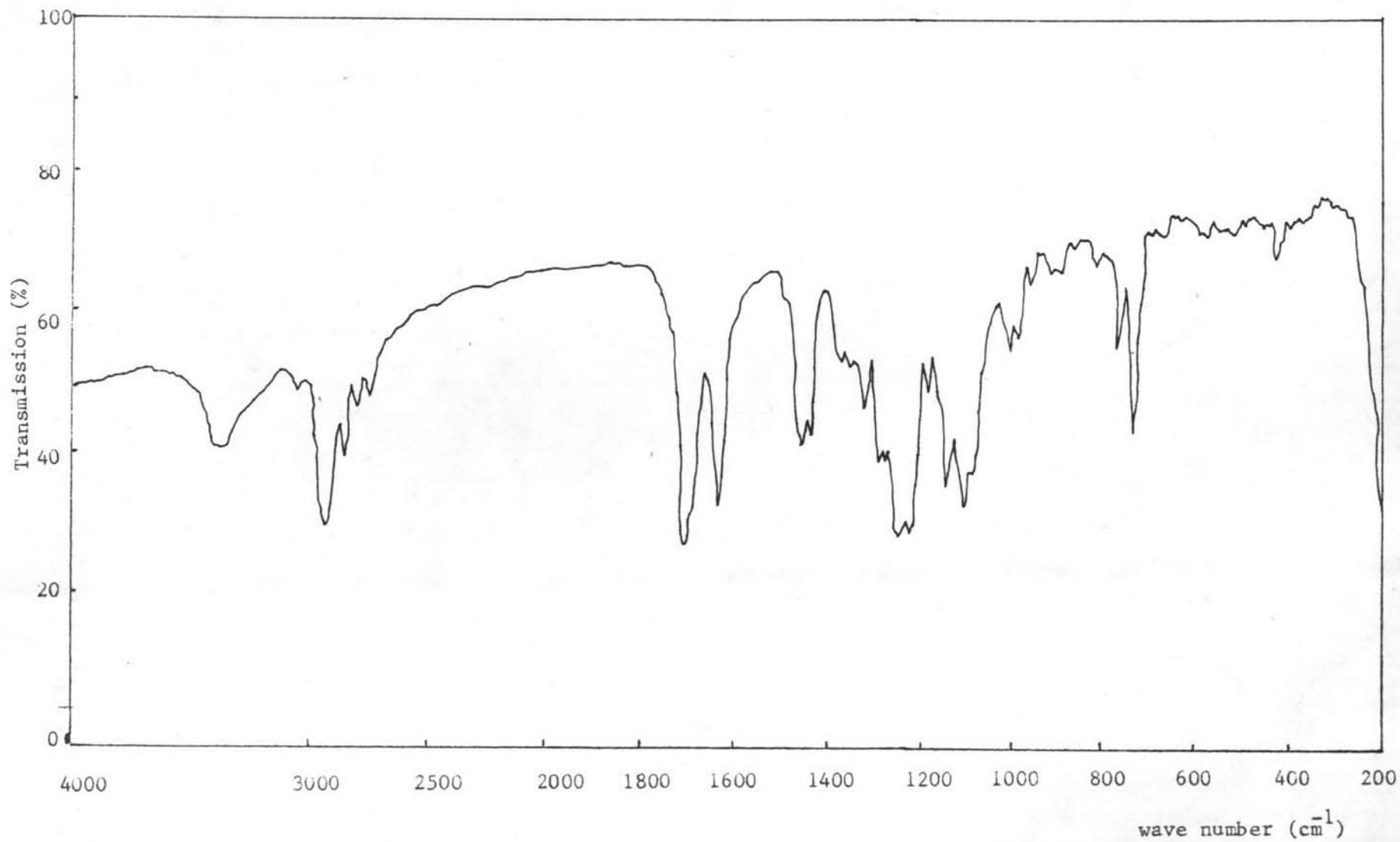


Figure XI Infrared absorption spectrum of S₁ (isolated dihydrocorynantheine).

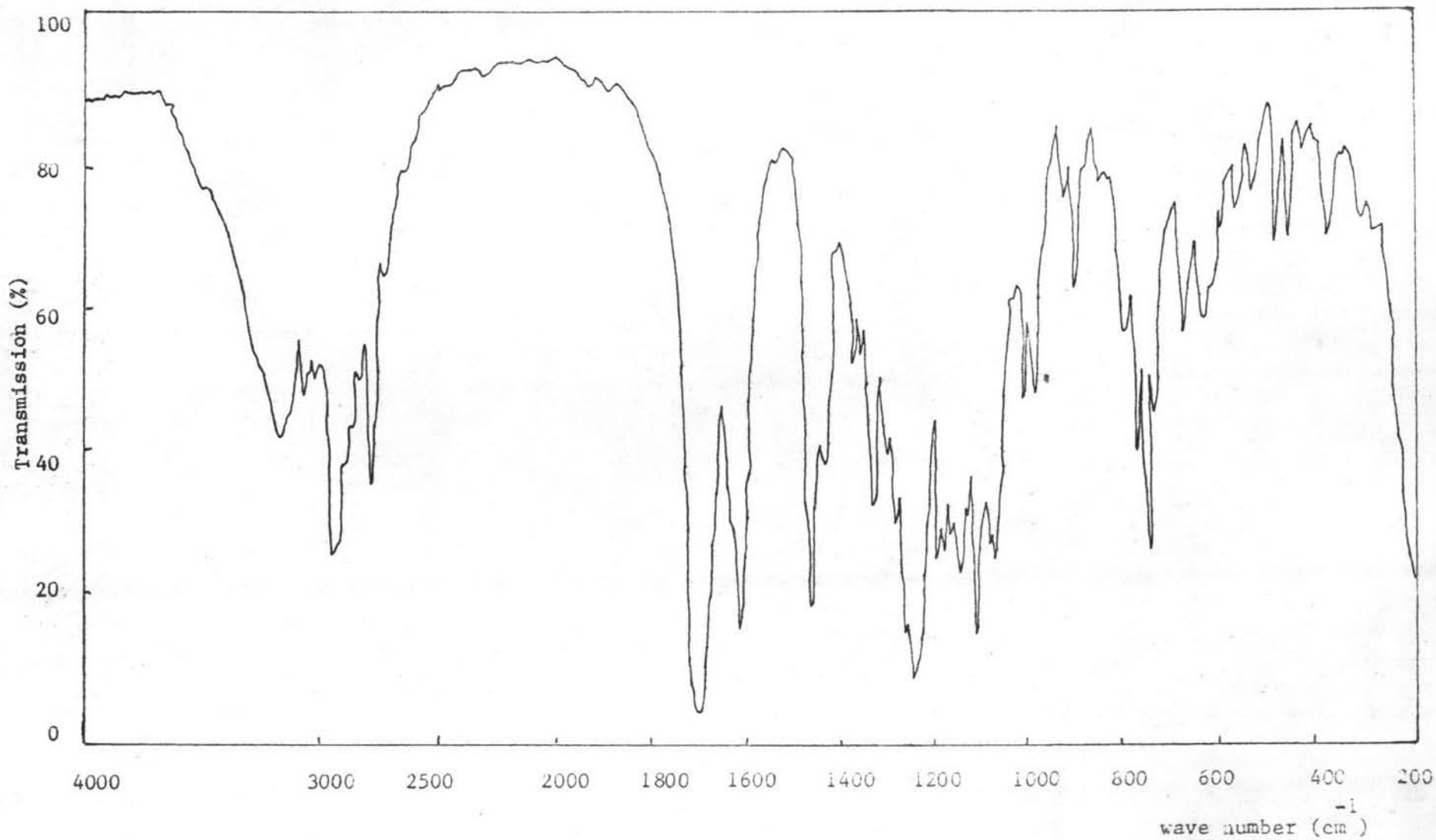


Figure XII Infrared absorption spectrum of S₂ (isolated corynoxine).

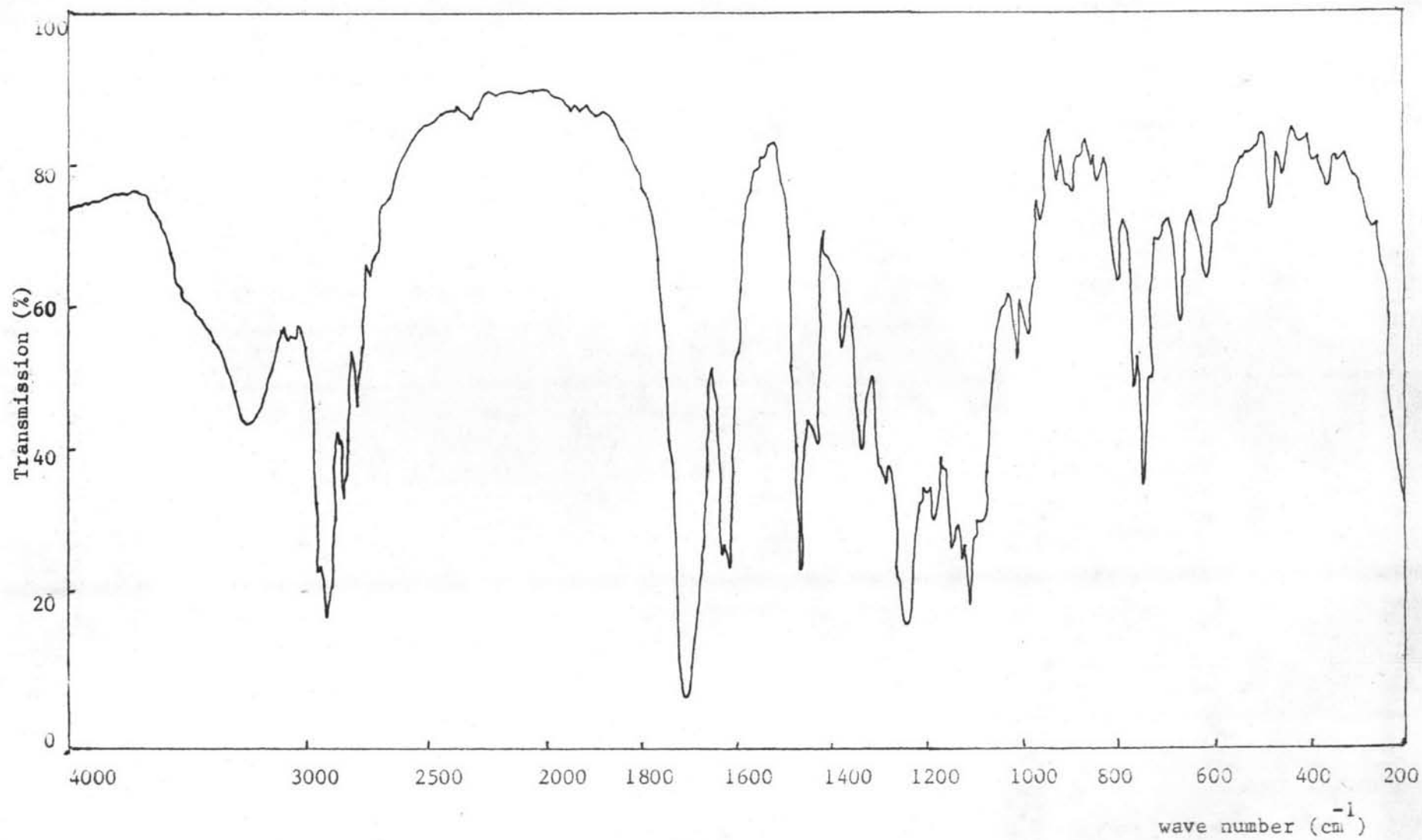


Figure XIII. Infrared absorption spectrum of S₃ (isolated isorhynchophylline).

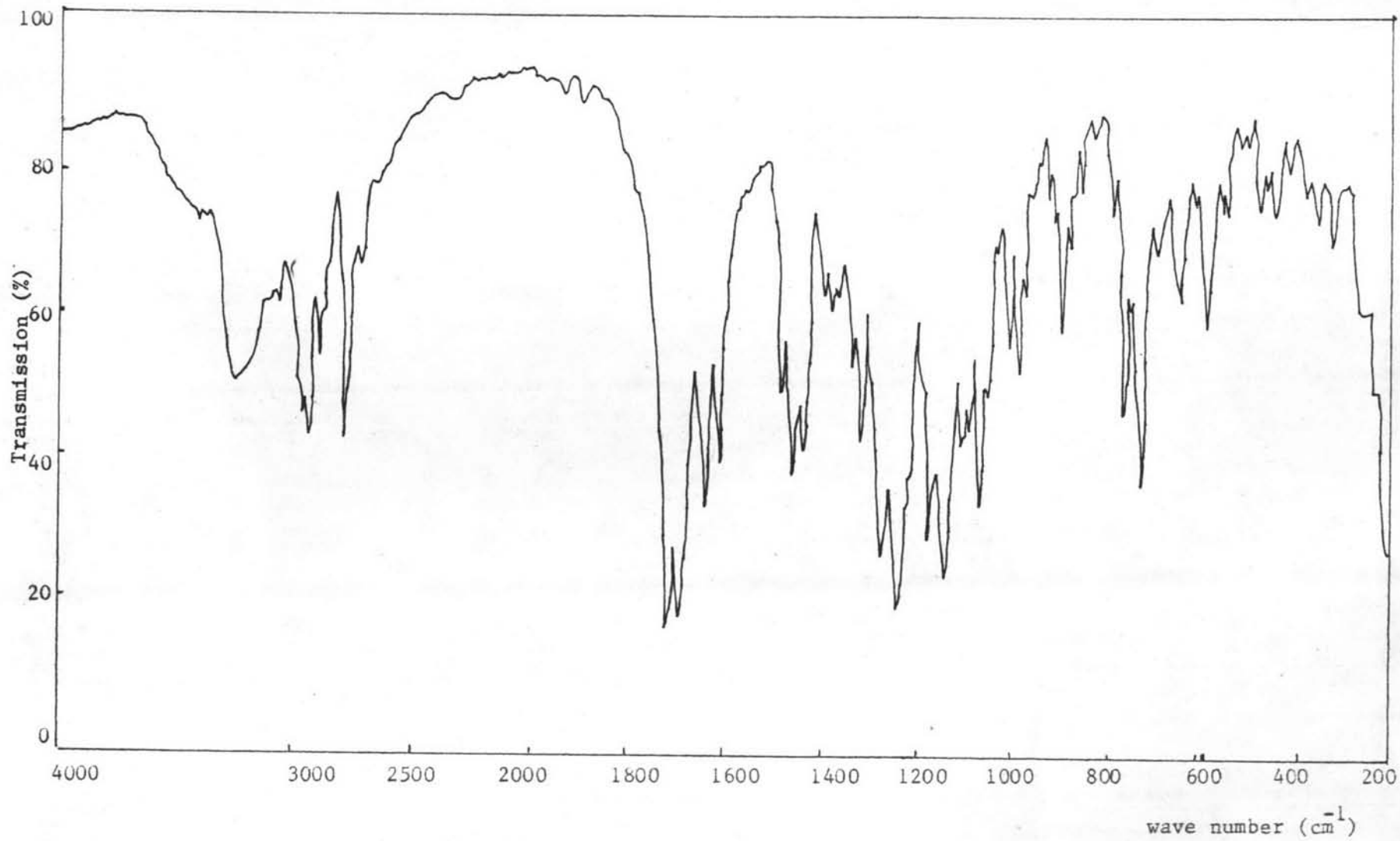


Figure XIV Infrared absorption spectrum of S₄ (isolated corynoxine B).

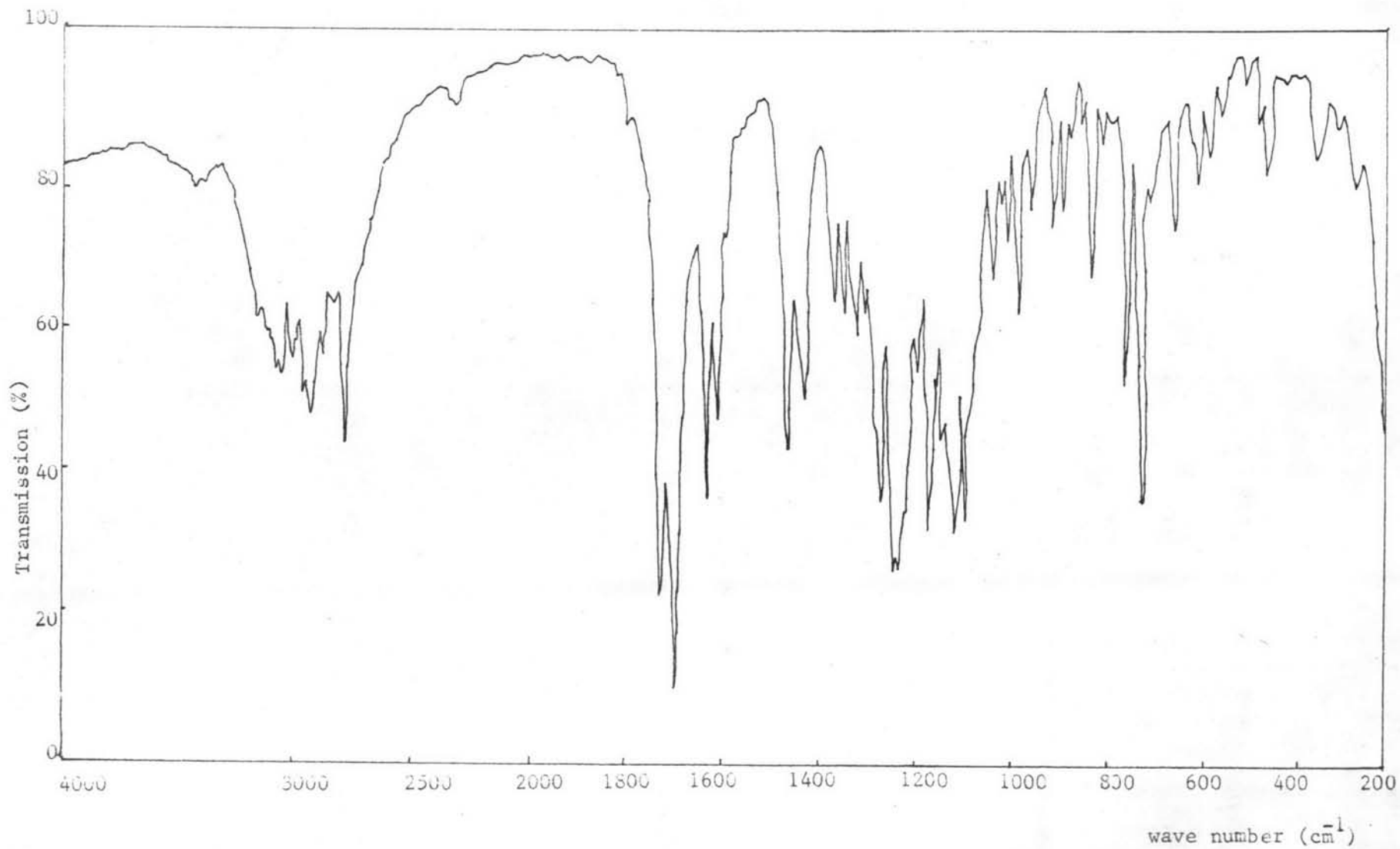


Figure XV Infrared absorption spectrum of S₅ (isolated rhynchophylline).

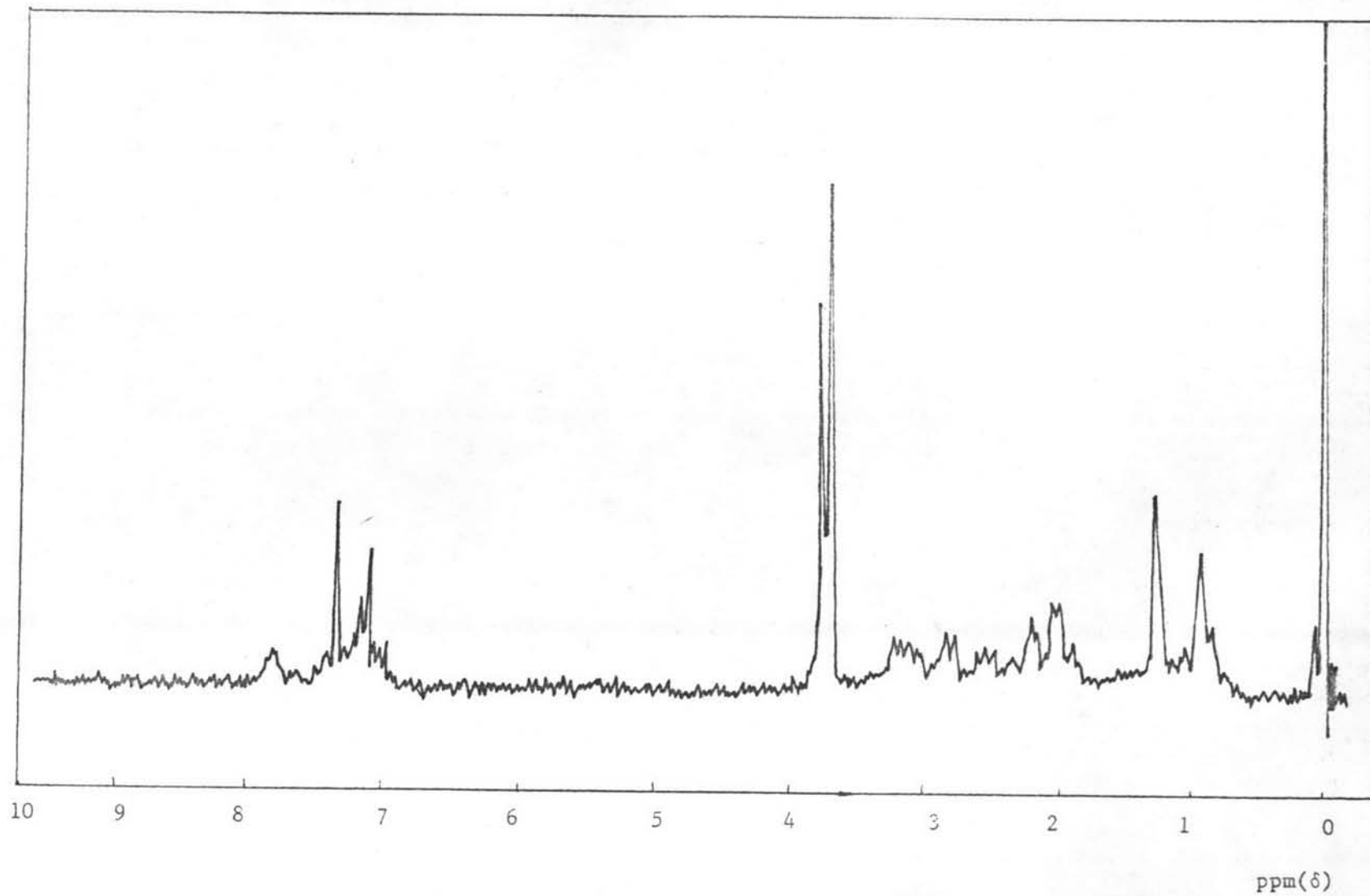


Figure XVI Nuclear magnetic resonance (CDCl_3) of S_1 (isolated dihydrocorynantheine).

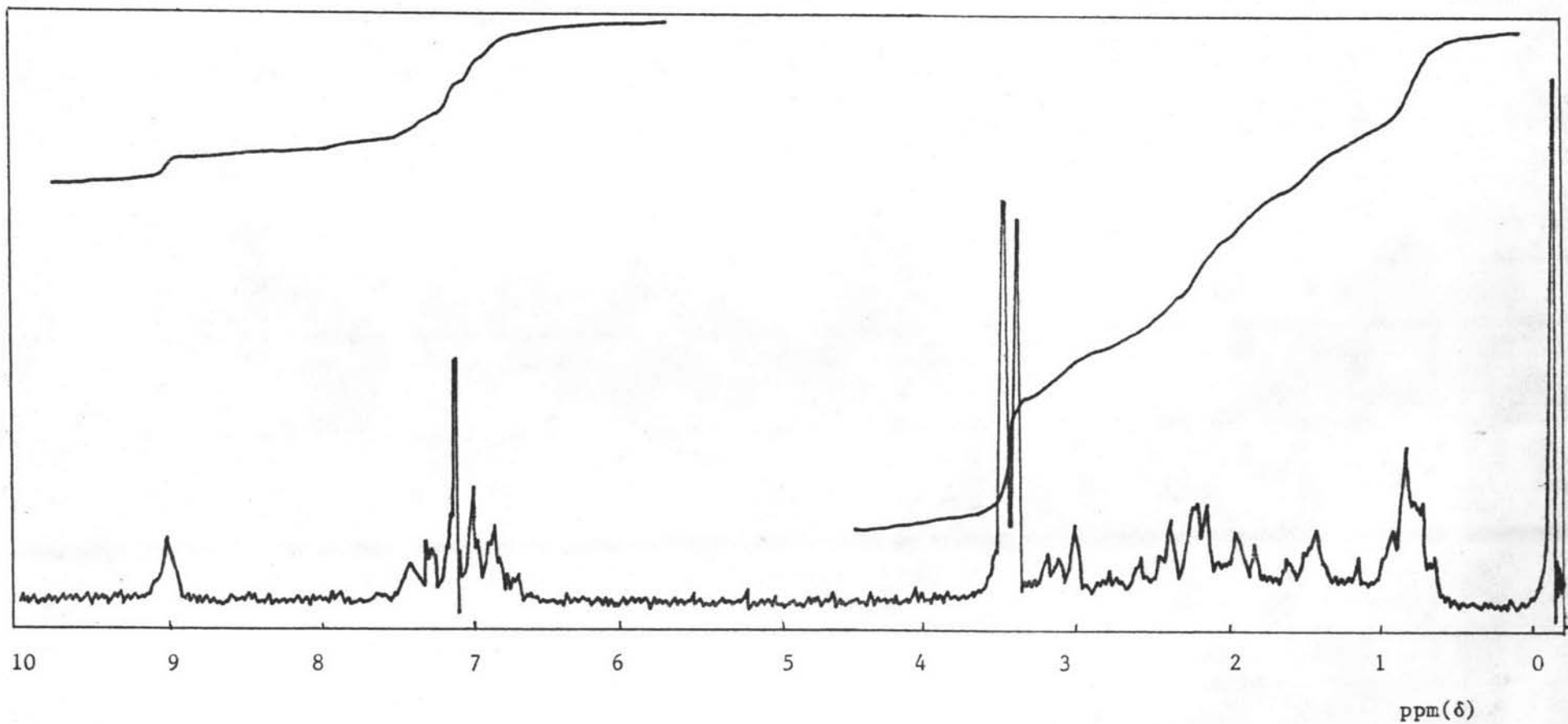


Figure XVII Nuclear magnetic resonance (CDCl_3) of S_2 (isolated corynoxine).

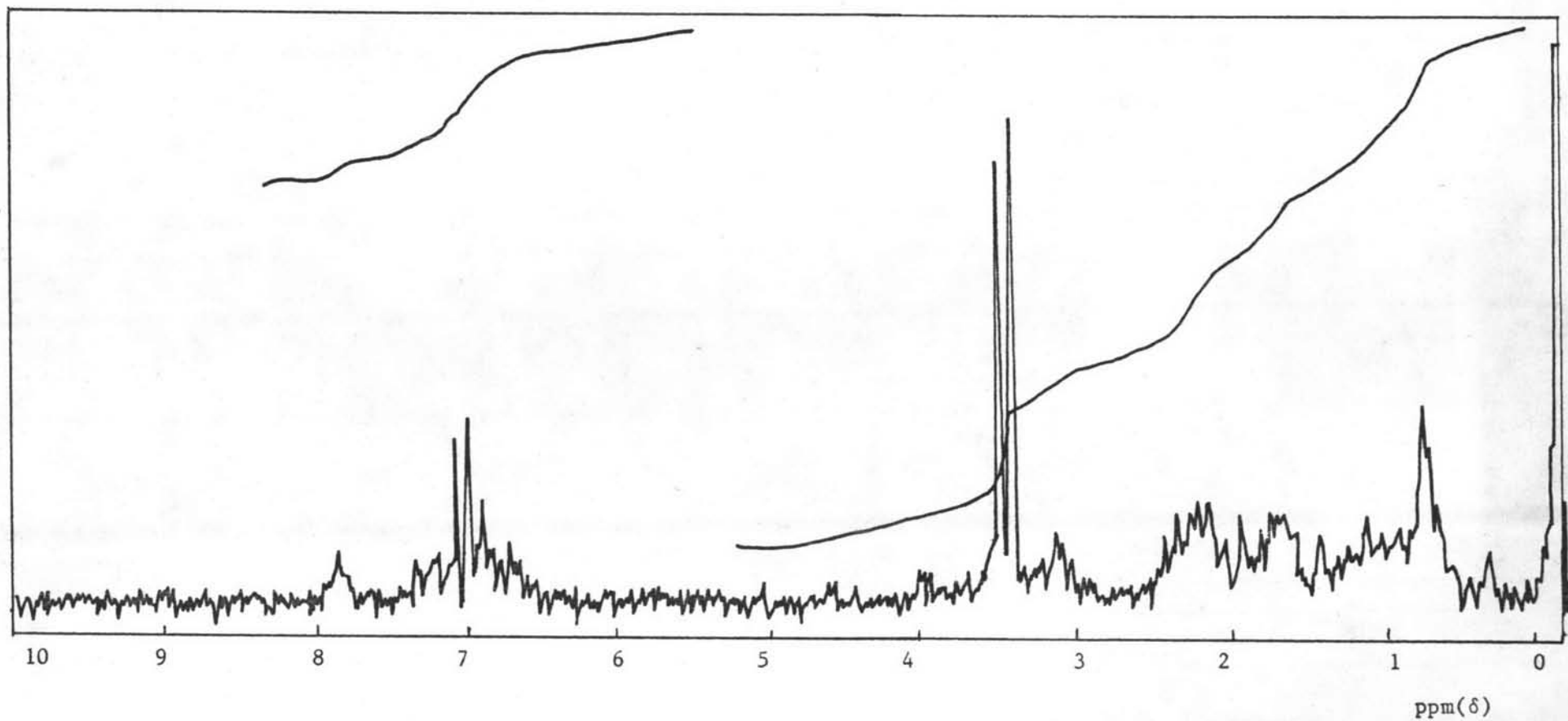


Figure XVIII Nuclear magnetic resonance (CDCl_3) of S_3 (isolated isorhynchophylline).

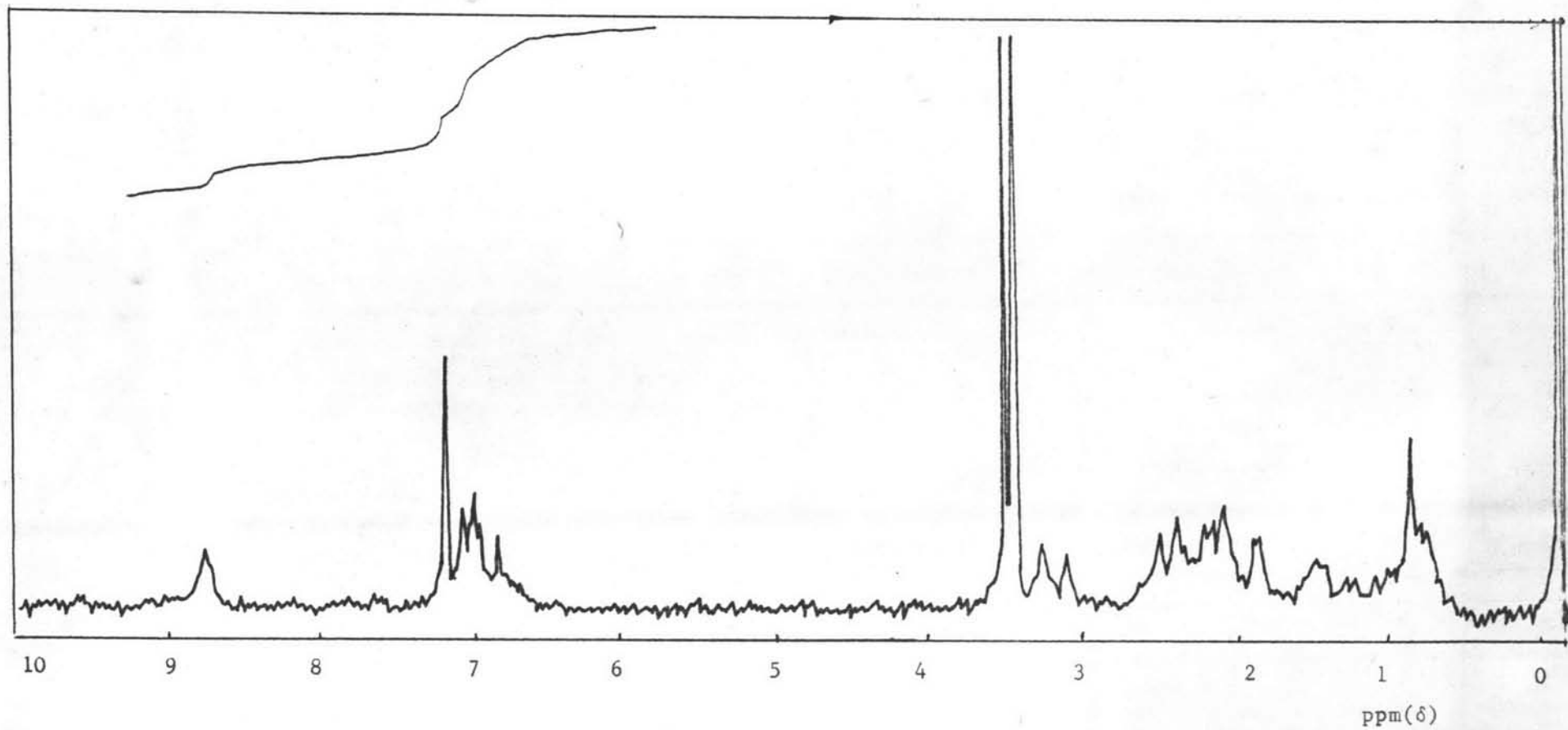


Figure XIX Nuclear magnetic resonance (CDCl_3) of S_4 (isolated corynoxine B).

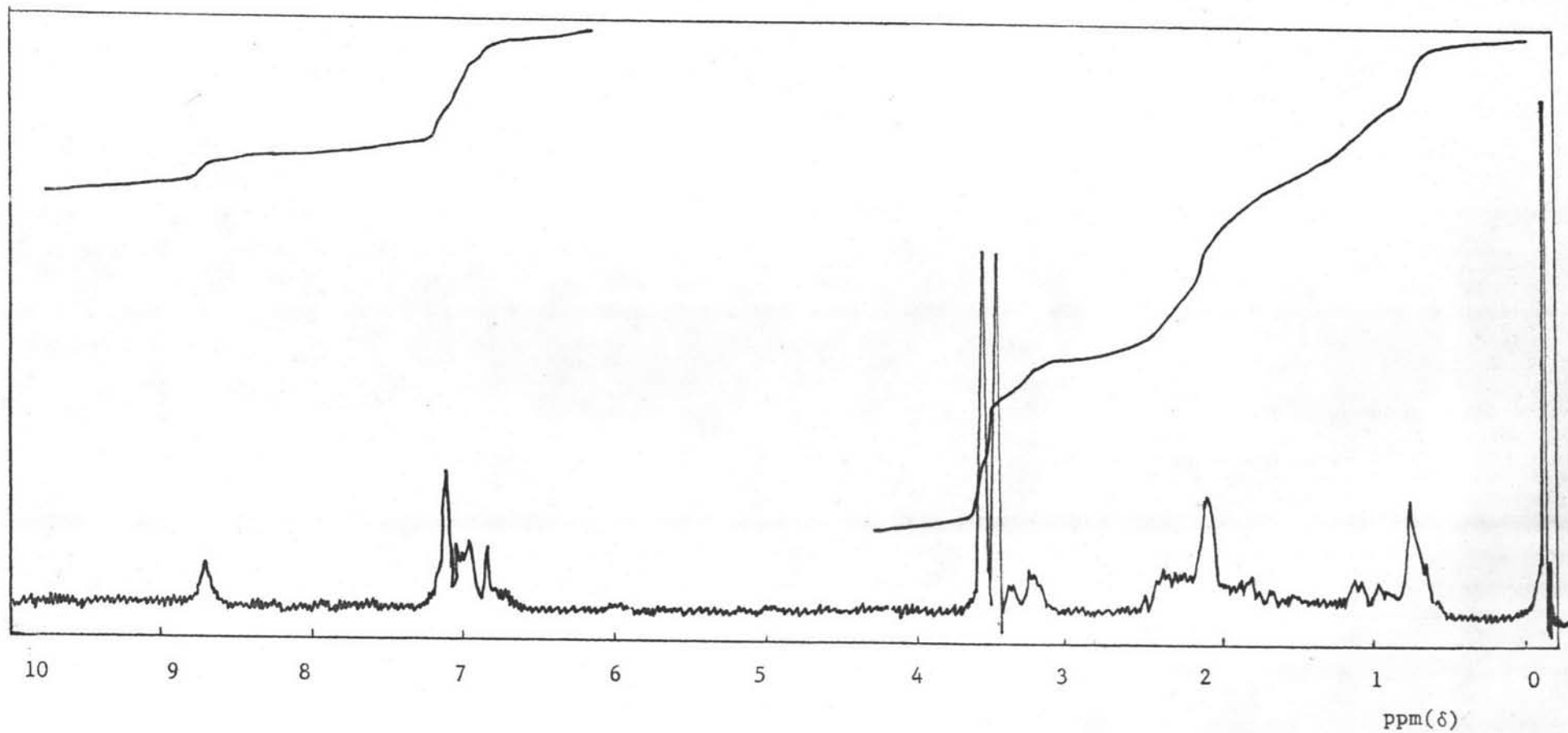


Figure XX Nuclear magnetic resonance (CDCl₃) of S₅ (isolated rhynchophylline).

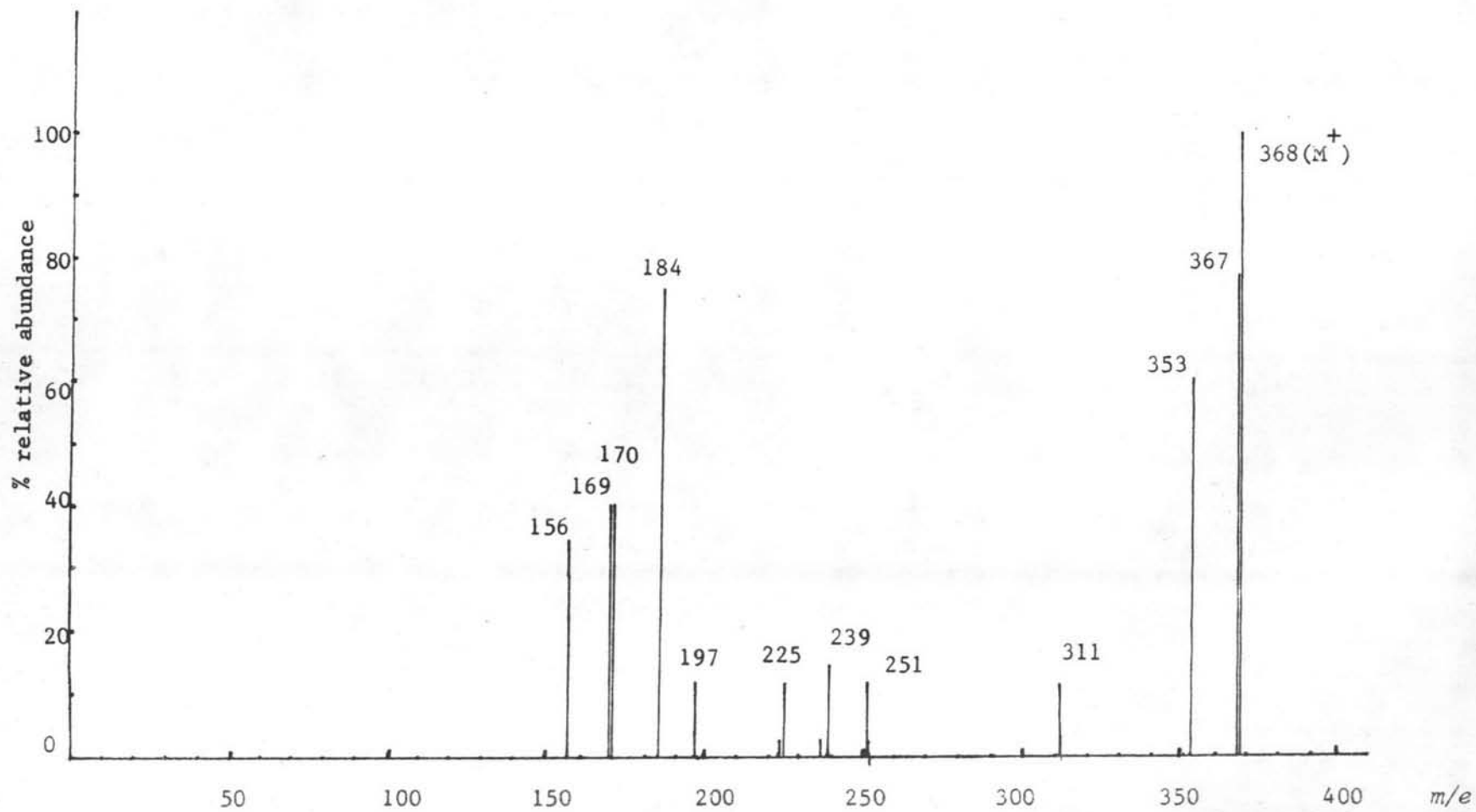


Figure XXI Mass spectrum of S₁ (isolated dihydrocorynantheine).

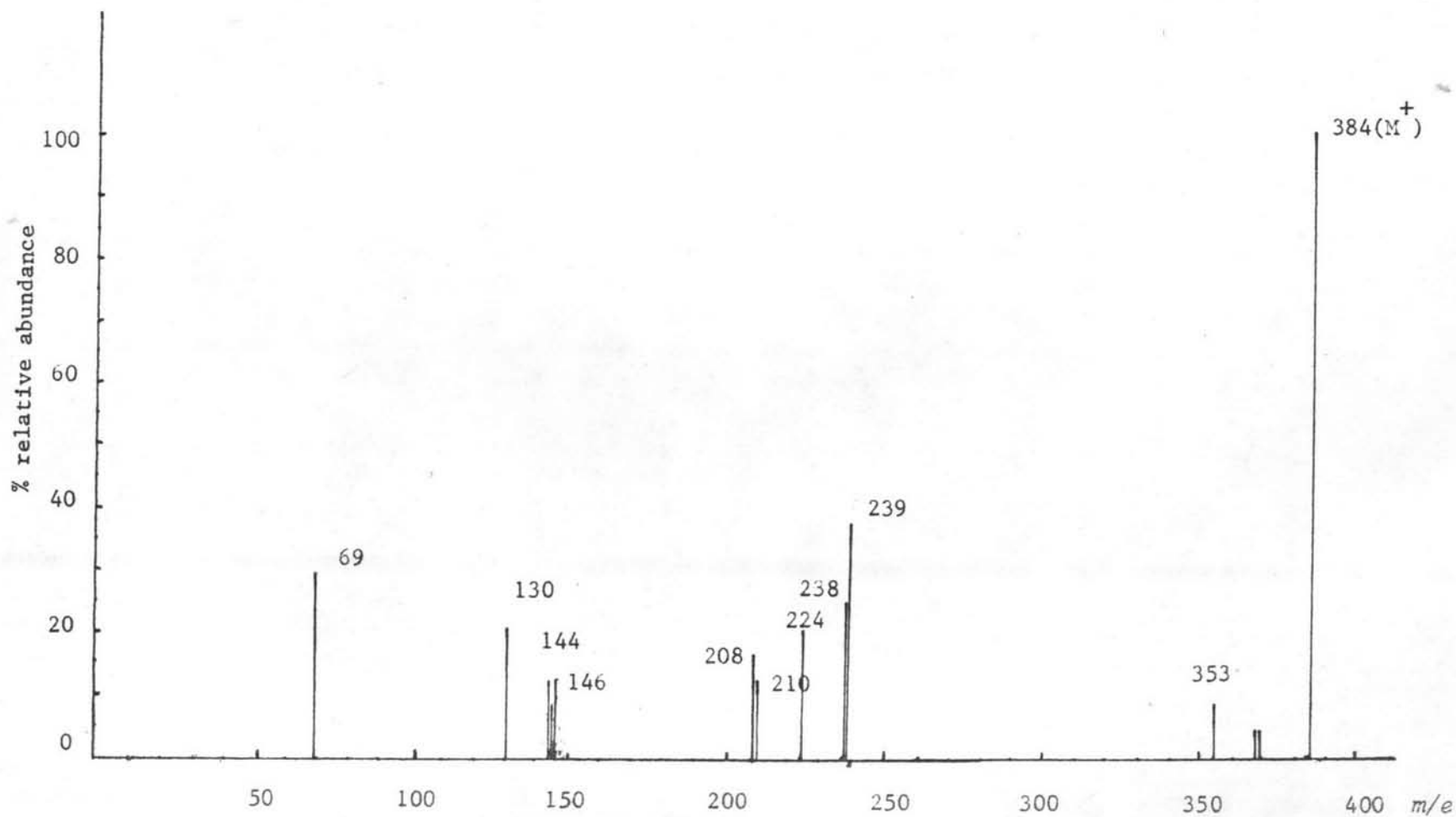


Figure XXII Mass spectrum of S₂ (isolated corynoxine).

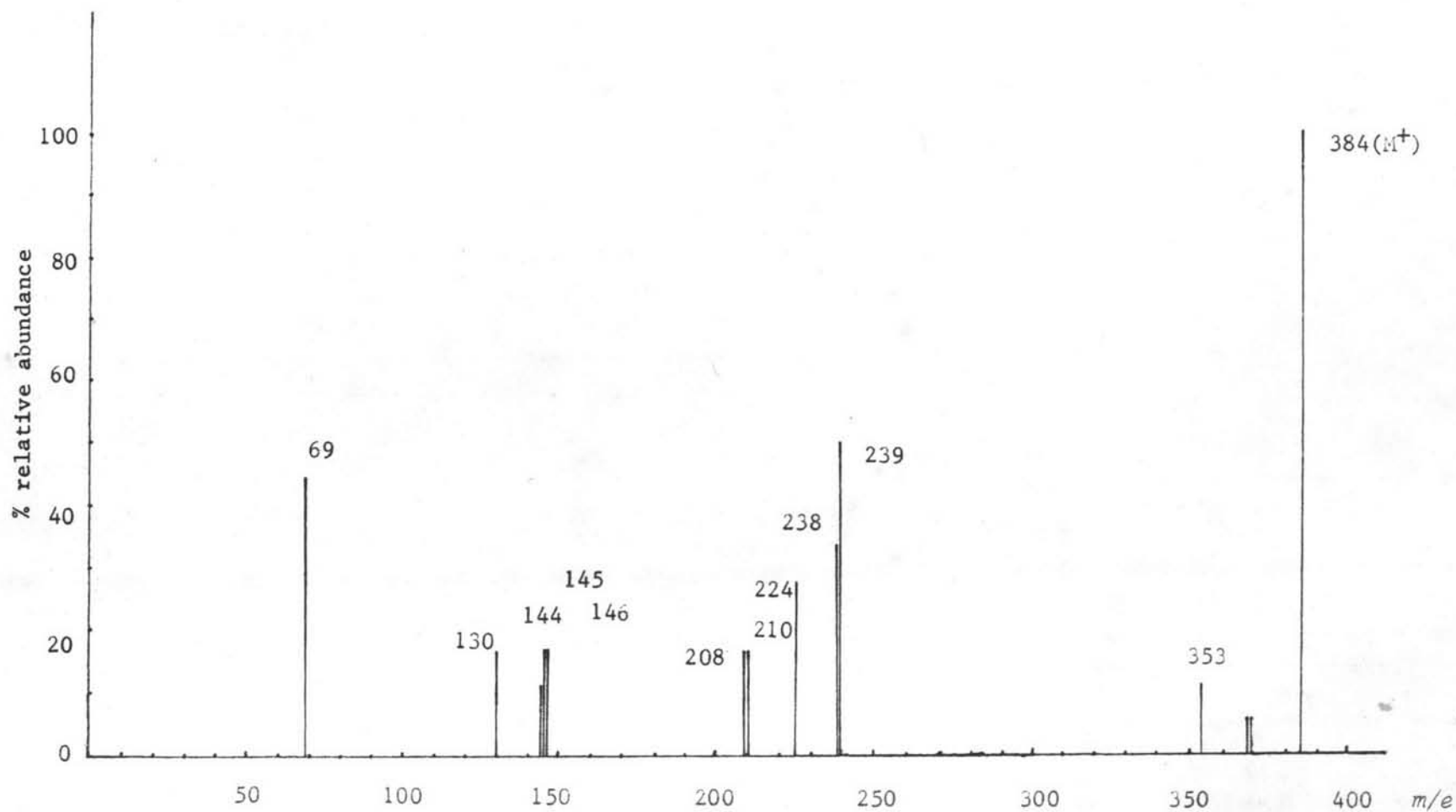


Figure XXIII Mass spectrum of S_3 (isolated isorhynchophylline).

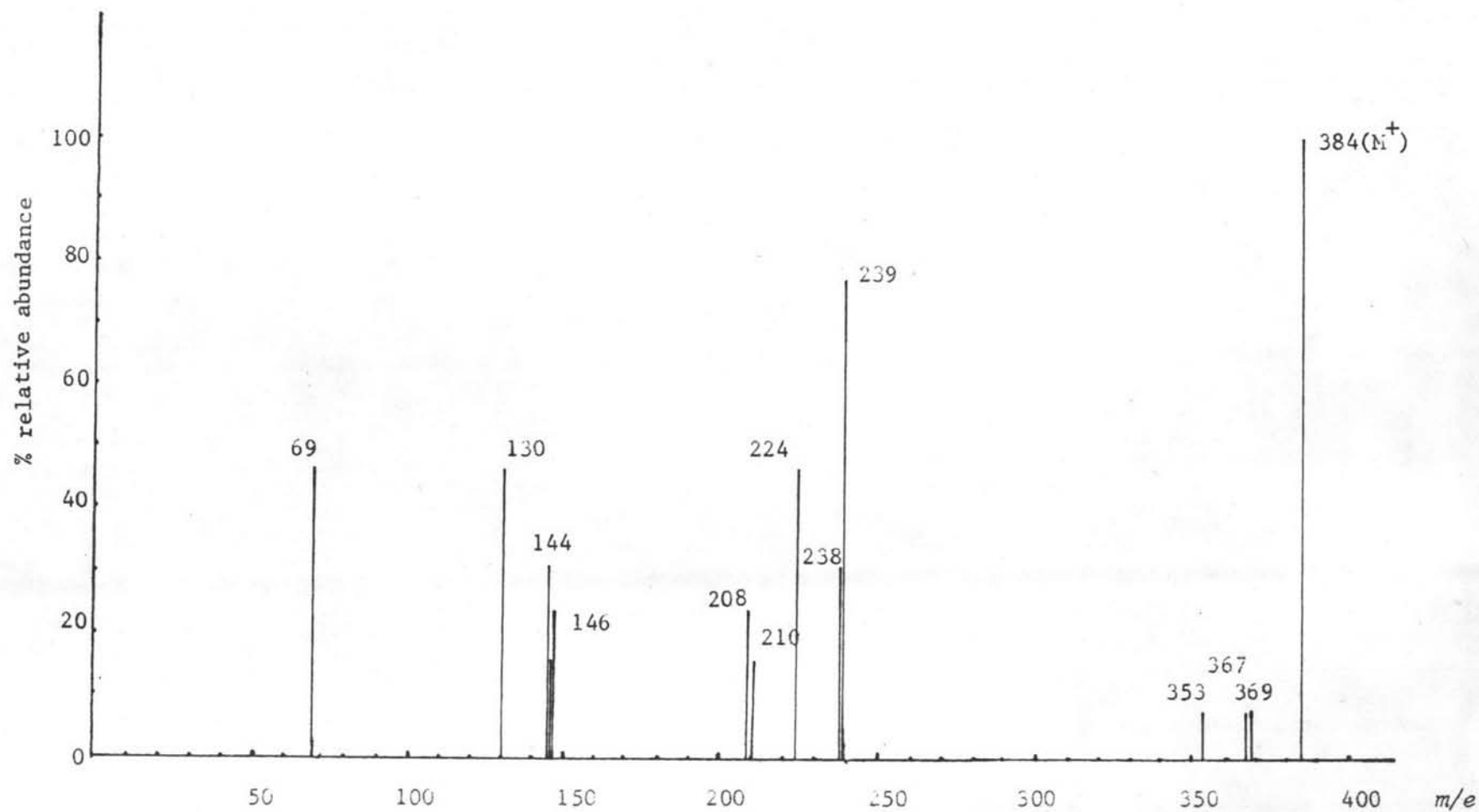


Figure XXIV Mass spectrum of S_4 (isolated corynoxine B).

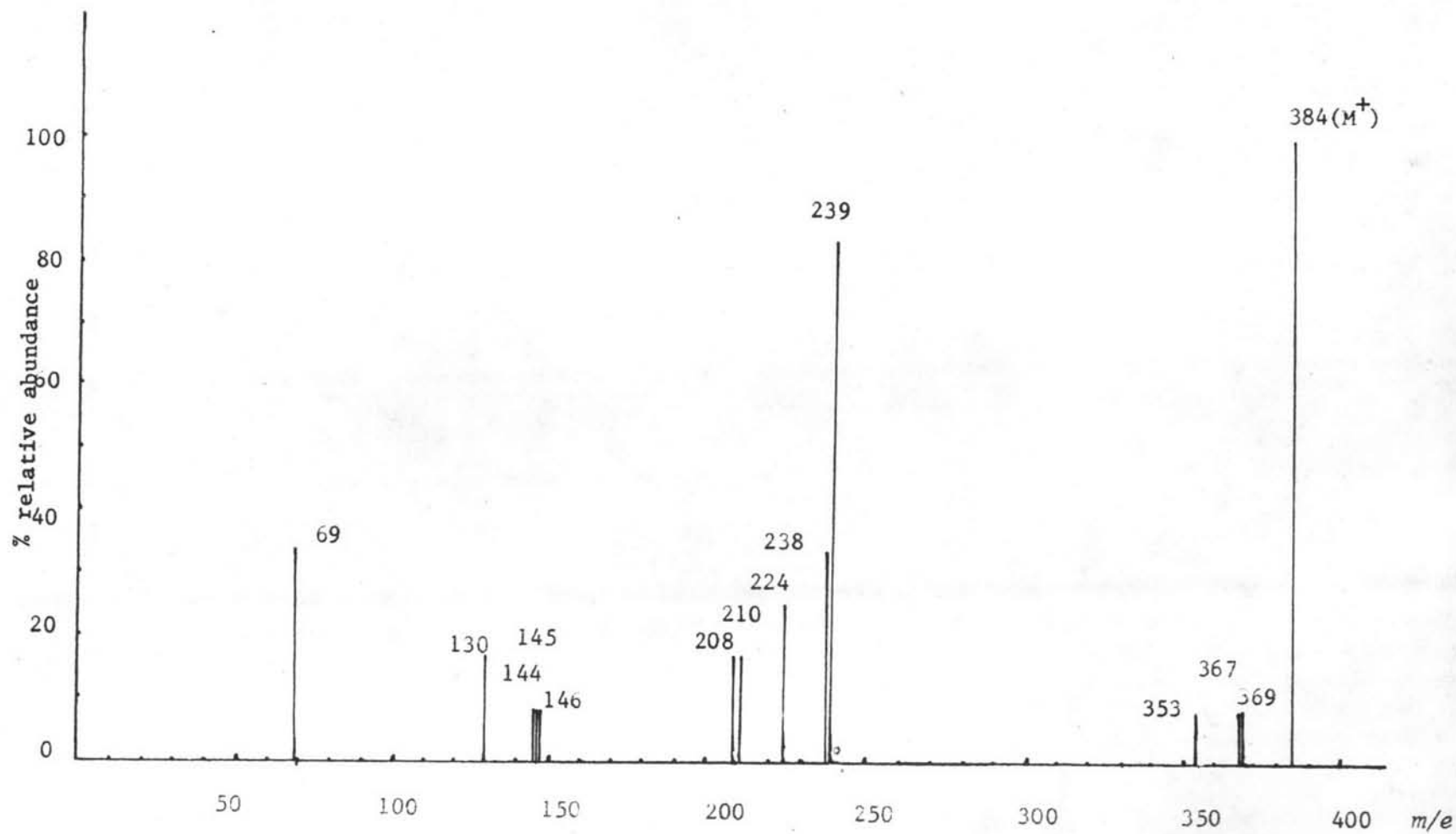


Figure XXV Mass spectrum of S_5 (isolated rhynchophylline).

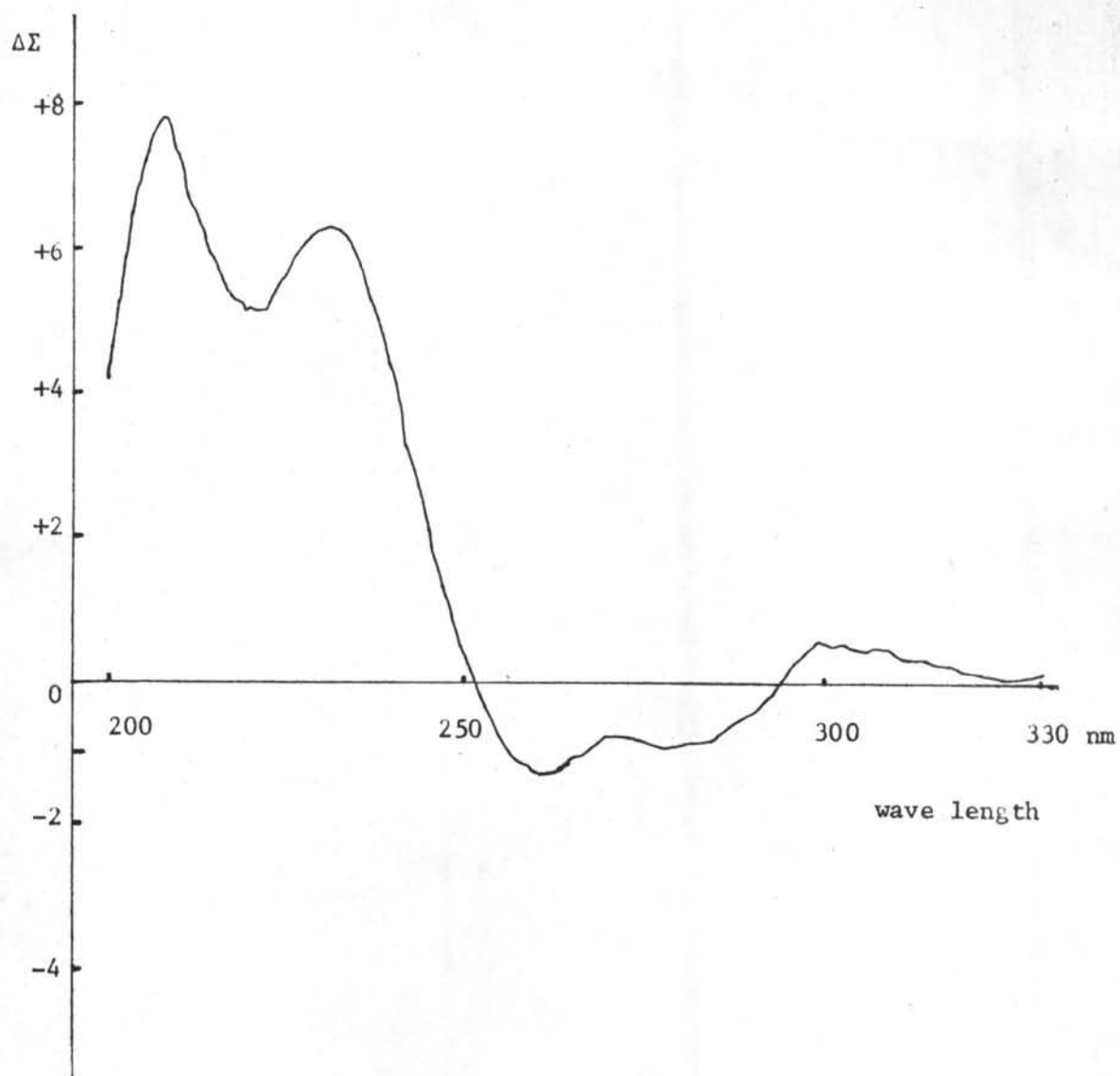


Figure XXVI Circular dichroism of S₂ (isolated corynoxine).

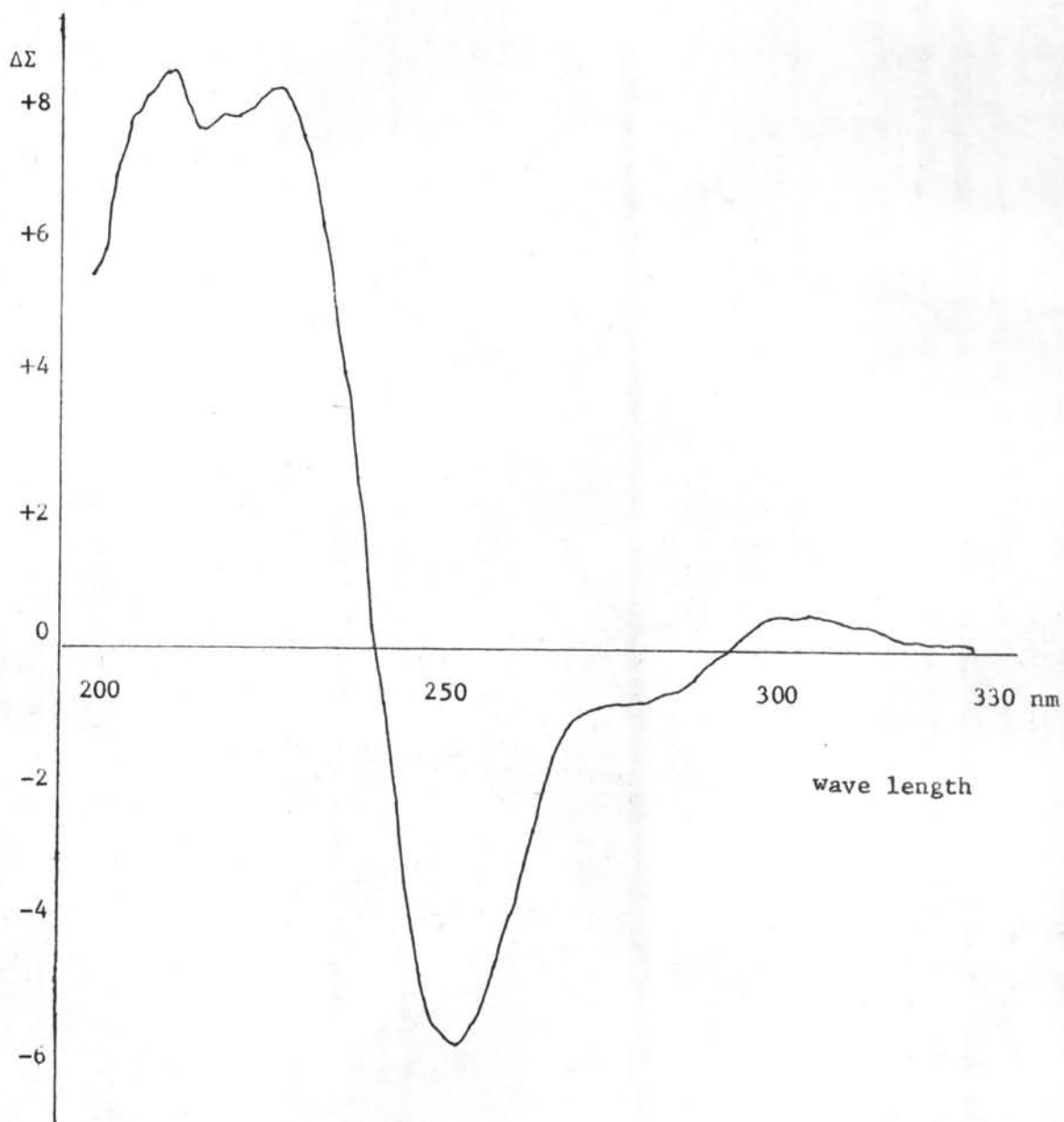


Figure XXVII Circular dichroism of S₃ (isolated isorhynchophylline).

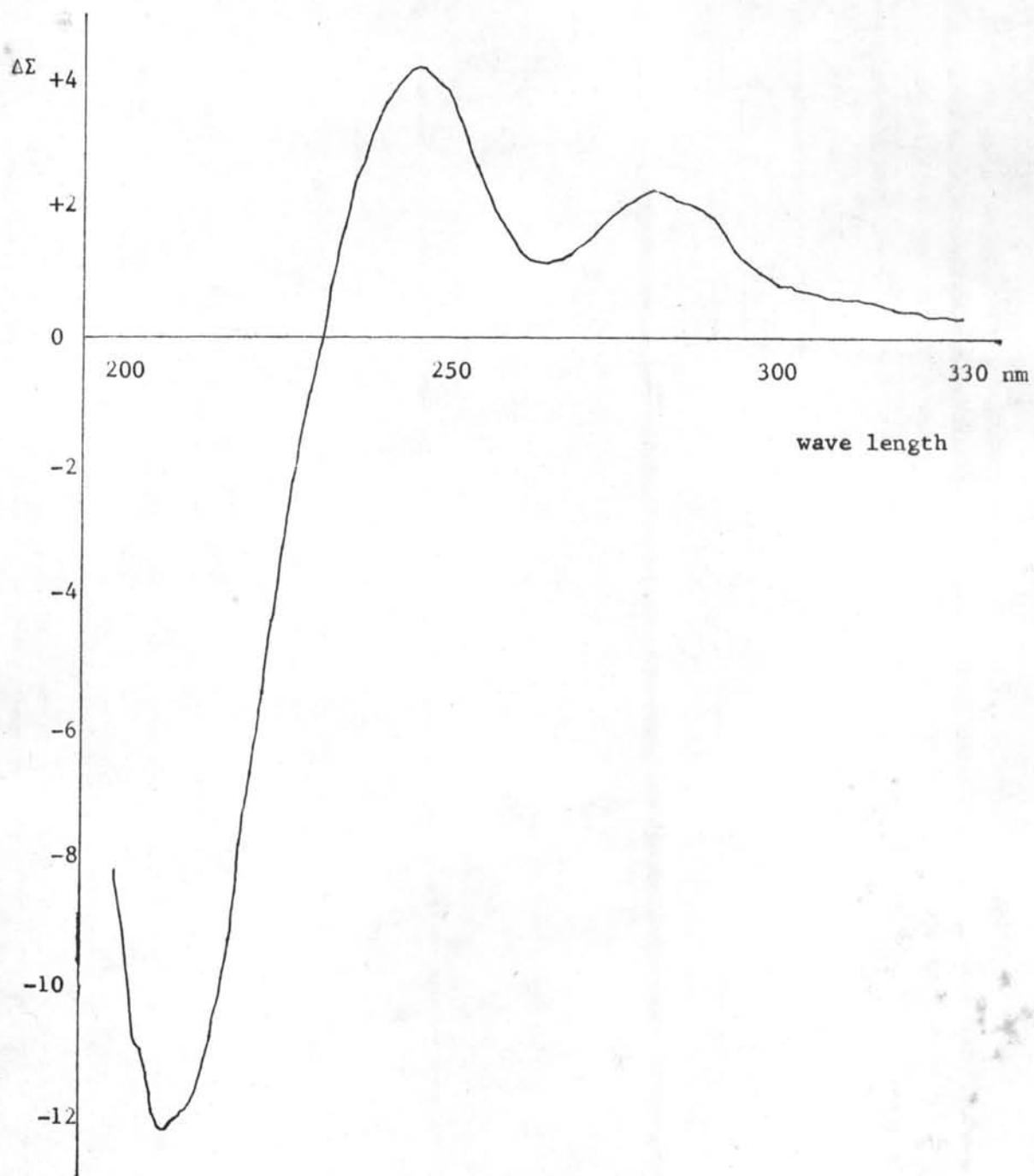


Figure XXVIII Circular dichroism of S₄ (isolated corynoxine B).

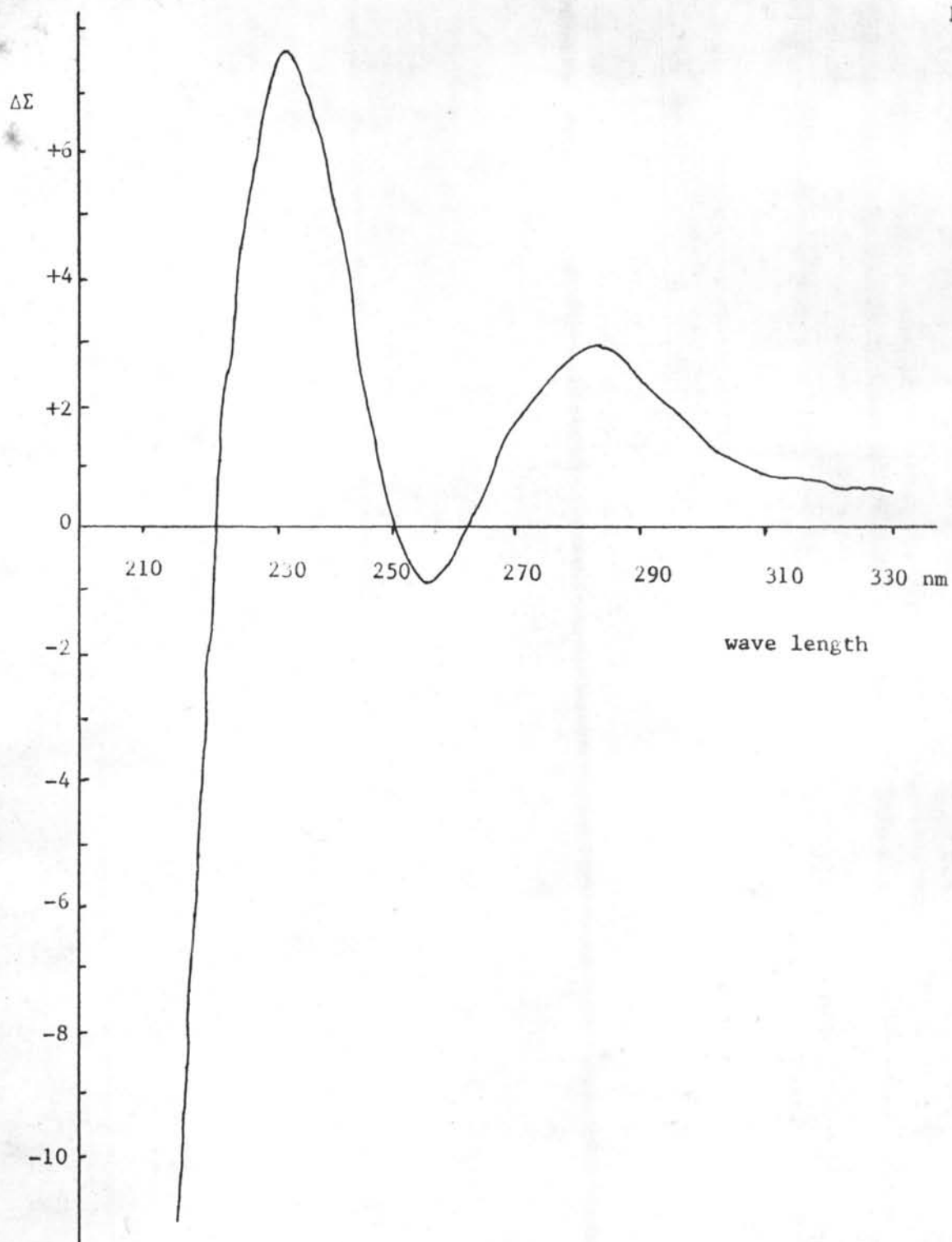
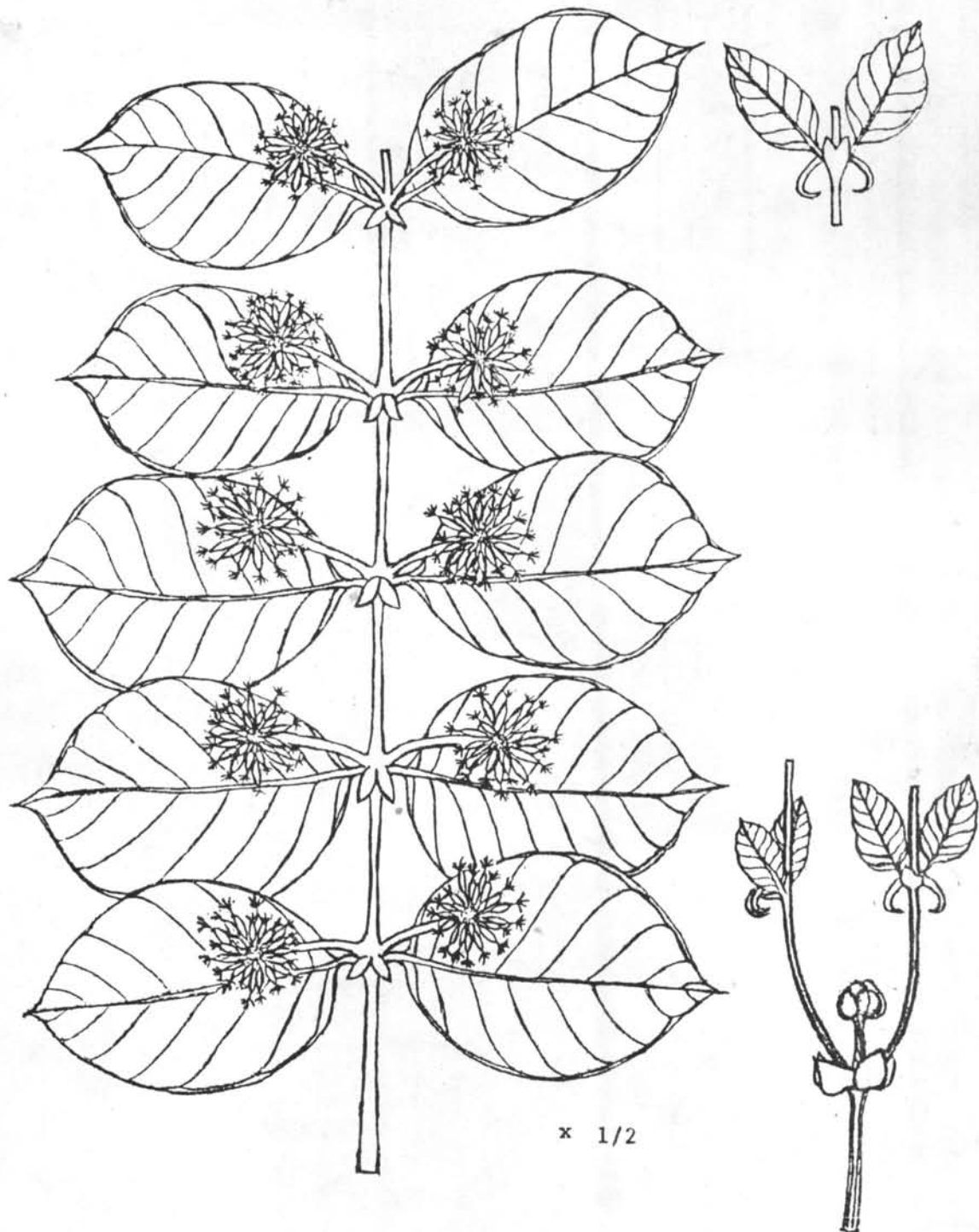


Figure XXIX Circular dichroism of S_5 (isolated rhynchophylline).



"เขาควายแม่หลุบ"

Uncaria macrophylla Wall.

VITA



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