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APPENDIX

silica gel G / 4% methanol in chloroform

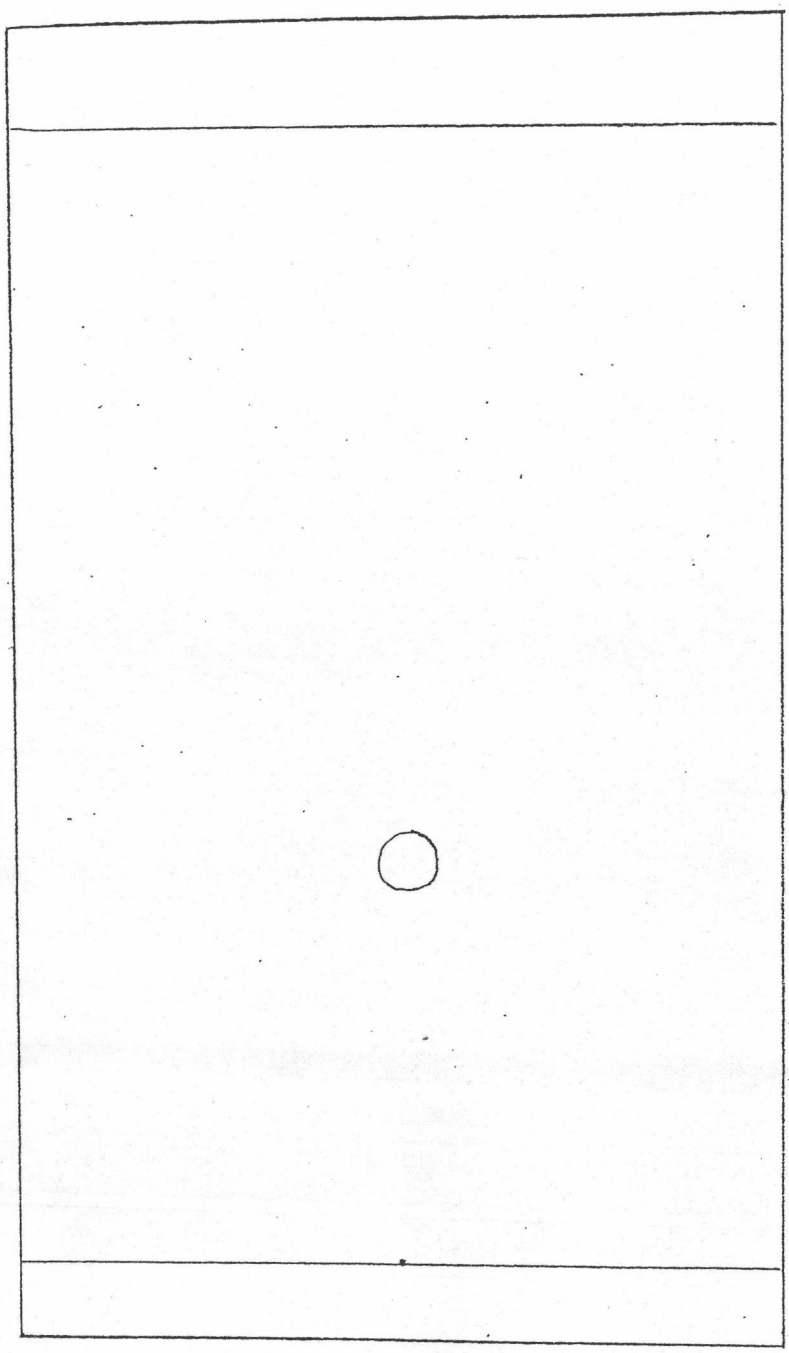

Fig. 4 Thin layer chromatogram of alkaloid Py

silica gel G / chloroform

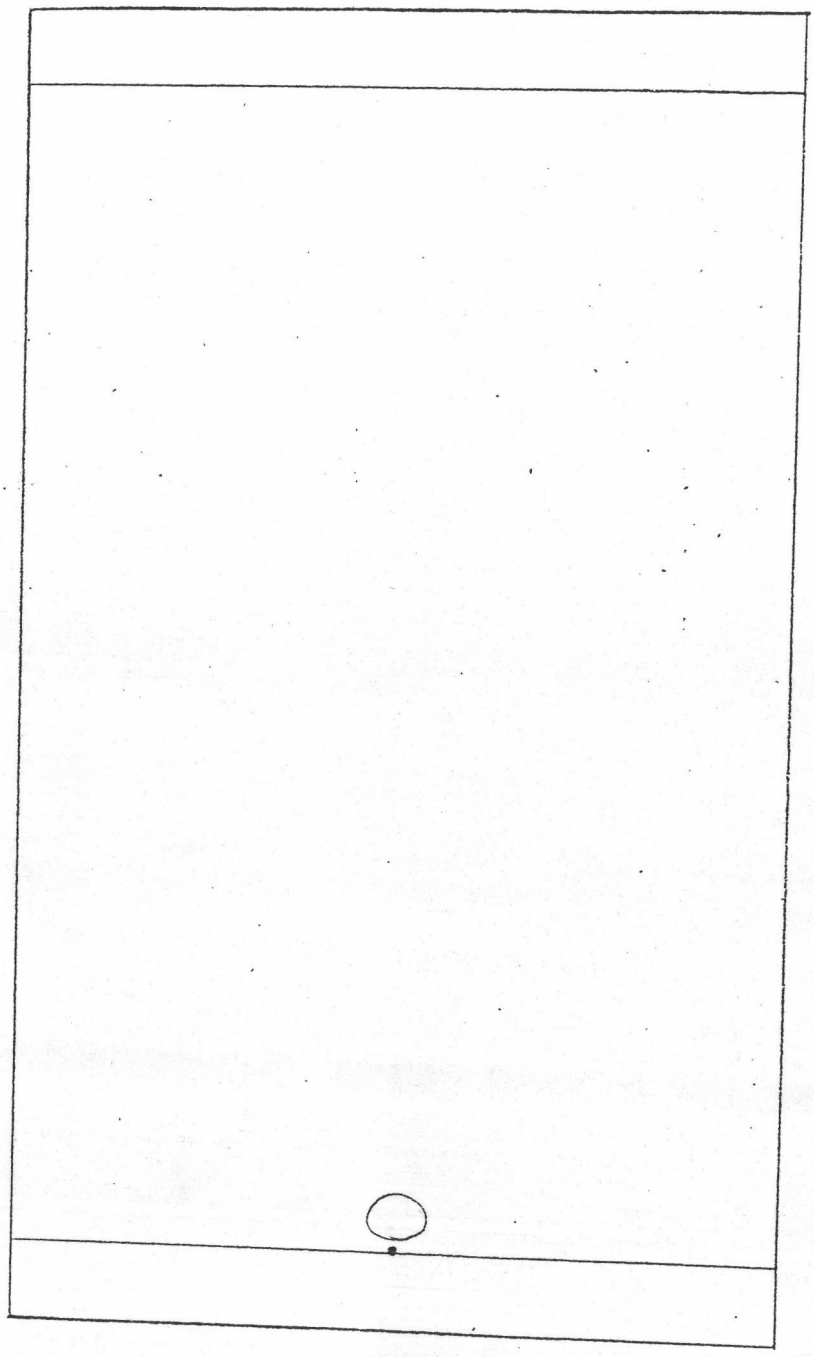

Fig. 5 Thin layer chromatogram of alkaloid Py

silica gel G / 10% acetone in chloroform

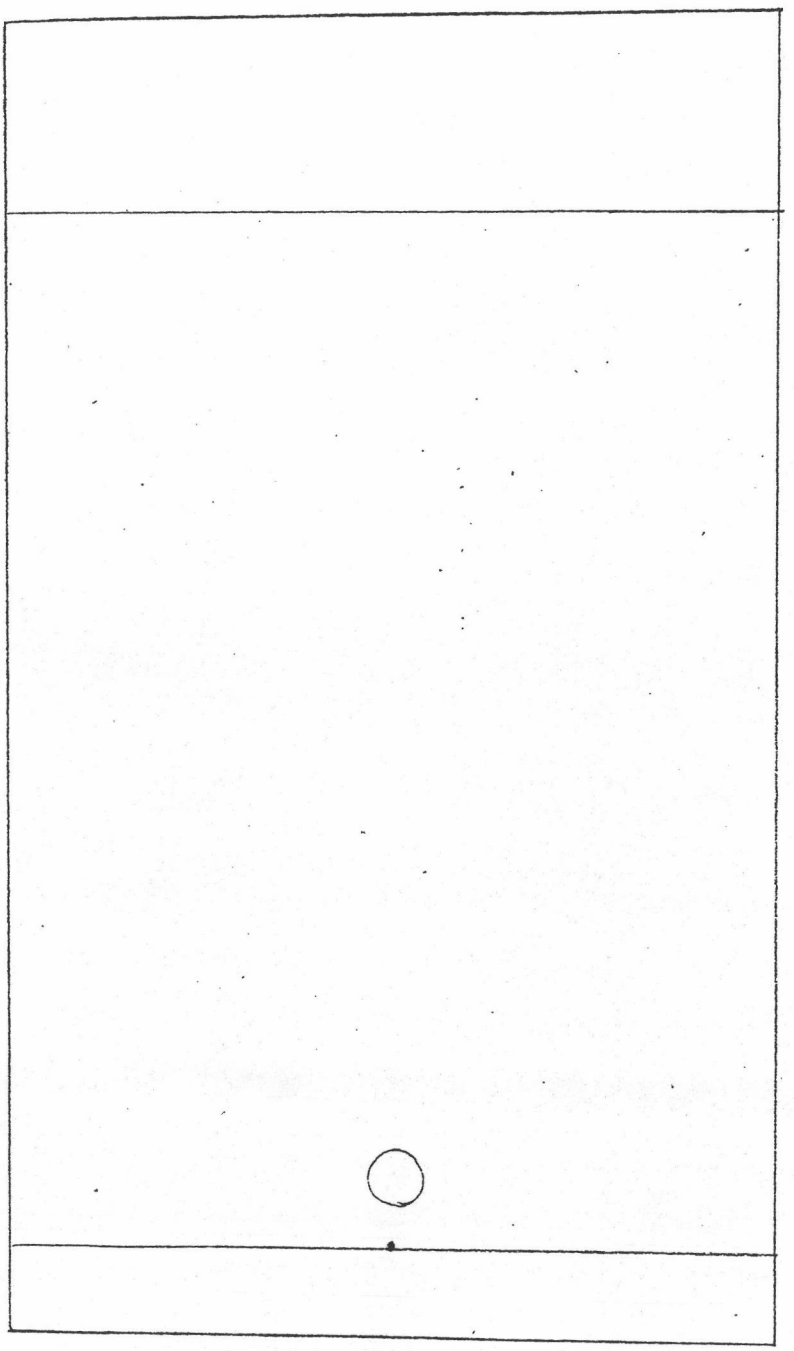

Fig. 6 Thin layer chromatogram of alkaloid Py

silica gel G / 30% benzene in chloroform

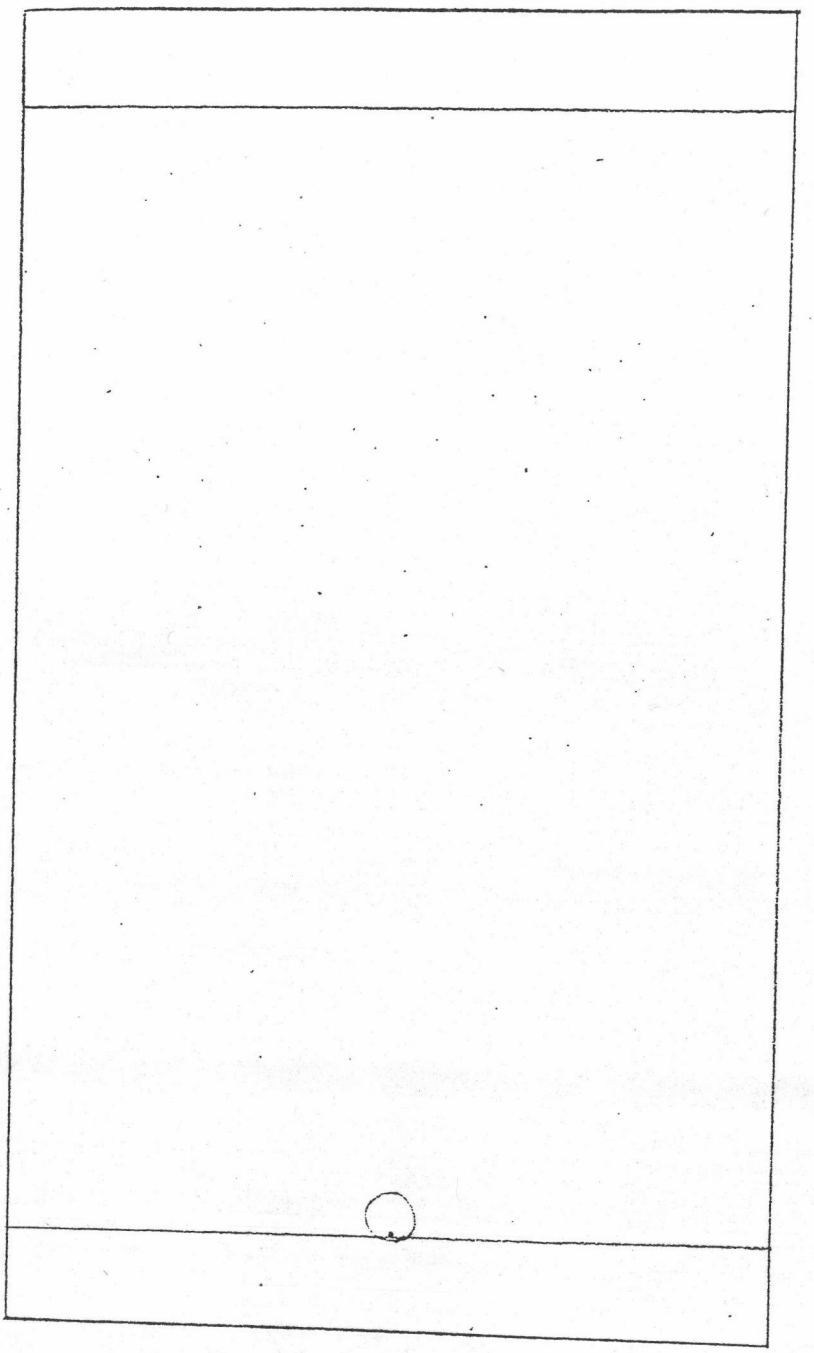

Fig. 7 Thin layer chromatogram of alkaloid Py

silica gel G / 10% ethyl acetate in chloroform

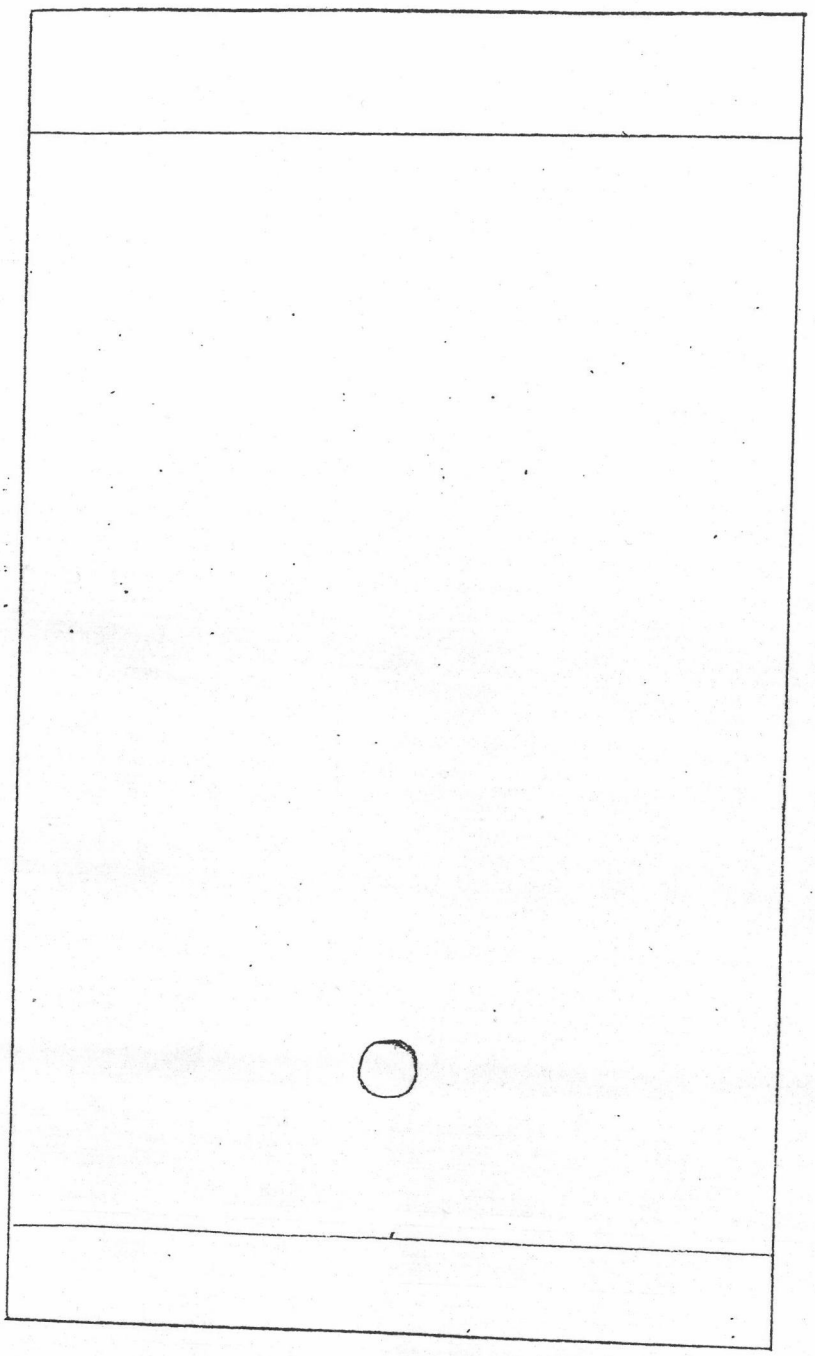

Fig. 8 Thin layer chromatogram of alkaloid Py

SCIENTIFIC AND TECHNOLOGICAL RESEARCH EQUIPMENT CENTER

CHULALONGKORN UNIVERSITY

ANALYSIS REPORT

SAMPLE	จันทน์ชะมด	
SAMPLE OWNER	นายจินดาพร ภูริพัฒนาวงษ์	
INSTRUMENT	ELEMENTAL ANALYZER(PERKIN ELMER 240C)	
ANALYSIS CONDITION	COMBUSTION TEMP.	950 °C
	REDUCTION TEMP.	650 °C
	HELIUM PRESSURE	18.5 psi
	OXYGEN PRESSURE	17.5 psi

RESULTS

SAMPLE NAME		%N	%C	%H
compound X	(1)	9.82	49.76	7.97
	(2)	9.70	49.67	8.18
alkaloid Py	(1)	8.66	73.74	6.93
	(2)	8:52	73.97	6.89

ANALYST

DATE

หมายเหตุ ผลการทดสอบที่ได้รับนี้ เป็นผลการทดสอบเฉพาะตัวอย่างที่ทำการทดสอบจาก ศูนย์เครื่องมือวิจัยวิทยาศาสตร์และเทคโนโลยีเท่านั้น

AU/WS

Fig. 9 Elemental analysis of alkaloid Py and compound X

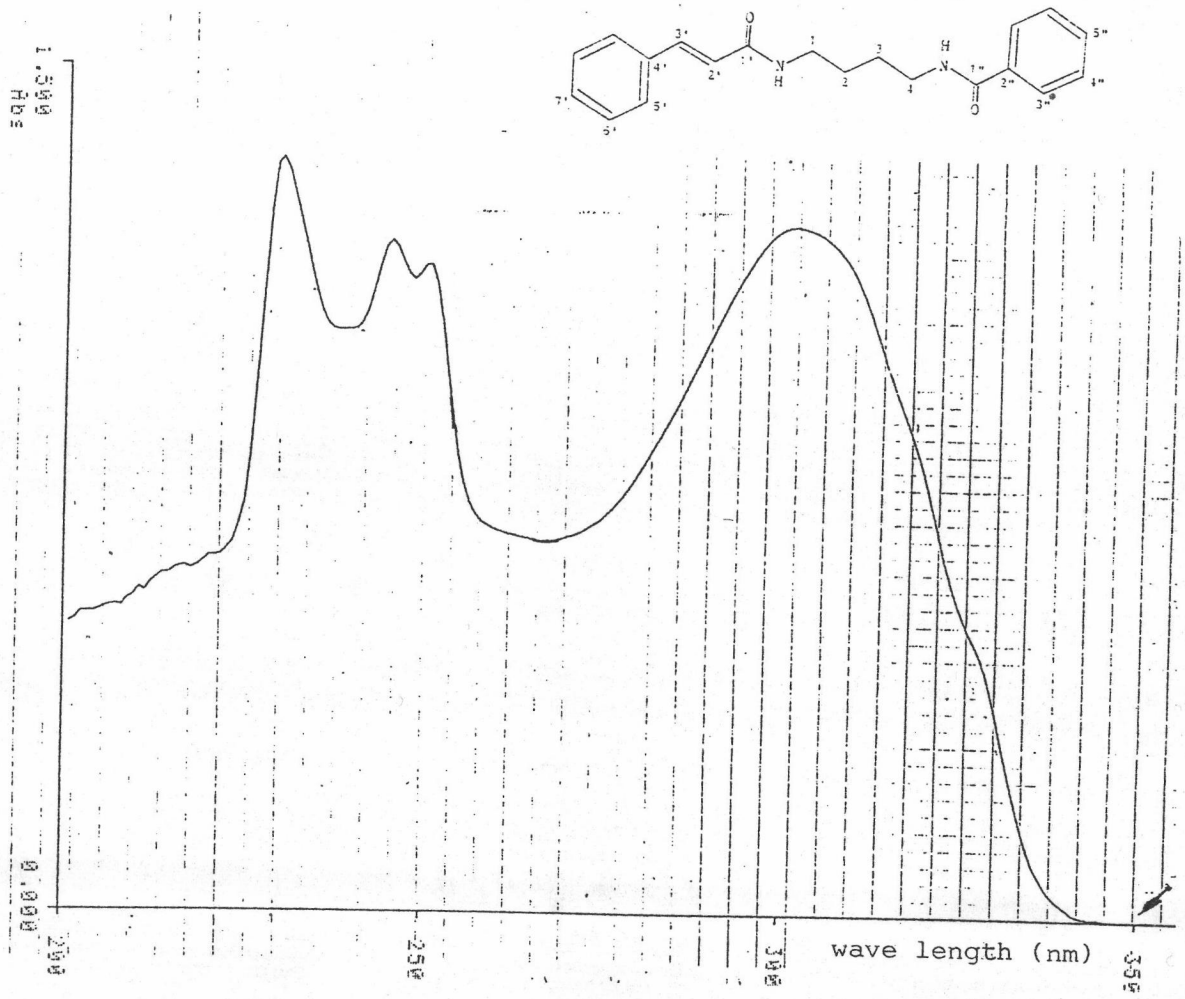

Fig. 10 Ultraviolet absorption spectrum of alkaloid Py

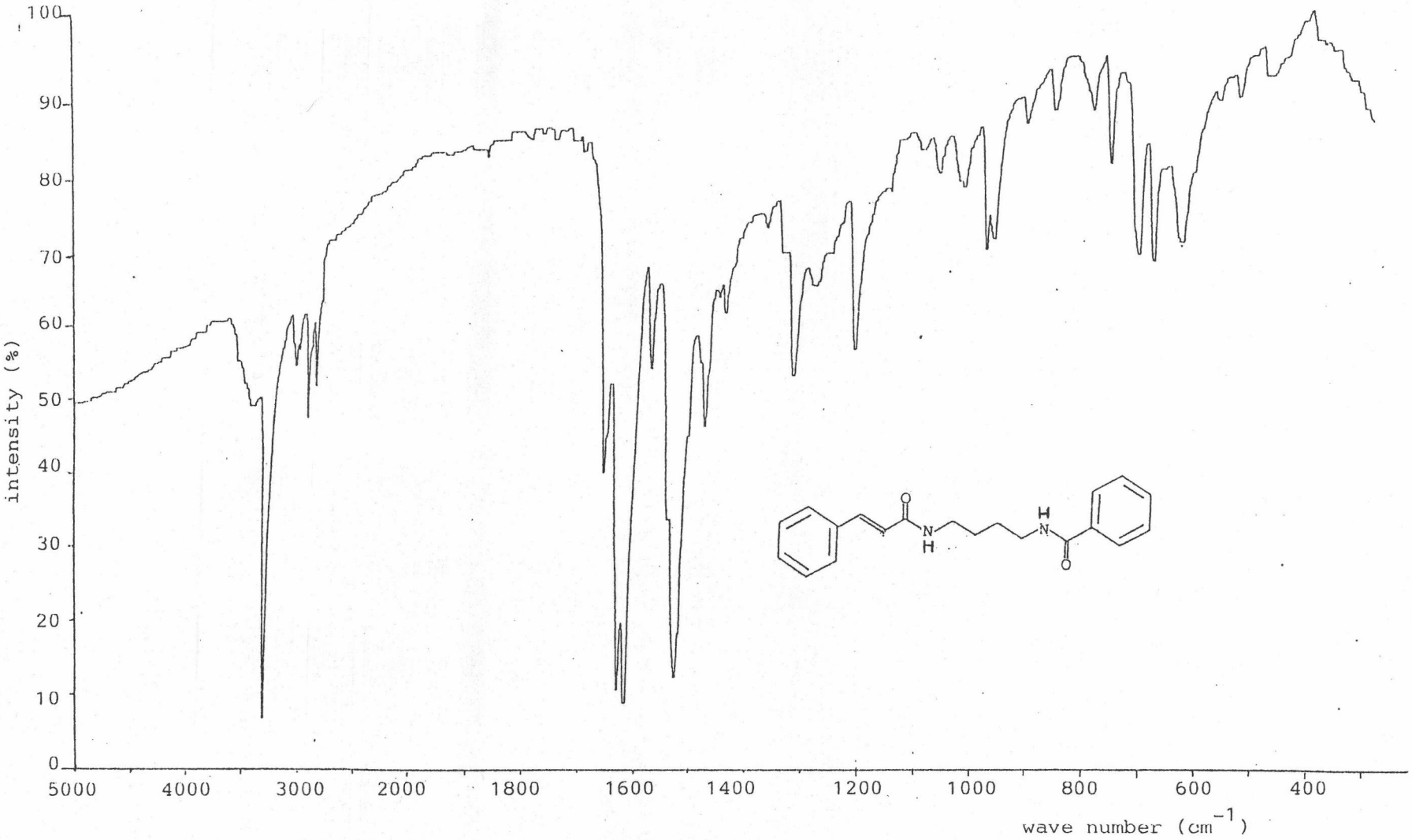

Fig. 11 Infrared absorption spectrum of alkaloid Py

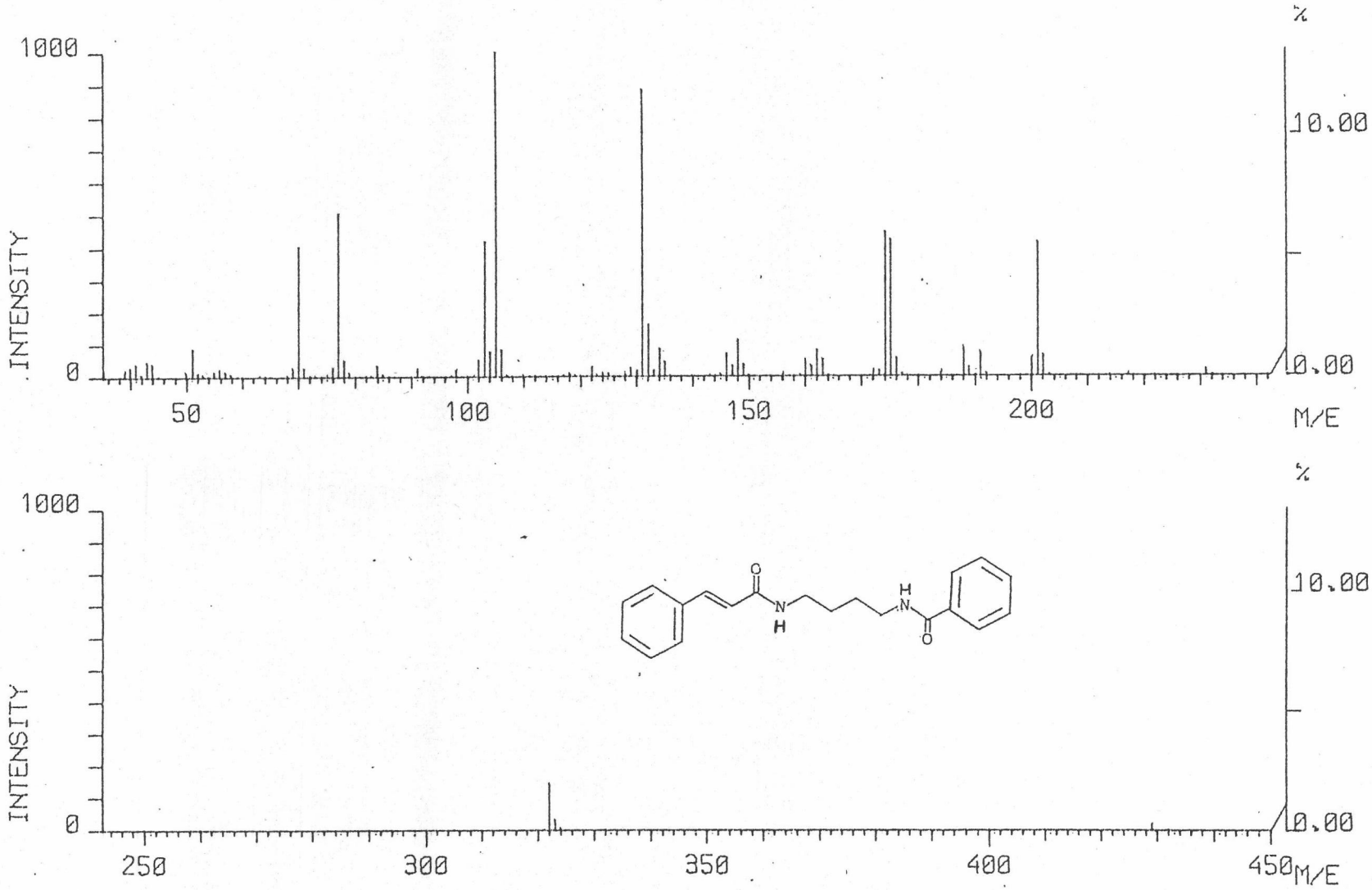

Fig. 12 Mass spectrum of alkaloid Py

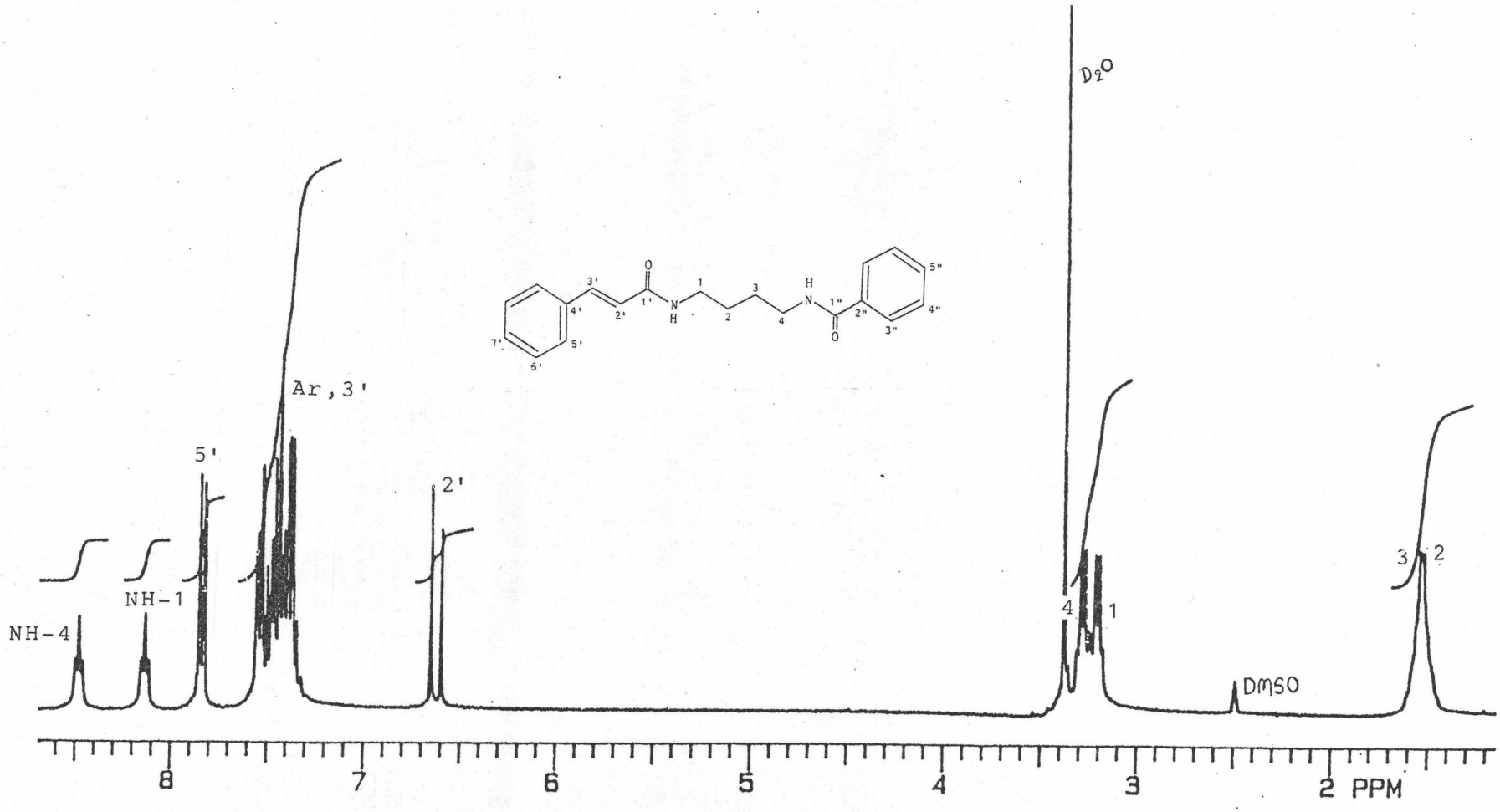

Fig. 13 ^{1}H Nuclear magnetic resonance spectrum (300 MHz) of alkaloid Py in DMSO-d_6

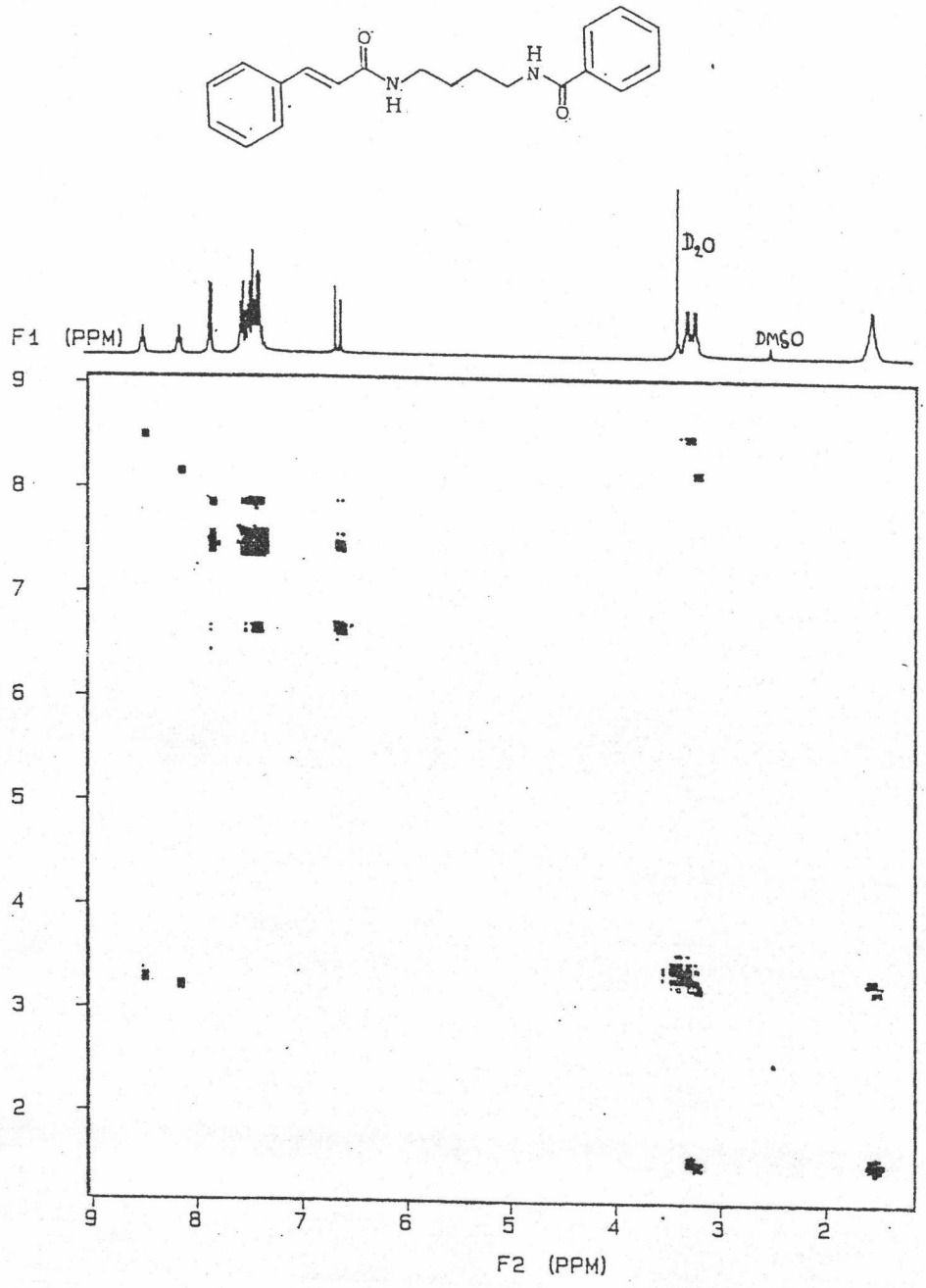

Fig. 14 2-D Homonuclear (COSY) nuclear magnetic resonance spectrum (300 MHz) of alkaloid Py

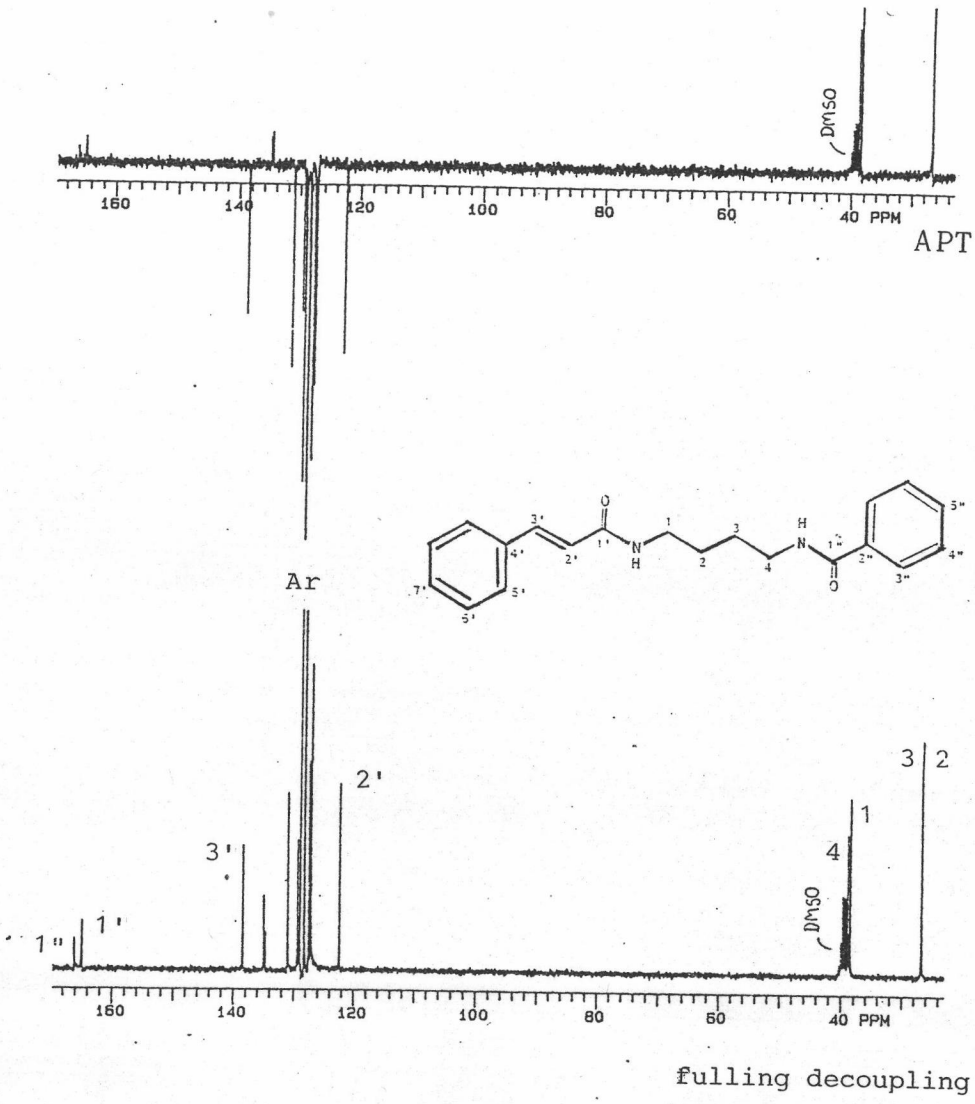

Fig. 15 ^{13}C Nuclear magnetic resonance spectrum (75 MHz) of alkaloid Py in DMSO-d_6

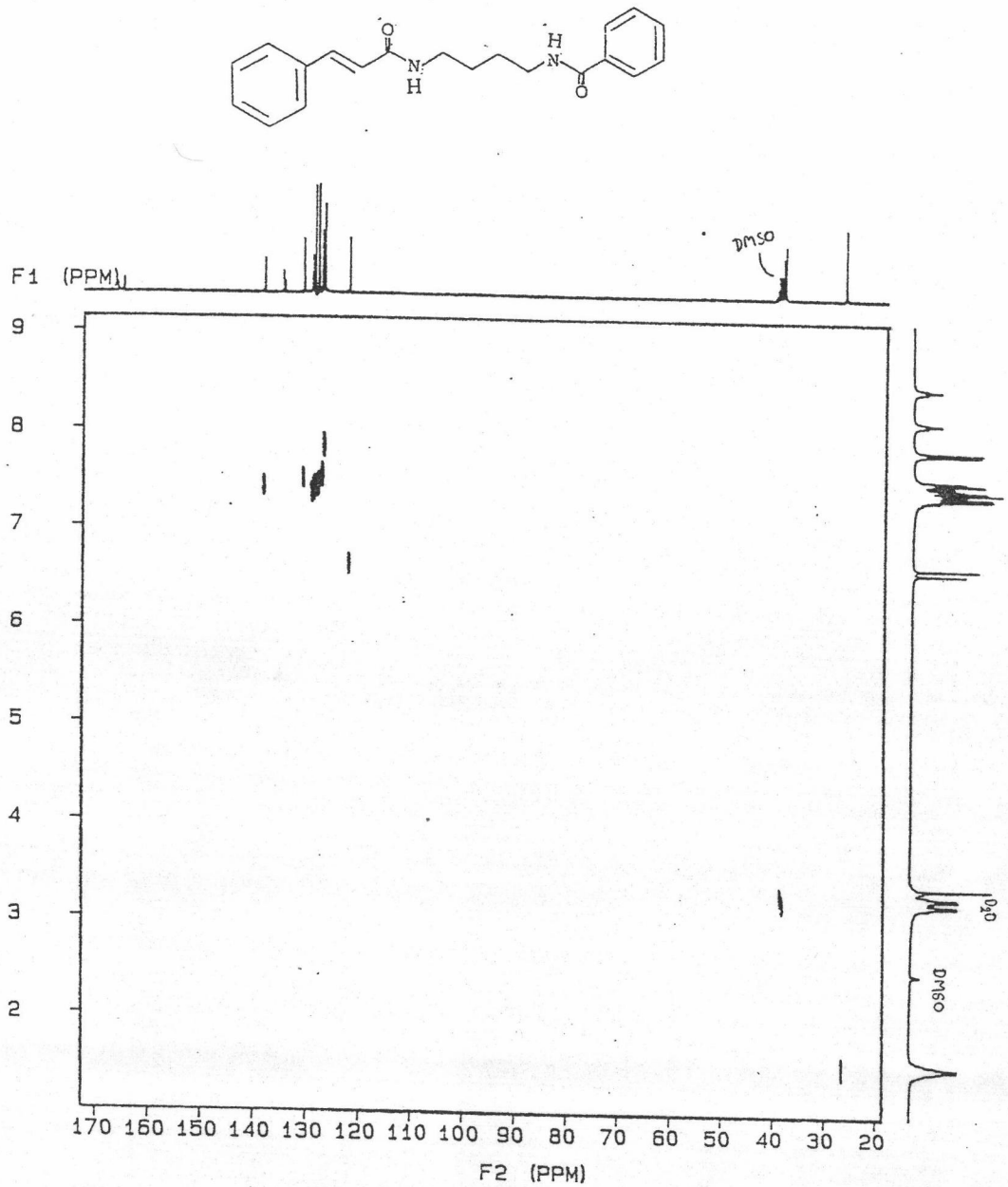

Fig. 16 2-D Heteronuclear (HETCOR) nuclear magnetic resonance spectrum (300 MHz) of alkaloid Py

silica gel G / 50% methanol in chloroform

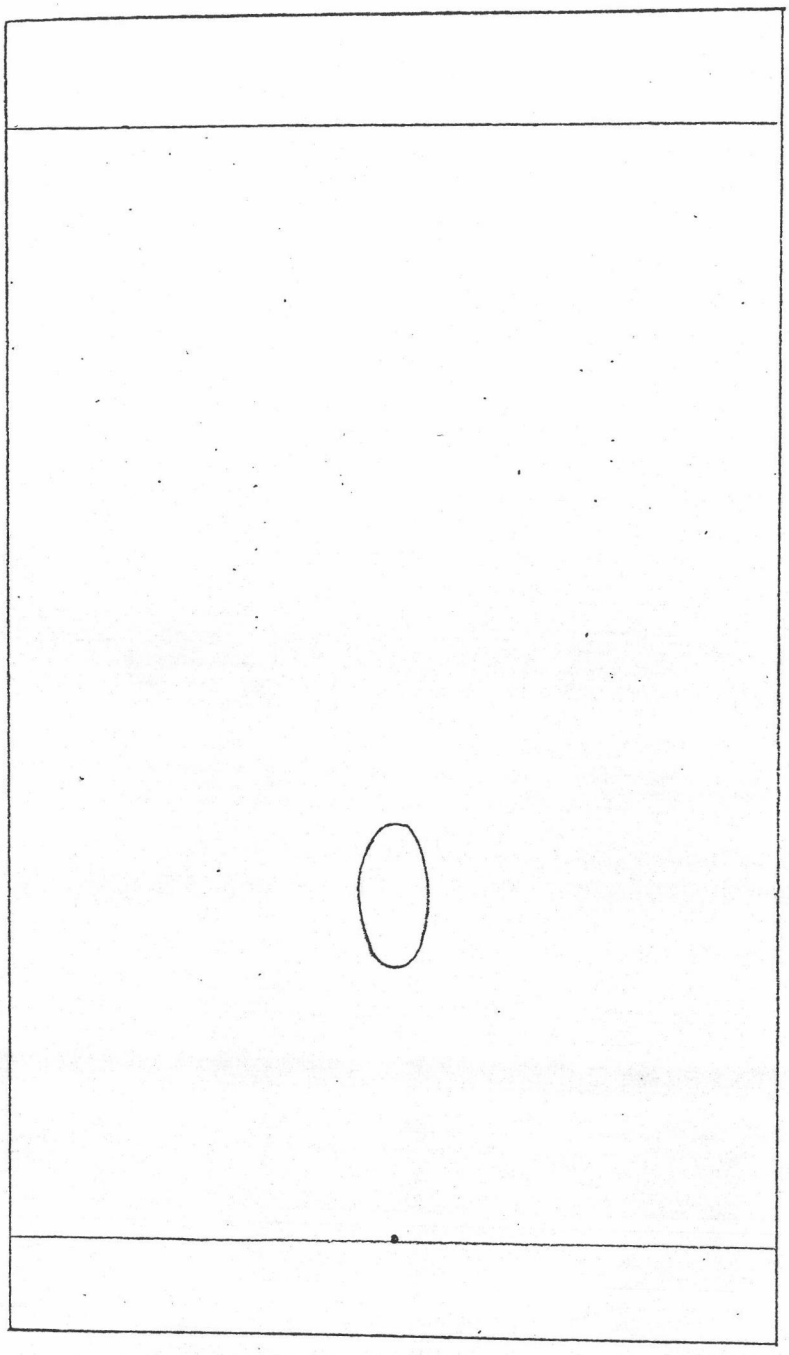

Fig. 17 Thin layer chromatogram of compound X

silica gel G / 30% ethanol in chloroform

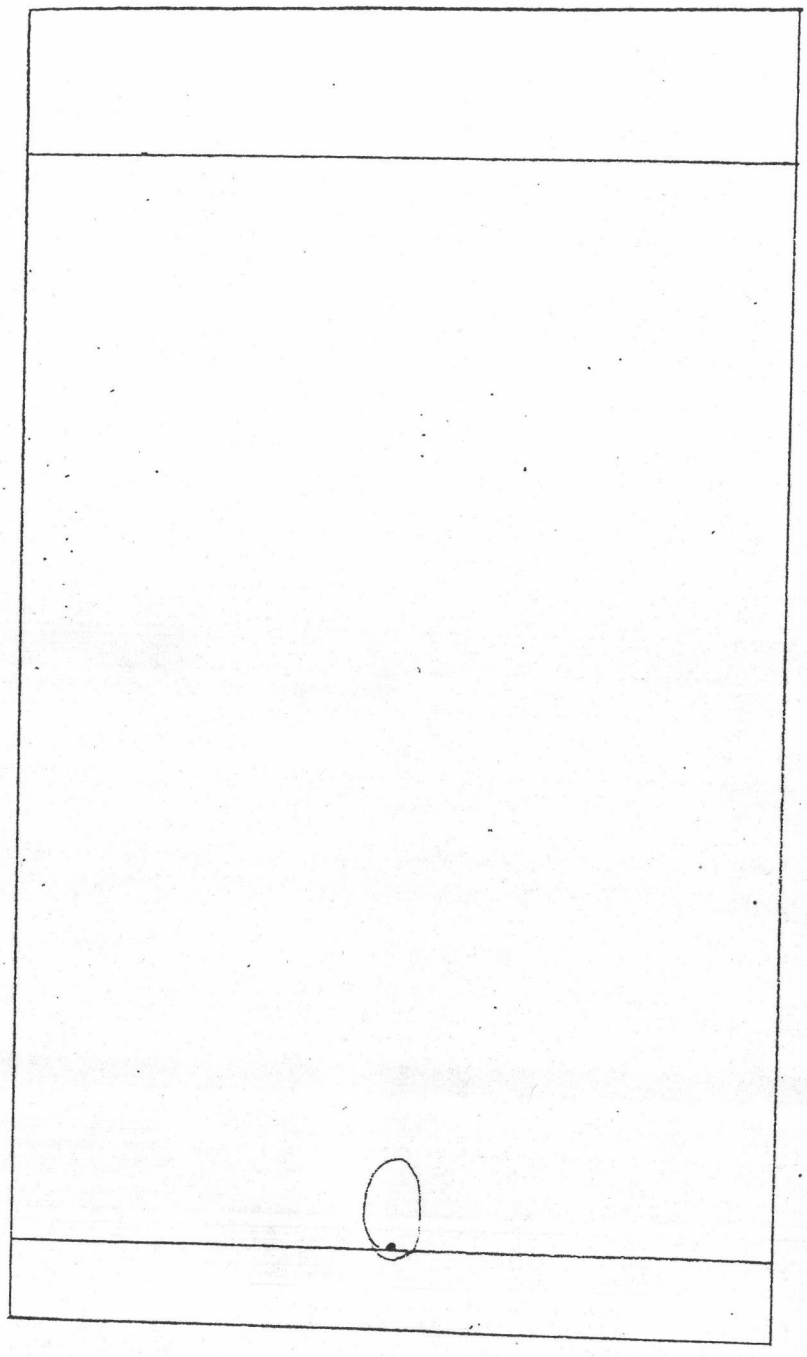

Fig. 18 Thin layer chromatogram of compound X

silica gel G / 50% acetnoe in methanol

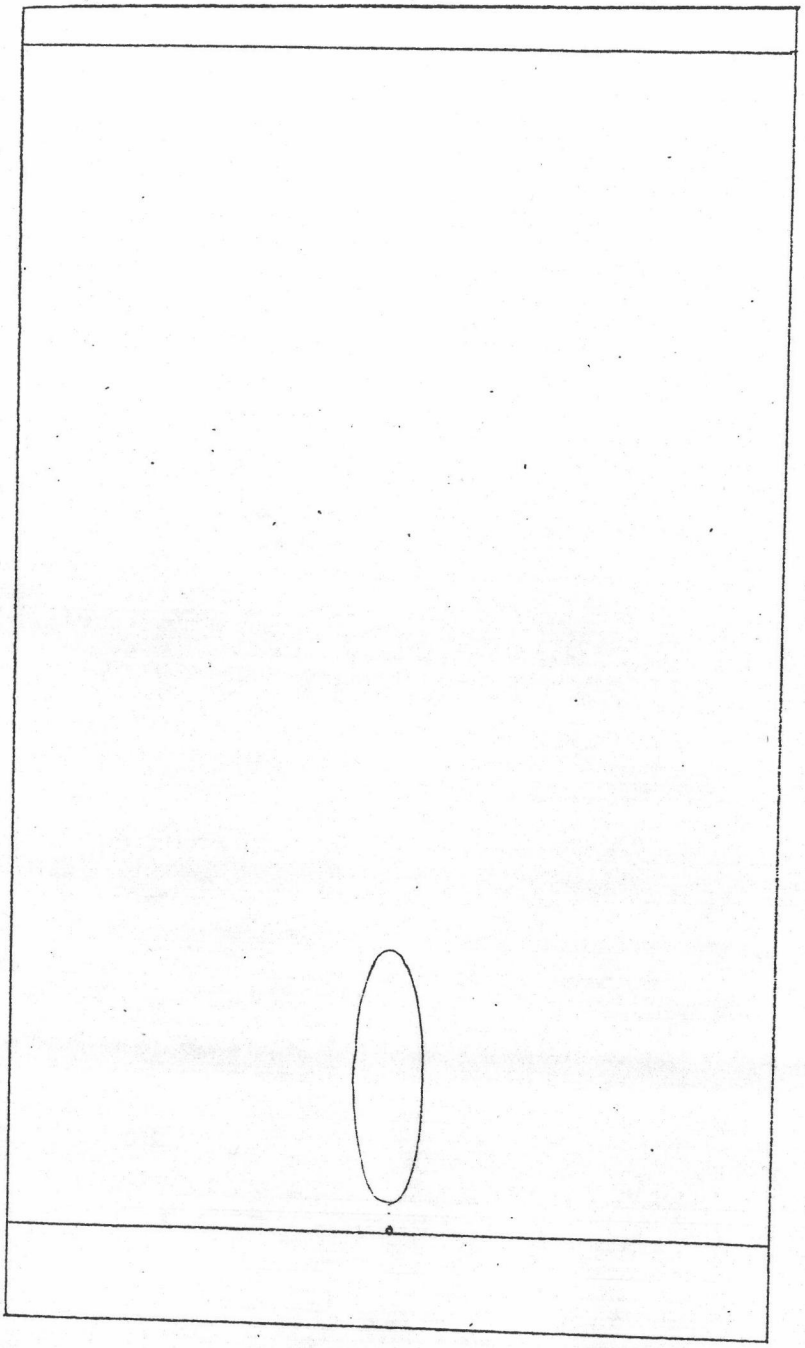

Fig. 19 Thin layer chromatogram of compound X

silica gel G / 50% ethyl acetate in methanol

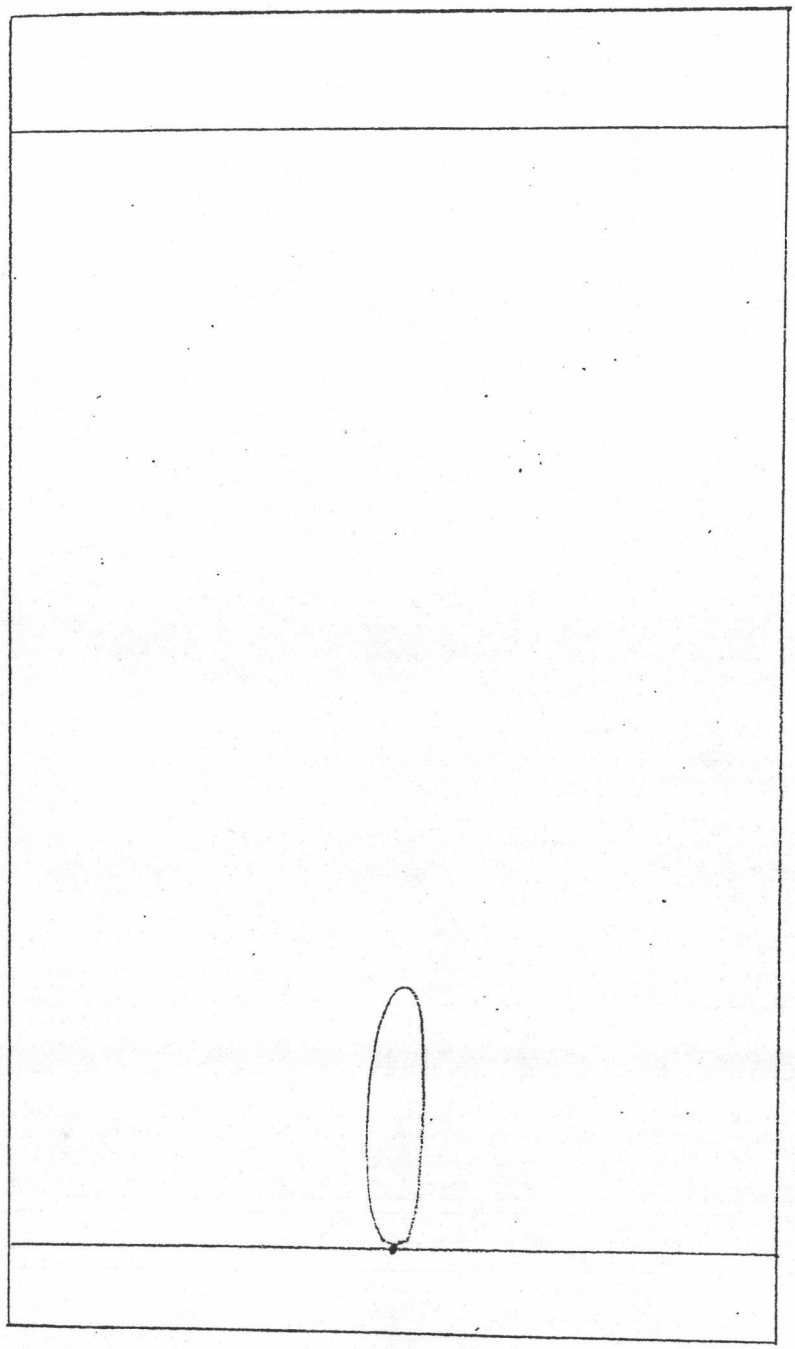

Fig. 20 Thin layer chromatogram of compound X

silica gel G / 30% ammonia in n-propyl alcohol

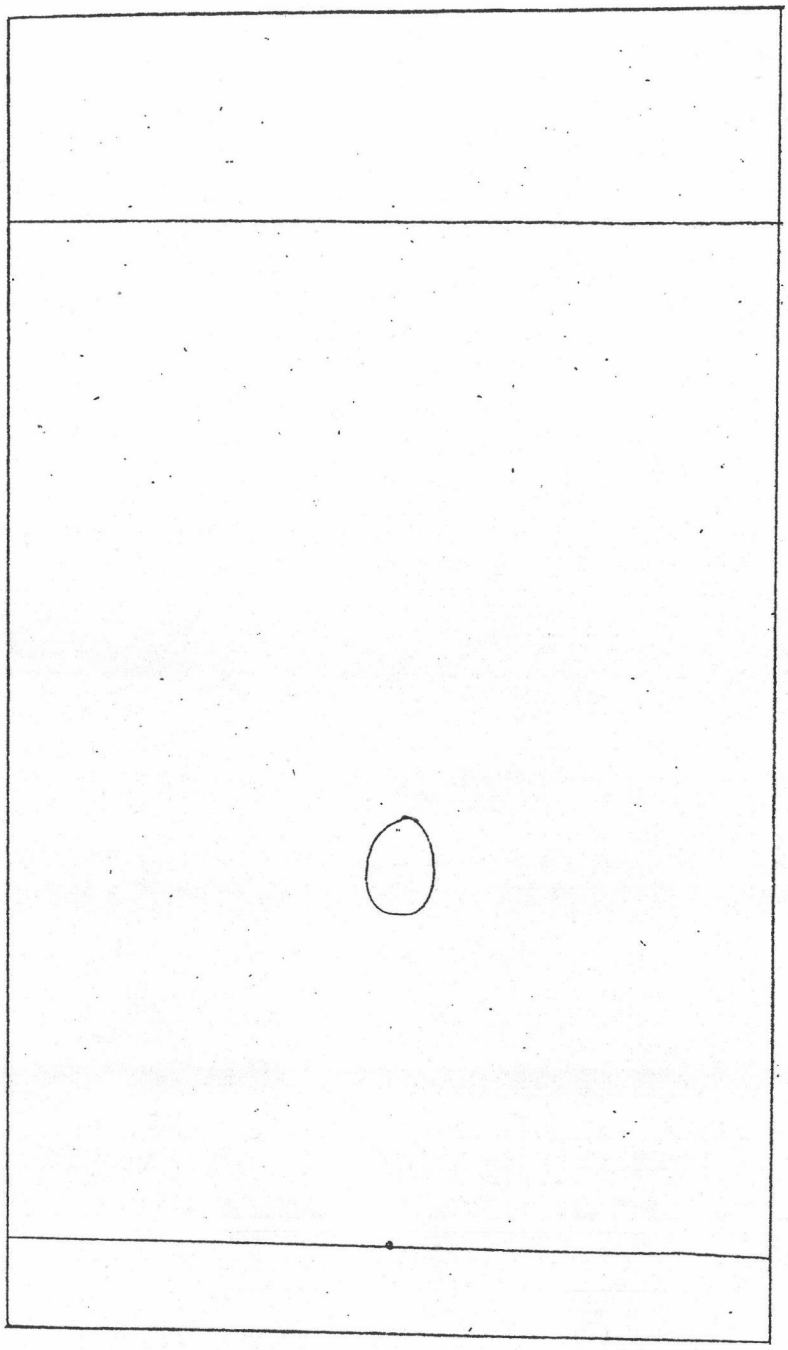

Fig. 21 Thin layer chromatogram of compound X

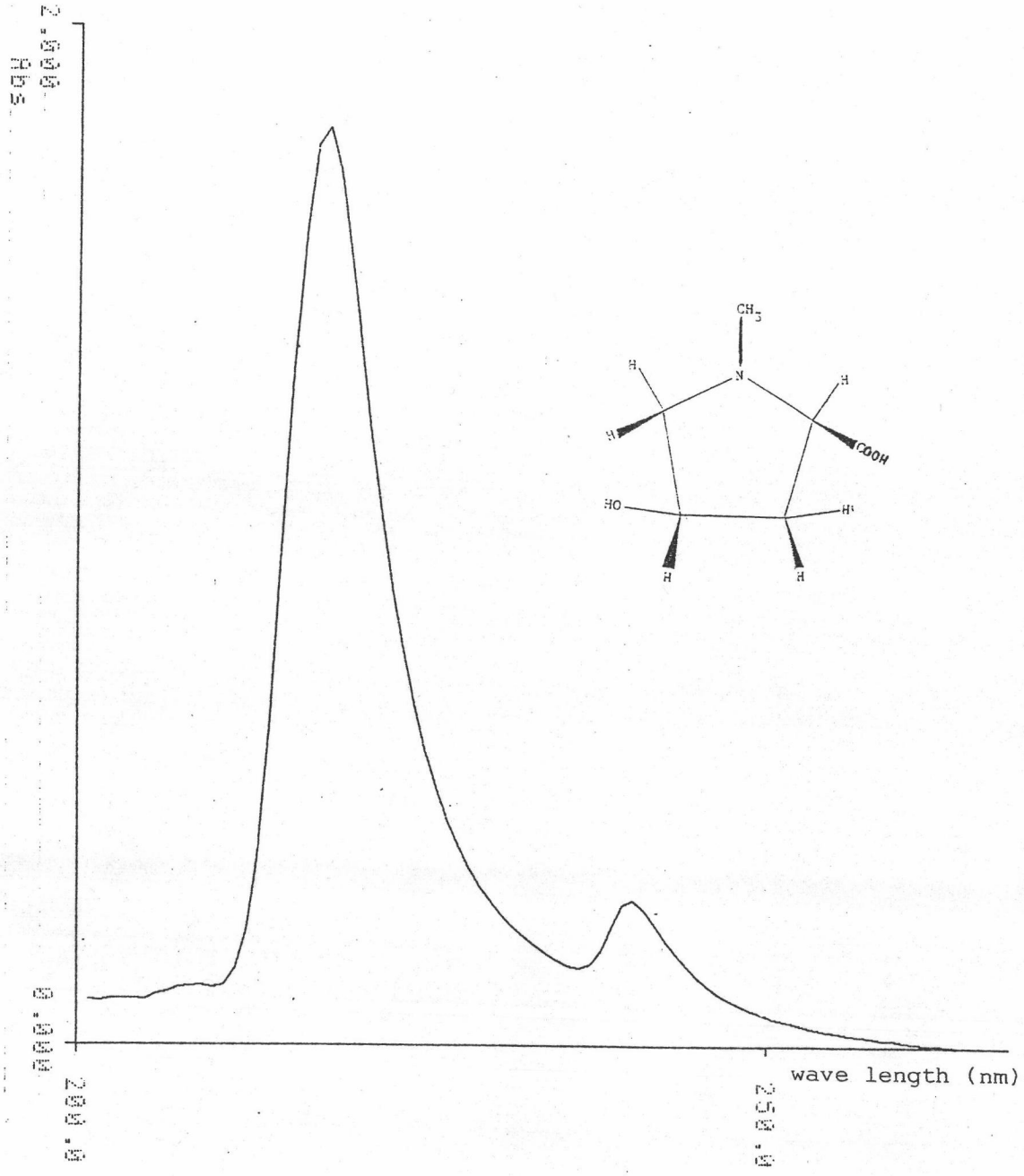

Fig. 22 Ultraviolet absorption spectrum of compound X

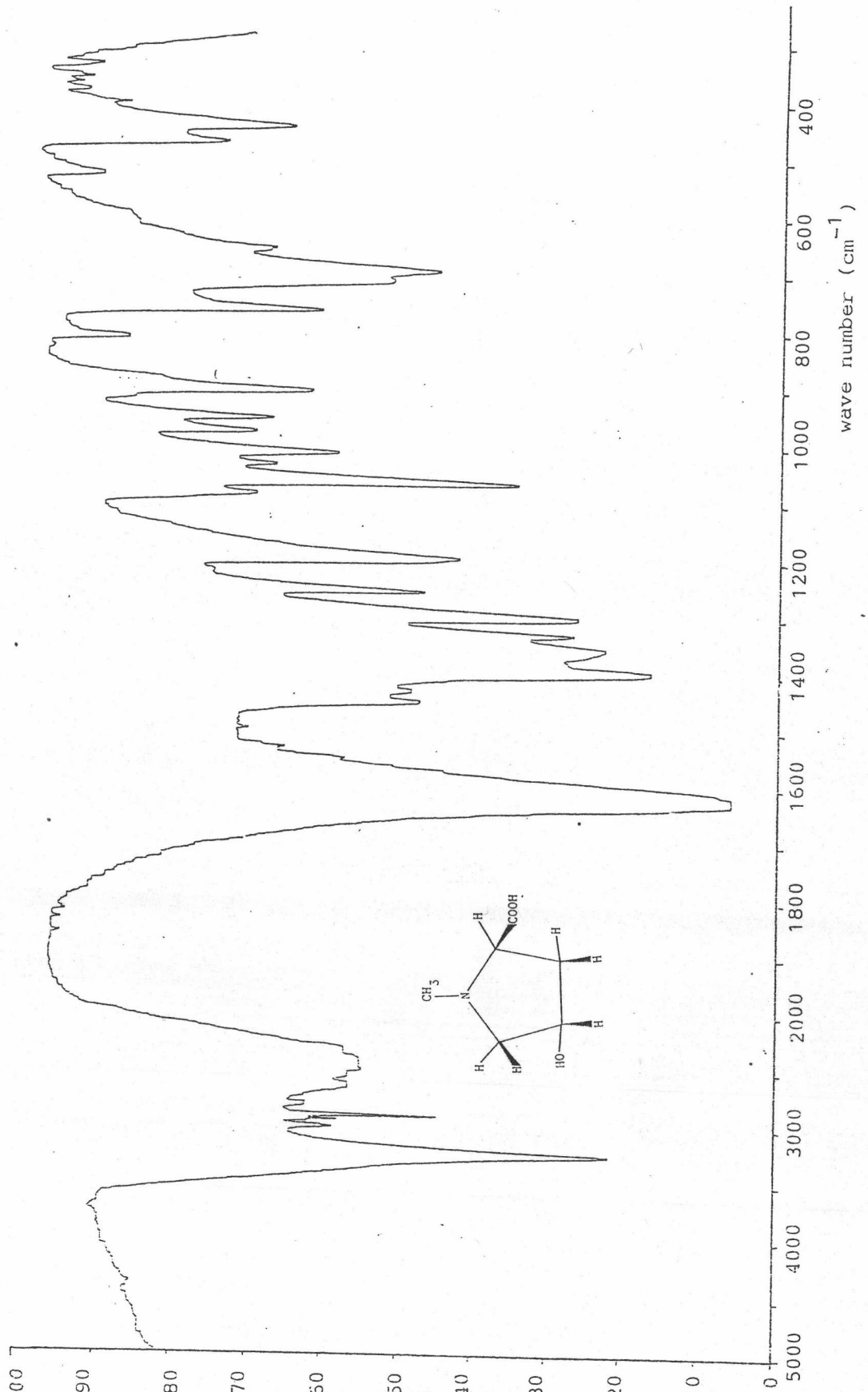

Fig. 23 Infrared absorption spectrum of compound X

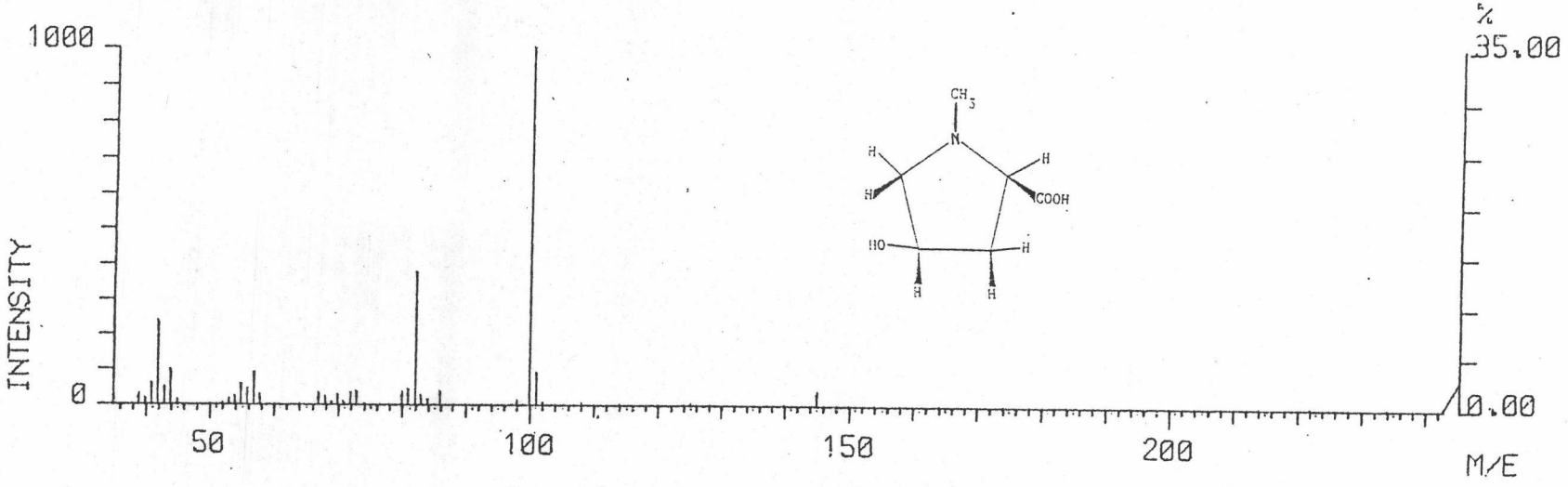

Fig. 24 Mass spectrum of compound X

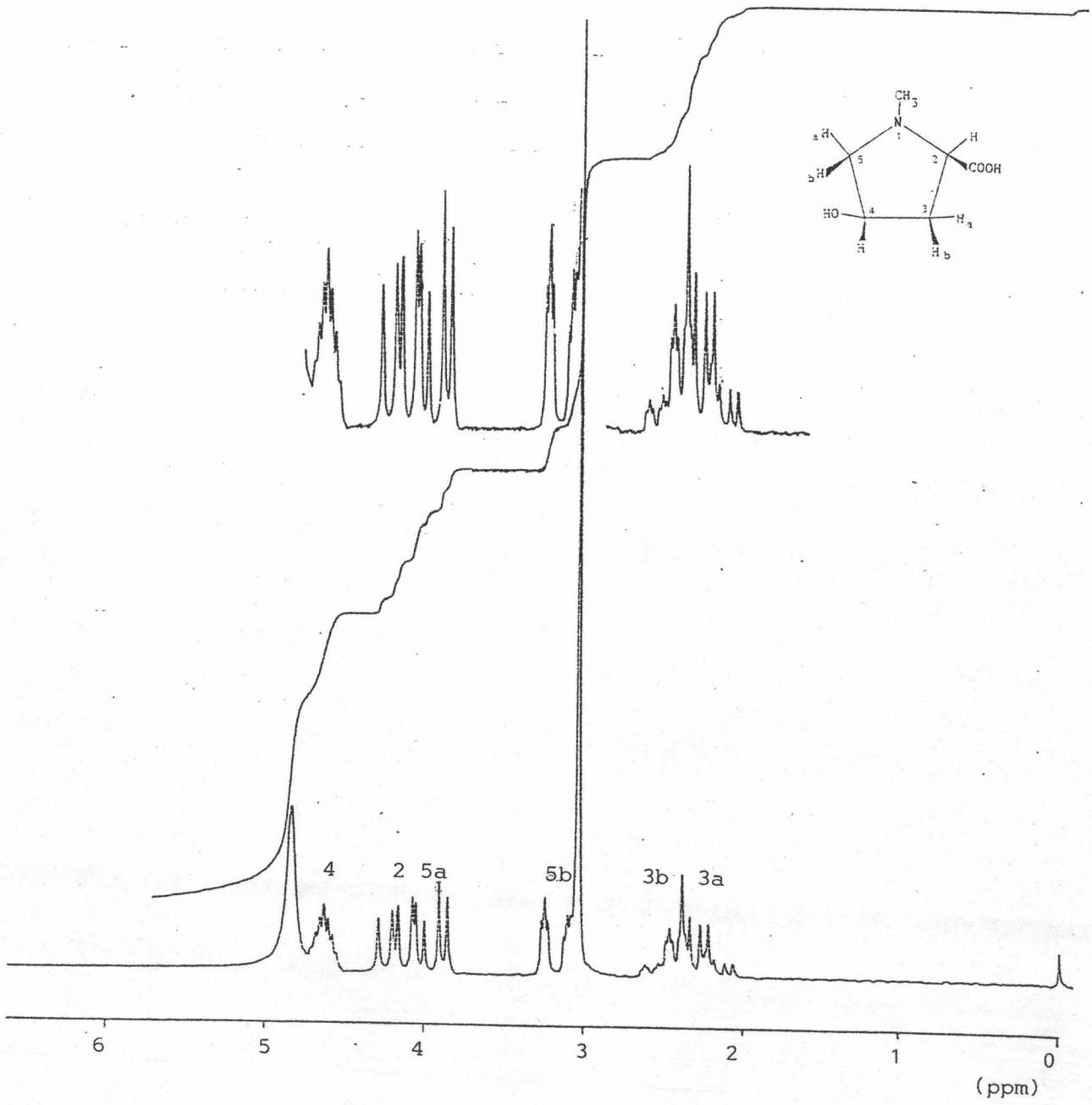

Fig. 25 ^{1}H Nuclear magnetic resonance spectrum (90 MHz) of compound X in D_2O

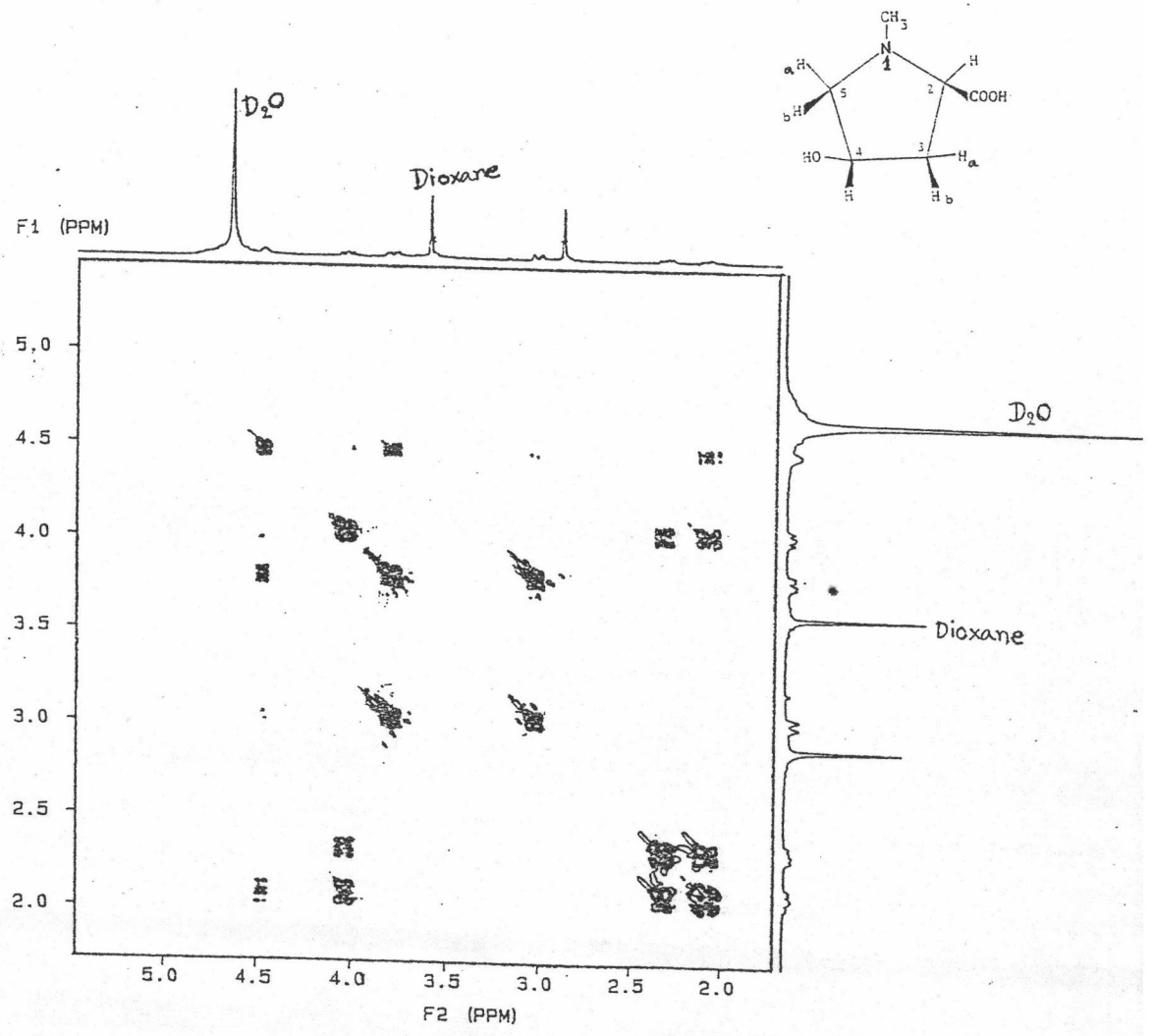

Fig. 26 2-D Homonuclear (COSY) nuclear magnetic resonance spectrum (300 MHz) of compound X

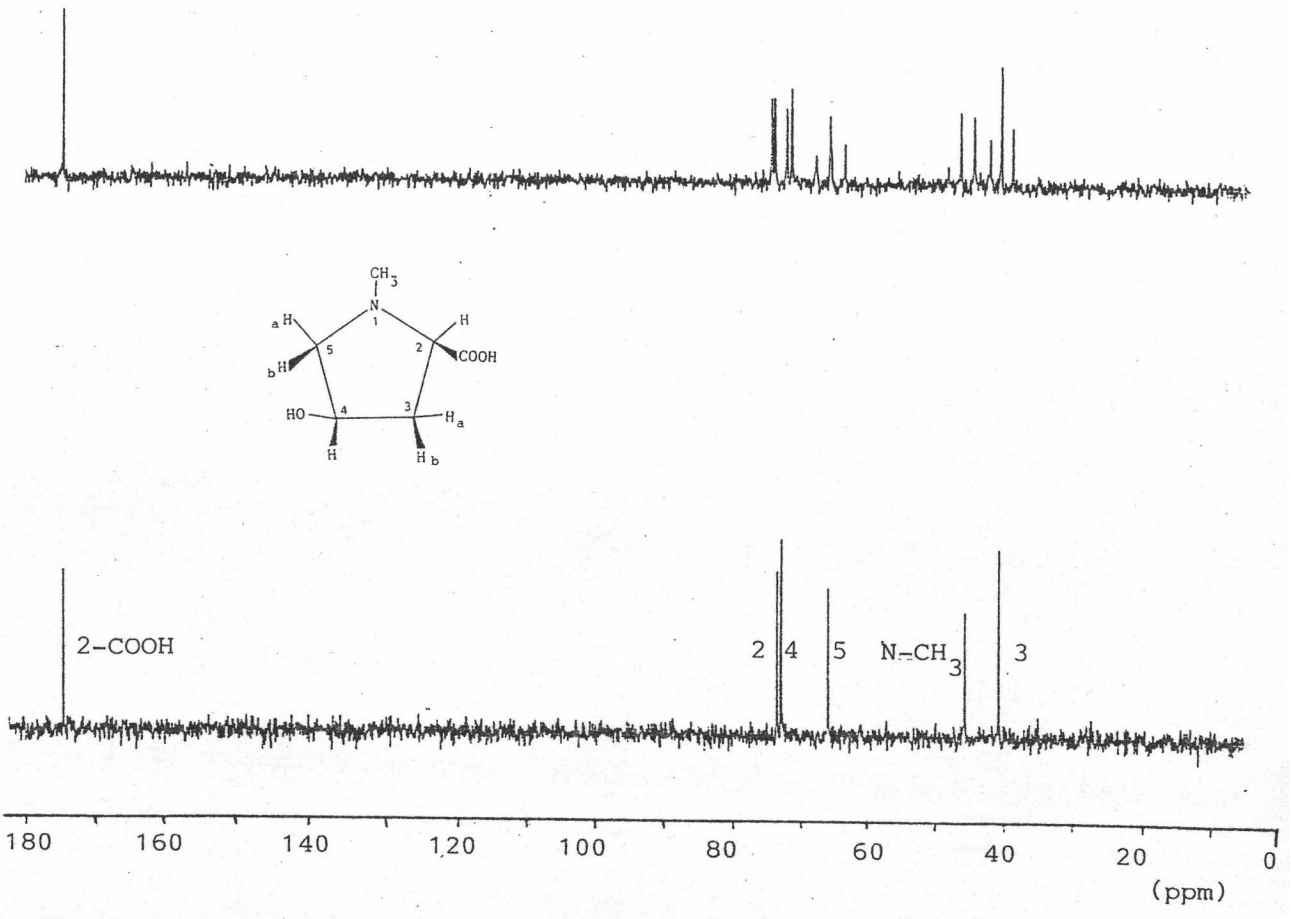

Fig. 27 ^{13}C Nuclear magnetic resonance spectrum (22.5 MHz) of compound X in D_2O

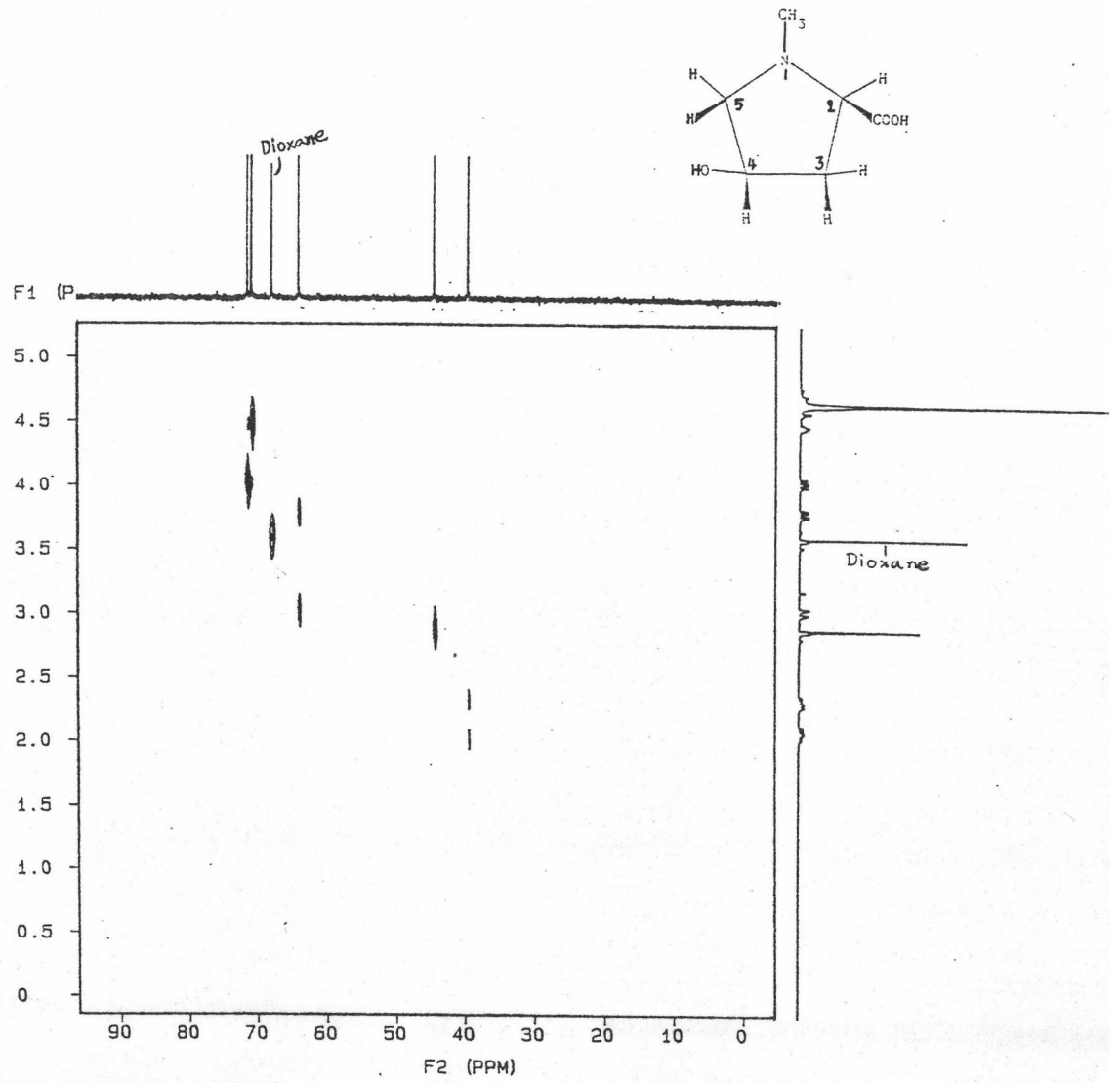

Fig. 28 2-D Heteronuclear (HETCOR) nuclear magnetic resonance spectrum (300 MHz) of compound X

VITA

Mr. Jindaporn Puripattanavong was born on January 17th, 1965 in Suratthani, Thailand. He obtained a B.Sc. in Pharm. from the Faculty of Pharmacy, Prince of Songkla University in 1988. Since graduation, he has been appointed as an instructor in the Department of Pharmacognosy and Pharmaceutical Botany, Faculty of Pharmacy, Prince of Songkla University, Songkhla, Thailand.