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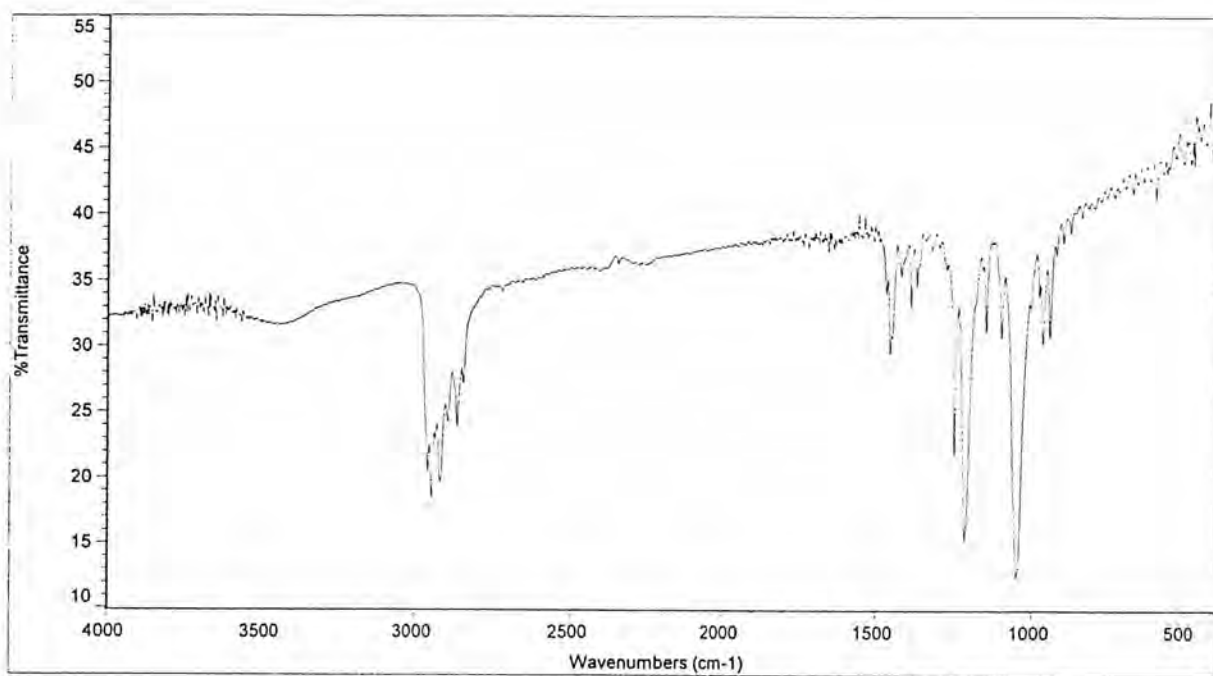
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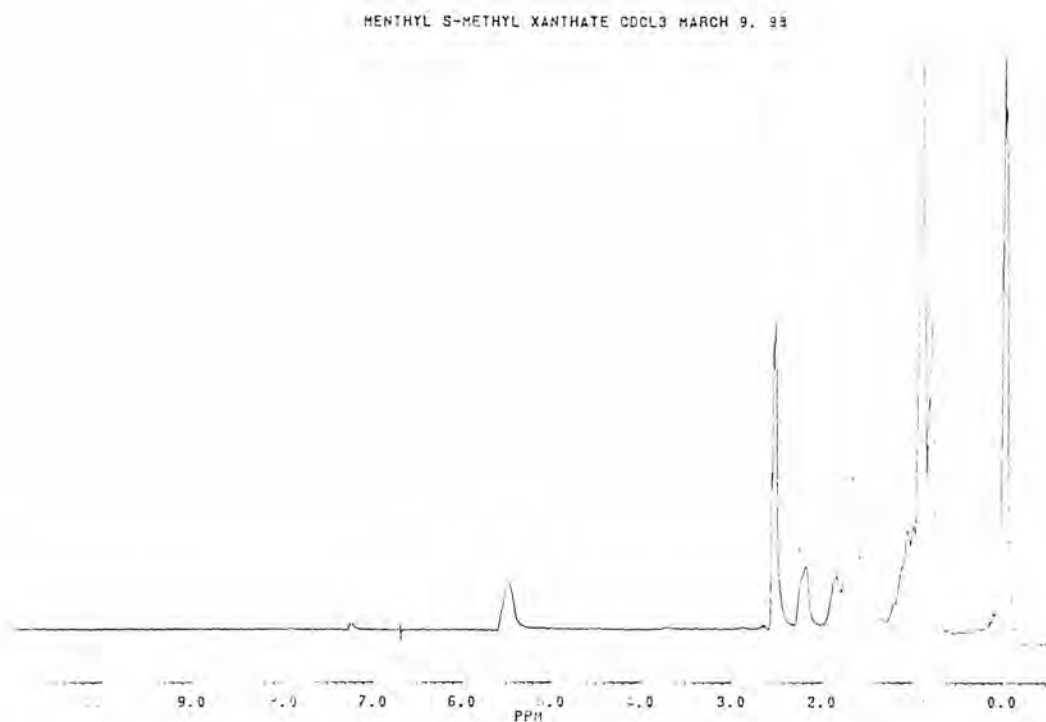
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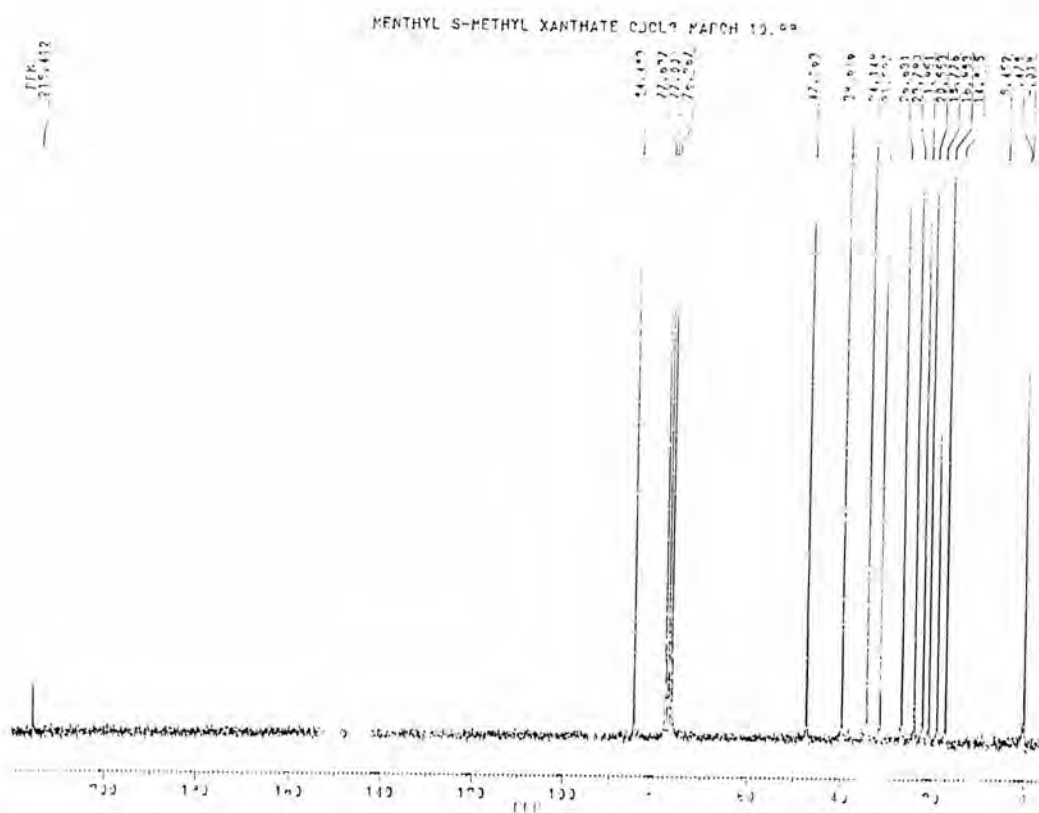
## APPENDIX



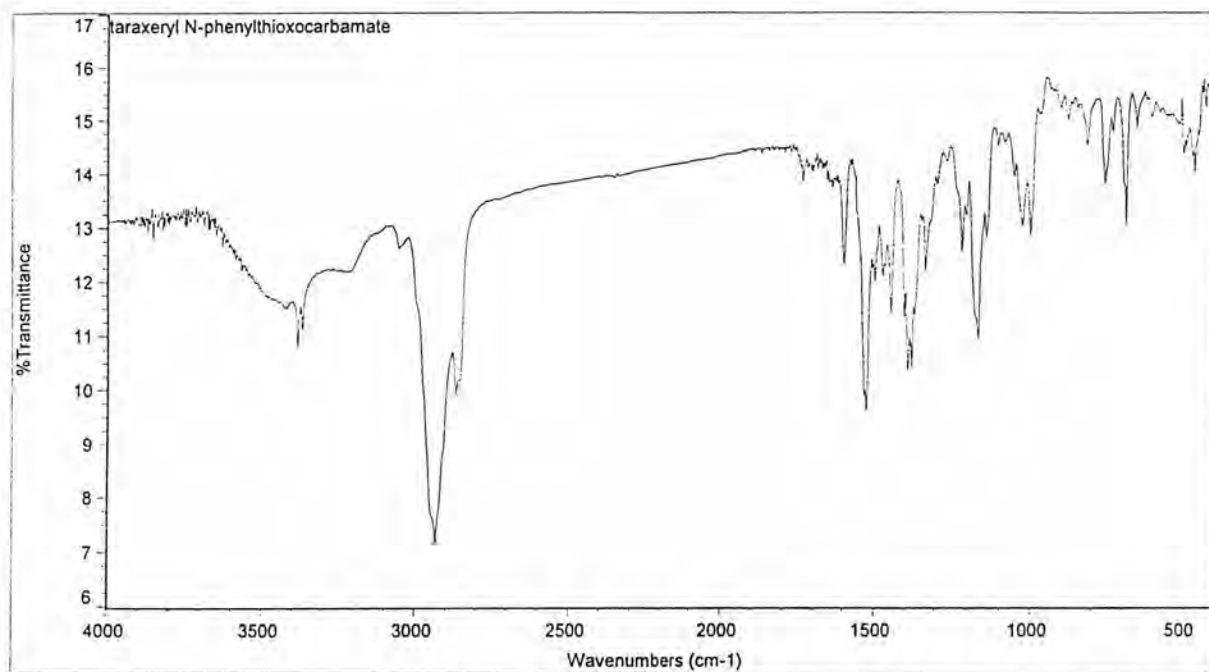
**Figure 1** The IR spectrum of *O*-menthyl *S*-methyl xanthate ( **3c** )



**Figure 2** The  $^1\text{H}$  NMR spectrum of *O*-menthyl *S*-methyl xanthate (**3c**)



**Figure 3** The  $^{13}\text{C}$  NMR spectrum of *O*-menthyl *S*-methyl xanthate (**3c**)



**Figure 4** The IR spectrum of taraxeryl *N*-phenylthioxocarbamate ( **4h** )



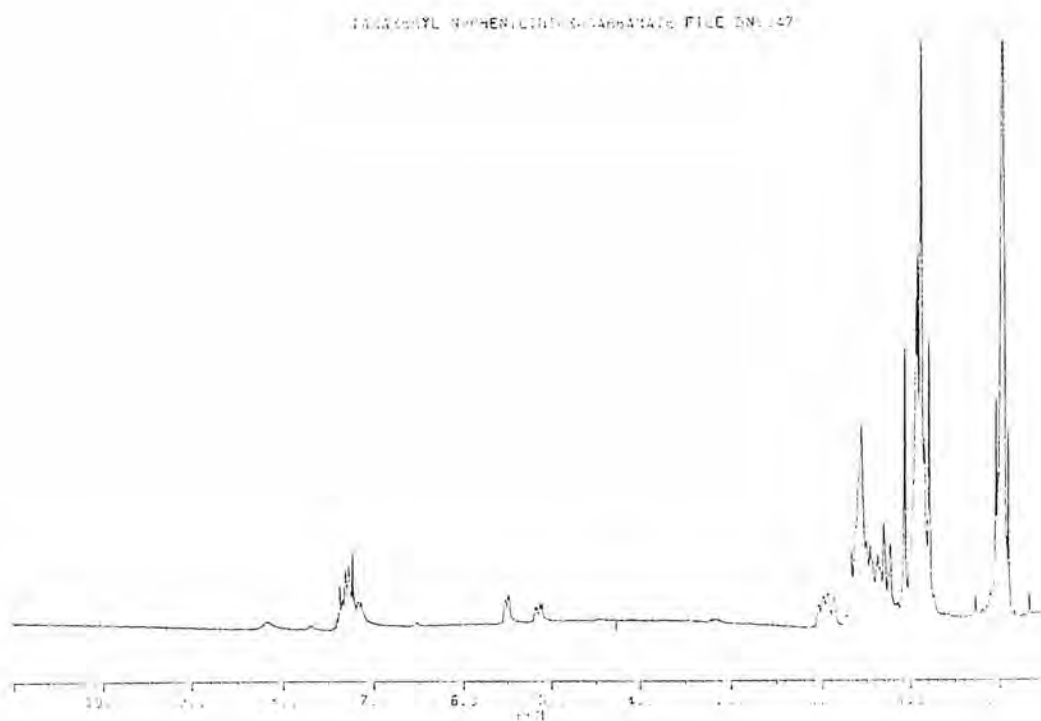


Figure 5 The  $^1\text{H}$  NMR spectrum of taraxeryl *N*-phenylthioxocarbamate (4h)

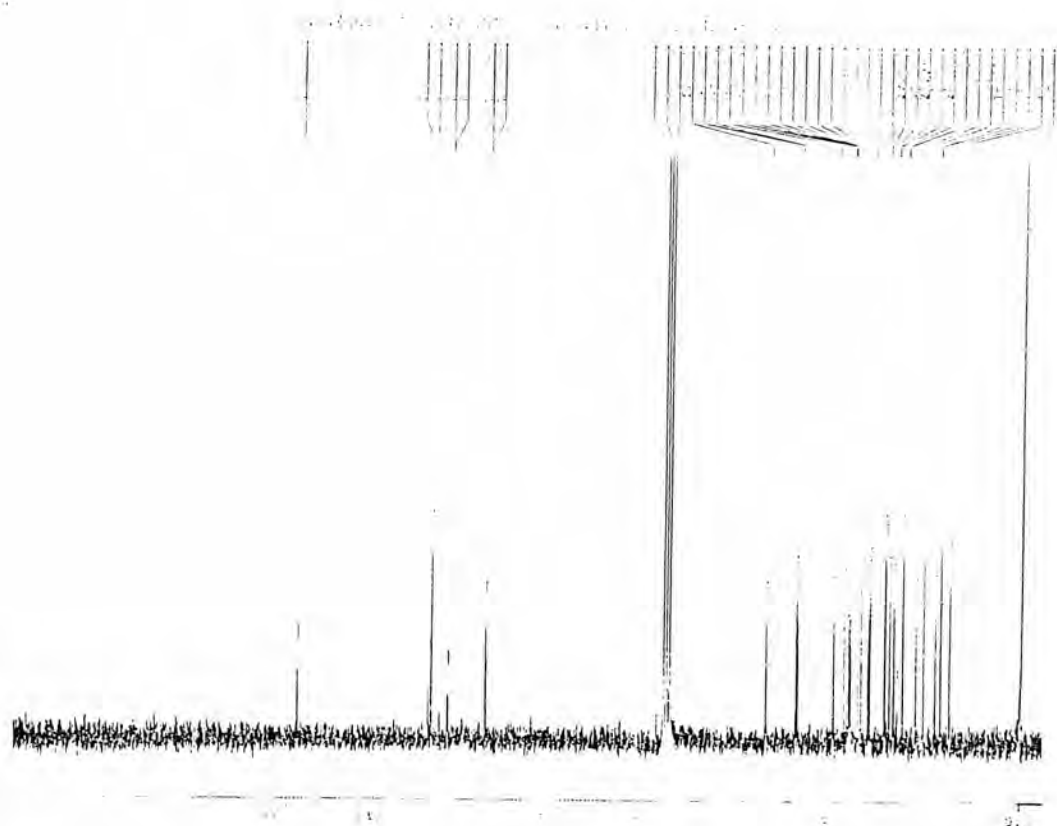
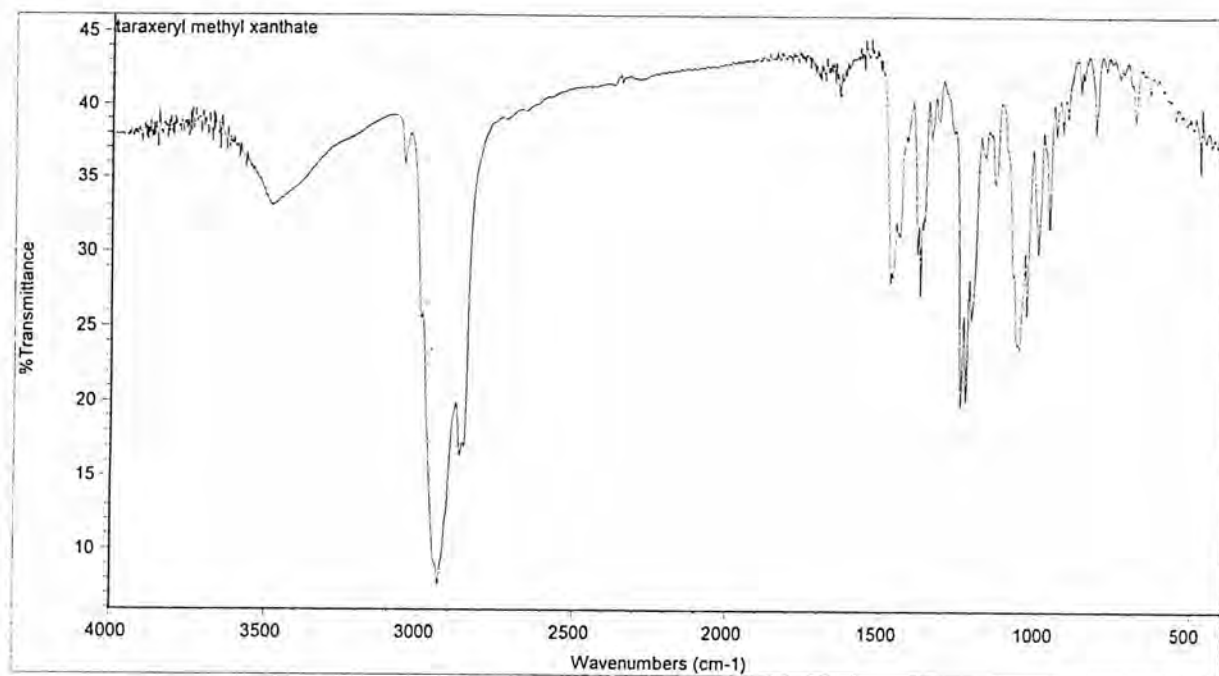


Figure 6 The  $^{13}\text{C}$  NMR spectrum of taraxeryl *N*-phenylthioxocarbamate (4h)



**Figure 7** The IR spectrum of taraxeryl *S*-methyl xanthate (**3h**)

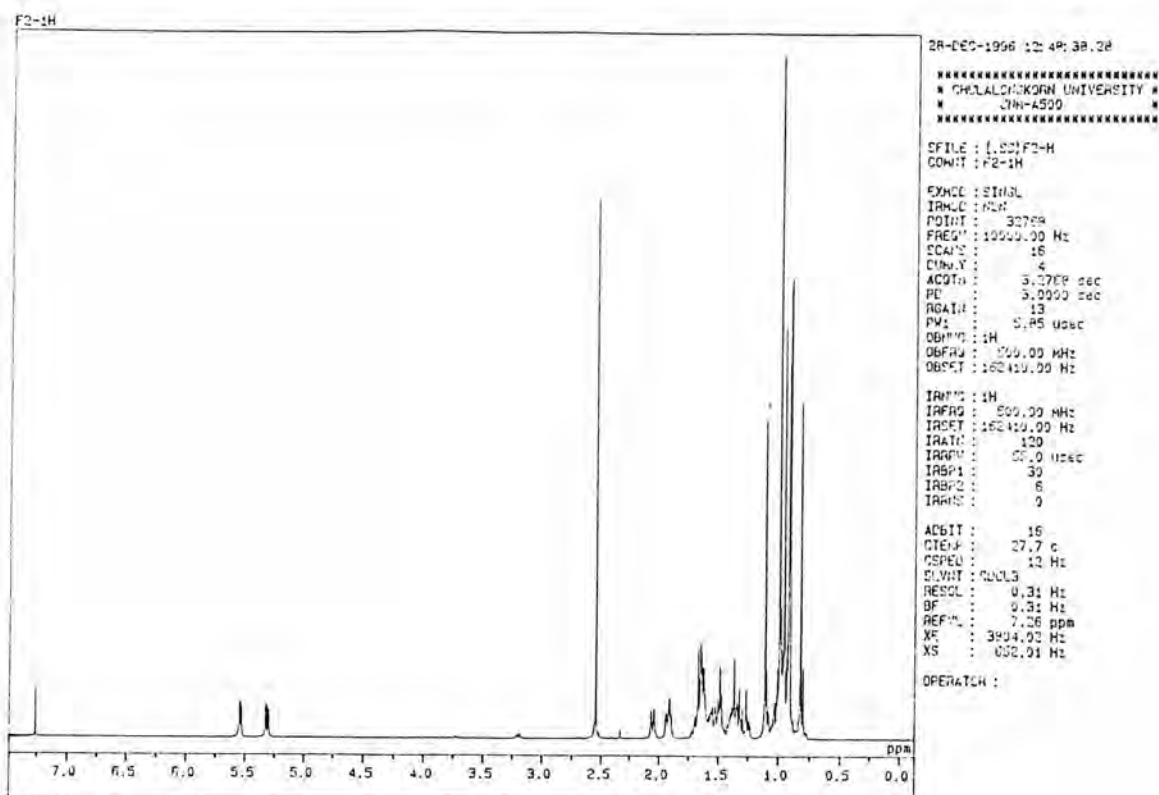


Figure 8 The  $^1\text{H}$  NMR spectrum of taraxeryl *S*-methyl xanthate (3h)

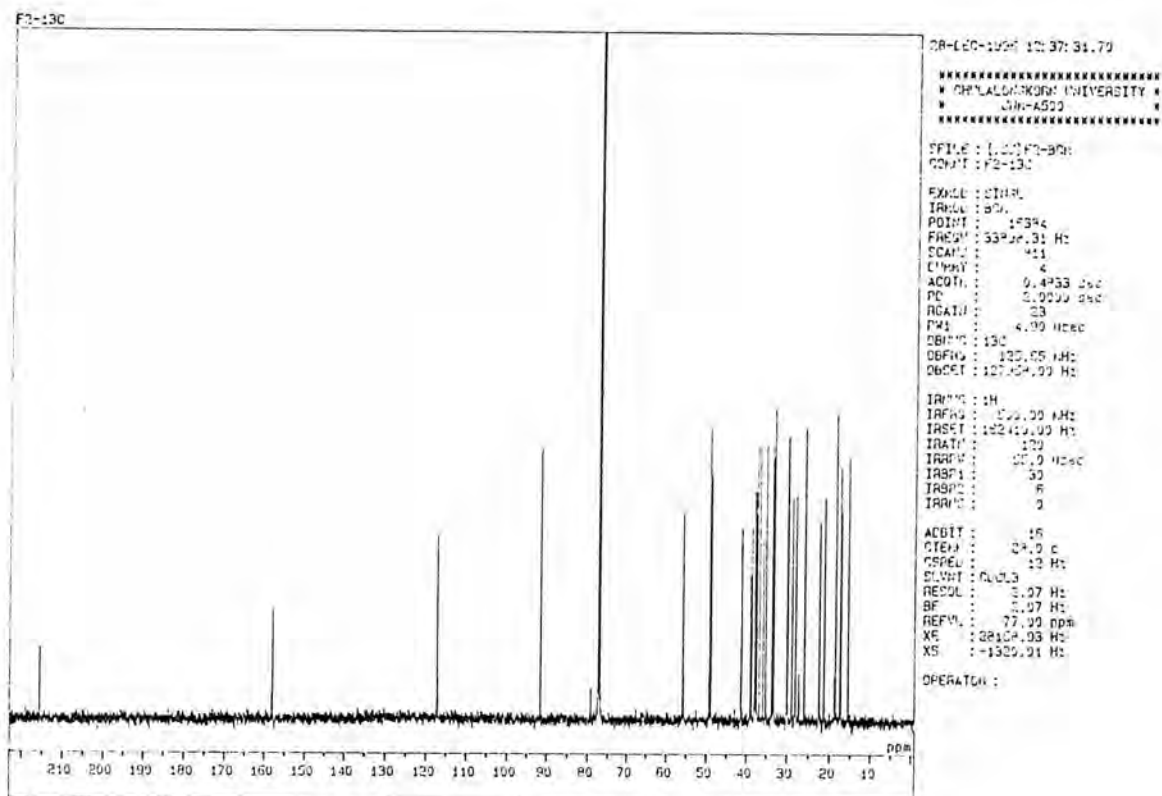
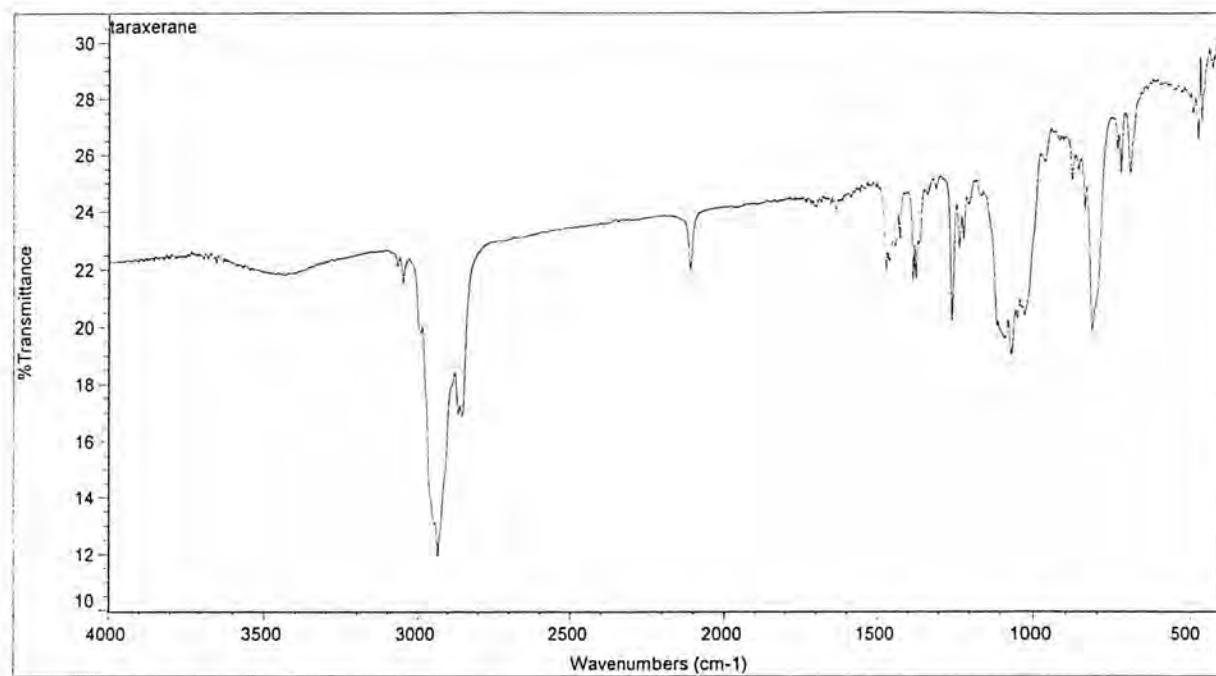


Figure 9 The  $^{13}\text{C}$  NMR spectrum of taraxeryl *S*-methyl xanthate (3h)



**Figure 10** The IR spectrum of taraxerene ( **2h** )

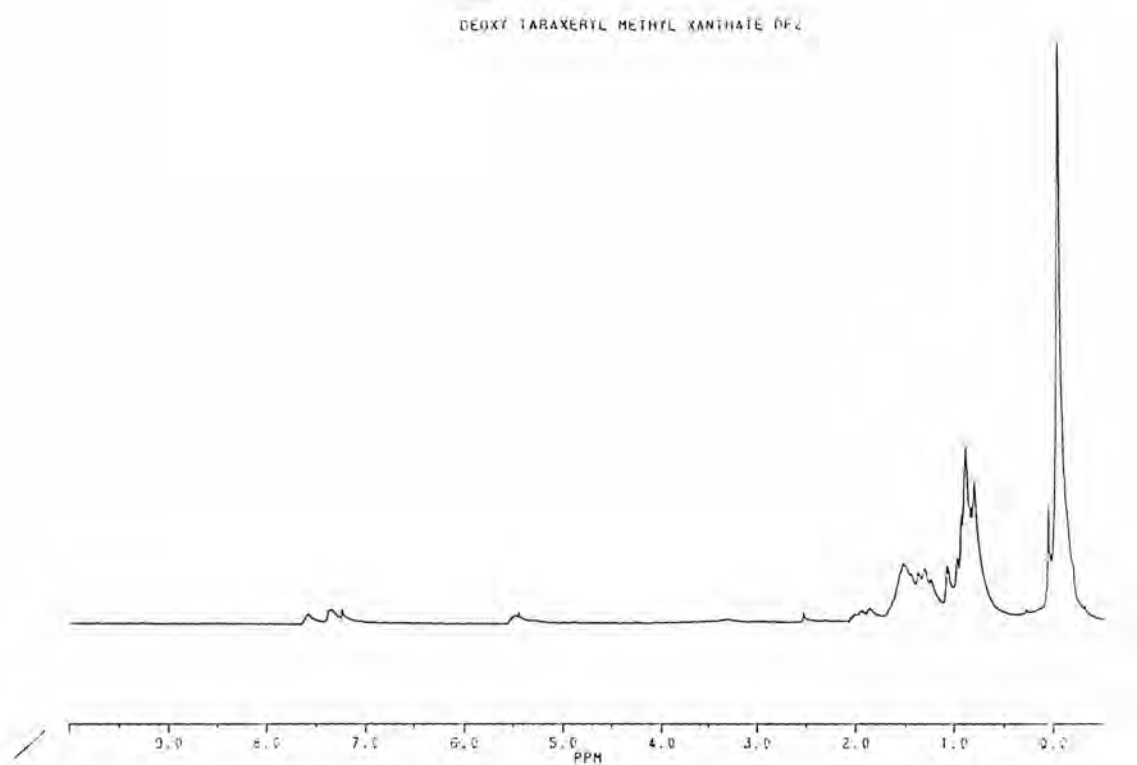


Figure 11 The  $^1\text{H}$  NMR spectrum of taraxerene ( 2h )

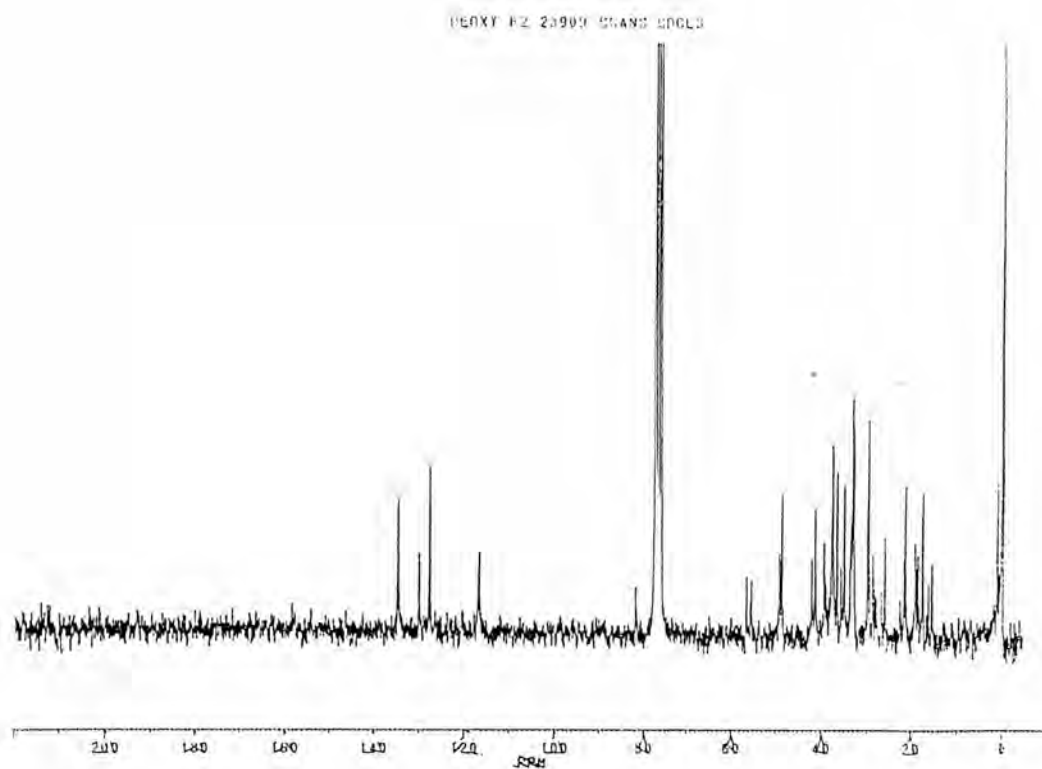


Figure 12 The  $^{13}\text{C}$  NMR spectrum of taraxerene ( 2h )

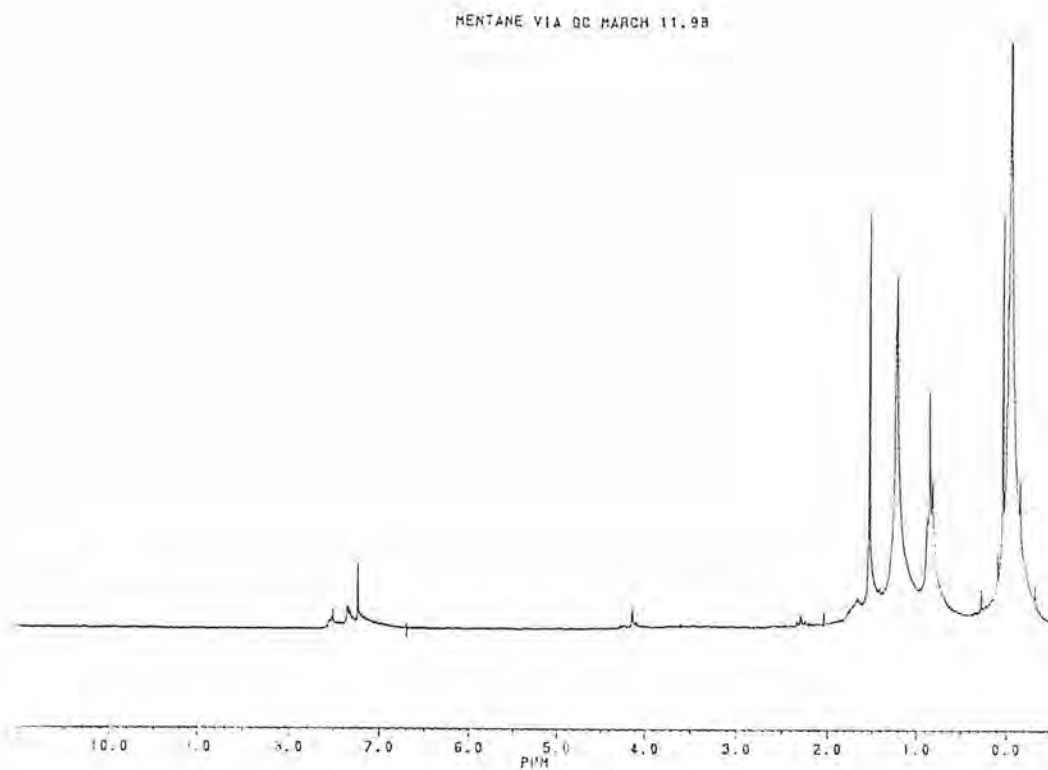


Figure 13 The  $^1\text{H}$  NMR spectrum of *trans*-1-methyl-4-isopropyl cyclohexane (2c)

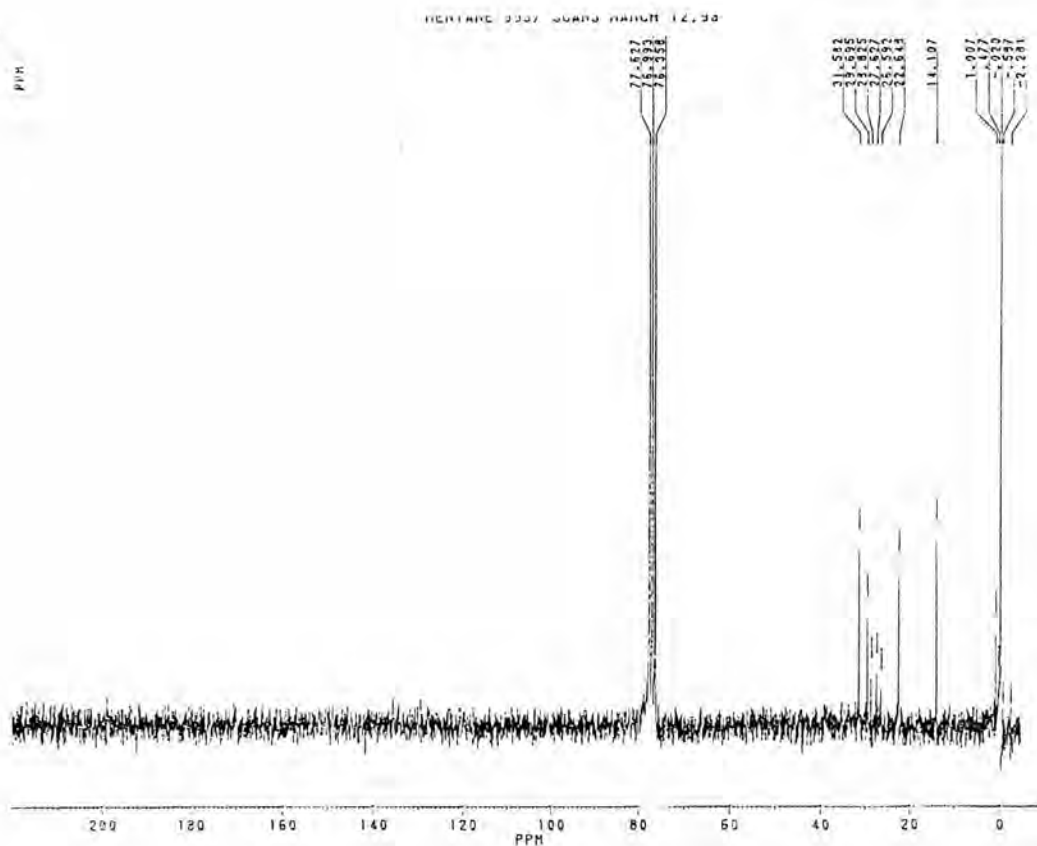


Figure 14 The  $^{13}\text{C}$  NMR spectrum of *trans*-1-methyl-4-isopropyl cyclohexane (2c)

## VITA

Miss Duangamol Nuntasri received a Bachelor Degree of Science (Chemistry) from Faculty of Science, Chulalongkorn University in 1995. Since 1996, she has been a graduate student studying Organic Chemistry in Chulalongkorn University. During the study towards the Master Degree's, she was awarded as a research assistance by the Graduate School, Chulalongkorn University during July 1996 to June 1998.

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