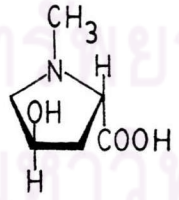
CHAPTER IV

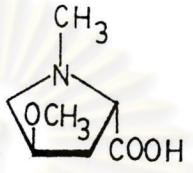
CONCLUSION

Extraction of the ground dried flowers of Aglaia odorata Lour. with hexane yielded tritriacontane ($C_{33}H_{68}$), ceryl alcohol ($C_{26}H_{54}O$) and β-sitosterol. Besides these, a nitrogenous compound was obtained from the methanol extract which was colourless needle crystals. From the analysis of its ^{1}H and ^{13}C-NMR spectra including ^{1}H COSY correlated spectrum and $^{13}C/^{1}H$ two dimensional techniques (2D-NMR), mass spectrum and X-ray crystallography indicated that this compound was infact "4-hydroxy-*N*-methyl-L-proline". The conformation of carboxylate and methyl group which was confirmed by the X-ray crystallographic data was trans-position to each other and the conformation of carboxylate and hydroxy group was also trans to each other. This structure was shown below.



The isolation and identification of 4-hydroxy-*N*-methyl-L-proline in Aglaia odorata Lour. represented the first report of this compound in Aglaia species. Moreover, the spectral data and X-ray crystallographic data were not previously reported for this compound.

The methylation of *trans*-4-hydroxy-L-proline and the methylation of odoram were carried out to give the same structure product which showed the corresponding PMR and CMR spectra. This product was named "*trans*-4-methoxy-*N*-methyl-L-proline". This structure was shown below.



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