



## CHAPTER V

## CONCLUSION AND RECOMMENDATION

*Murraya siamensis* Craib is a species native to Thailand and has been used widely in traditional medicine. Girinimbine (37) and murrayanine (6) are the two components reported previously from this plant. In this investigation, eight compounds were isolated from the roots of this plant. Seven of the compounds are carbazole alkaloids, three of which are unreported natural products, namely 3-formyl-2,7-dimethoxycarbazole (MS-4), 7-methoxymurrayacine (MS-7) and O-methylmukonal (MS-8). Moreover, four known carbazole alkaloids have been characterized as heptaphylline (MS-1), 7-methoxyheptaphylline (MS-2), 2-hydroxy-3-formyl-7-methoxycarbazole (MS-3) and mukonal (MS-6). Two of the known and two of the new carbazoles contain a rare 7-methoxy substitution. The other compound is the coumarin xanthoxyletin (MS-5). Various spectroscopic techniques were employed for the elucidation of the structure of the isolated compounds.

This work has offered some knowledge in supporting chemotaxonomic information and phytochemical notification. Further studies on various biological activities of the isolated compounds are recommended.