

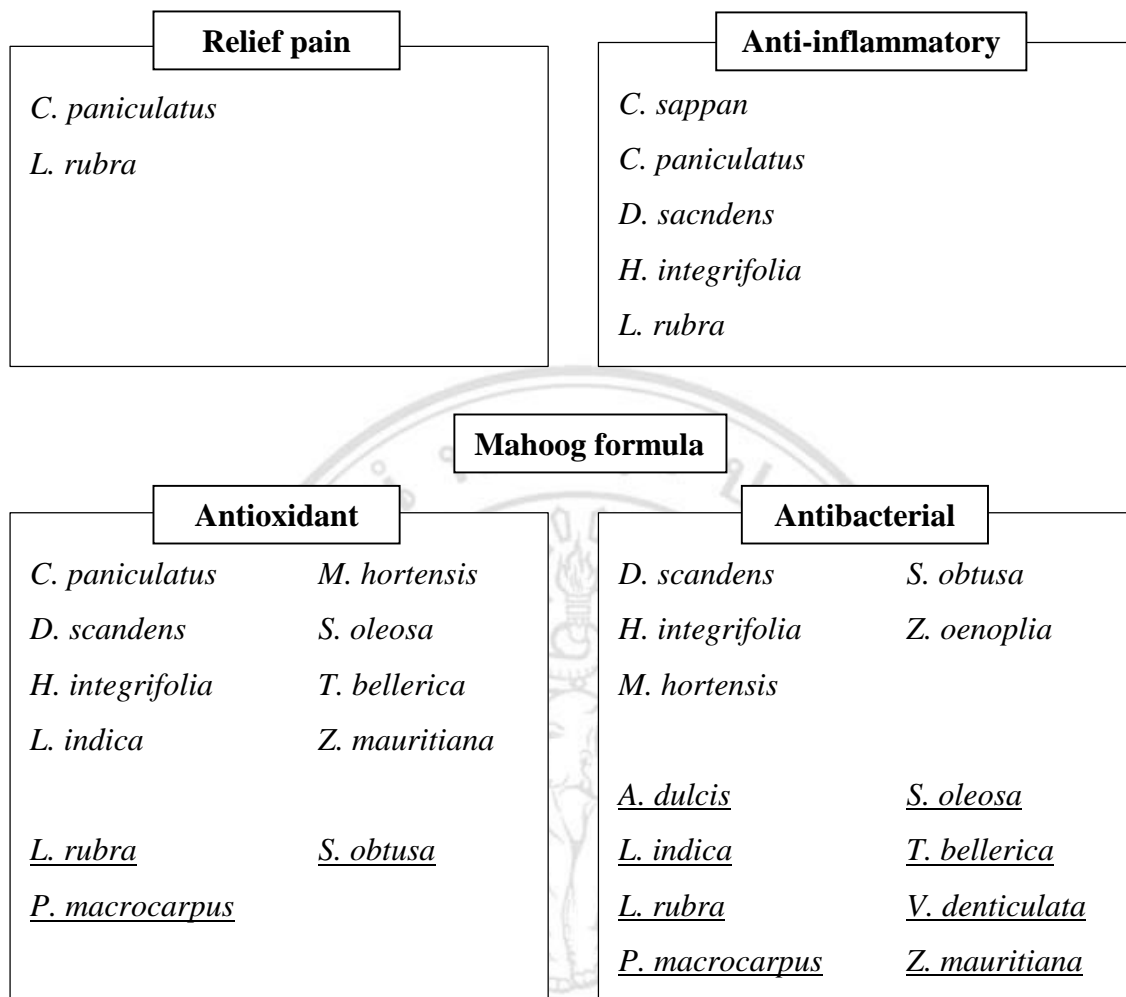
CHAPTER 5

Conclusion

In this study, 26 medicinal plants containing in Mahoog formula and Ya-Mud Mahoog were studied in their biological activities. For the study of biological activity, almost of medicinal plant extracts were active against *S. aureus* and *B. subtilis* and also showed a good antioxidant activity. *C. sappan*, one of the major ingredient found in various Mahoog formula, revealed highest antibacterial and antioxidant activities in ethanol extract and also water extract. Beside *C. sappan*, *S. siamensis*, *T. bellerica*, *L. rubra* (root) and *S. oleosa* showed good antibacterial and antioxidant activities. One of the Mahoog formula from the community in Sunpatong district was selected to evaluate their biological activities compare to single plant containing in this formula. The results showed that Ya-Mud Mahoog and their ingredients showed good antibacterial and antioxidant activities.

L. rubra was one of the medicinal plants commonly found in Mahoog formula for relief pain. According to its uses in traditional recipe and the results found in the evaluation of biological activities, *L. rubra* was selected to study of its active compounds. Two known prenylated isoflavones, auricularin (LR2-05-A2-1-P) and pomiferin (LR2-05-A2-2-P) had been isolated. The two isolated compounds showed antibacterial activity against *B. subtilis* and *S. aureus* (IZD= 8.5-9 mm) and good antioxidant activities (TEAC= 0.386-0.586 and 0.472-0.884 g of Trolox/g of sample, respectively).

From the literature review together with the results from this study, we can suggest that the medicinal plants containing in Mahoog formula can classify into 4 groups of biological activities such as, relief pain, anti-inflammatory, antioxidant (may be related to tonic and inflammation) and antibacterial as shown in Figure 5.1. Moreover, the data obtained from this study can specify the indication of each plant in Ya-Mud Mahoog too, Table 5.1.



*The letters in not underlining are the data from the literature review.

The letters in underlining are the data from this study.

Figure 5.1 The classification of medicinal plants containing in Mahoog formula, following the biological activities

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Table 5.1 The fulfillment of biological activity of each plant in Ya-Mud Mahoog

Plants	Traditional healers	Literature review/ <u>this study</u>
<i>C. sappan</i>	blood tonic, stop bleeding, astringent	anti-inflammatory ⁶³ , antimicrobial ^{65, 67, 156} antioxidant ^{62, 68} , immunomodulation ⁷³ , immunosuppressive ^{61, 74} , hepatoprotective ⁷⁵ and vasorelaxant ⁷¹
<i>E. cuneatum</i>	-	cytotoxicity ¹⁰⁶ and anticancer ¹⁰⁷ / <u>antioxidant</u>
<i>T. reidioides</i>	-	anticandidal ¹¹¹ and cytotoxic ¹⁰⁹ / <u>antibacterial</u>
<i>L. rubra</i>	reduce inflammation, relieve pain, tonic	anti-inflammatory, antinociceptive and antipyretic ¹¹⁵ / <u>antibacterial and antioxidant</u>
<i>S. oleosa</i>	astringent	antiulcer ¹⁴⁸ , cytotoxic ¹⁴⁹ and hydroxyl radical scavenging ¹⁴⁹ / <u>antibacterial and antioxidant</u>

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