CHAPTER V

CONCLUSION AND RECOMMENDATION

The petroleum ether extract of *Typha elephantina* Roxb. fruits have been examined for the presence of two long-chain hydrocarbons and two phytosterols. The structure of these compounds were elucidated by means of spectral interpretation and identified as pentacosane (TE-1), 1-triacontanol (TE-2), β-sitosterol (TE-3) and β-sitosteryl -3-O-β-D-glucopyranoside (TE-4) respectively. β-Sitosterol which is the major component in this plant exhibits wide range biological activities as detailed in discussion section. It is also a precursor of medicated steroid synthesis. It should be recommended for devising extraction procedure which maximizes the isolation yield while minimizing the cost. The presence of β-sitosterol in this investigation might be worthwhile in turning weeds grown abundantly in waste-land into medicinal ones.

Another phytochemical investigation was performed on the ethanolic extract of *Randia siamensis* Craib fruits. It was shown to contain one triterpenoid sapogenin RS-1'and three triterpenoid saponins RS-1, RS-2 and a novel saponin RS-3. The structures of these compounds were characterized as ursolic acid, pseudoginsenoside-RP_1 (3-O-β-GlcUa-(2-1)-β-Xyl of oleanolic acid), pseudoginsenoside-RT_1 (3-O-β-GlcUA-(2-1)-β-Xyl of glucosyl oleanolate) and siamenoside (3-O-β-GlcUA-(2-1)-β-Xyl-(2-1)-α-Rha of glucosyl oleanolate) respectively.

Randia siamensis Craib fruits is claimed for inducing abortion, emmenagogue and hemataenic. Crude ethanolic extract exhibits potent ichthyotoxic and spermicidal activities. Therefore, the pharmacology of these three saponins is on of the most interesting point recommended to be studied.