

CHAPTER V

CONCLUSION

It has been reported that friedelin is present in *A. larmarckii* leaves [5]. Therefore, the genes that are involved in the formation of friedelin were targeted. However, based on the results presented, it can be concluded that the gene obtained would be involved in the formation of triterpene mono-alcohols. This suggested that this plant has other triterpenoid compounds which have not been reported, presumably due to their presence as minor compounds. The results also suggest that β -amyrin can be found spread in many plants both as specific product of OSC and as a product of multifunctional OSC. In contrast, OSCs producing taraxasteol found previously in some plants as a minor product, but this research work found that OSC-producing taraxasterol is a major product in *A. larmarckii* leaves. Moreover, the introduced yeast consensus sequences are assumed to have an effect on the efficiency of translation initiation in this study. Importantly, changing the amino acid from TGG, encoding for tryptophan, to TCS, which encodes for serine, to get the suitable yeast consensus sequence had an effect to protein structure and resulted to none of triterpene production. However, the finding of OSC genes in this study would contribute to the knowledge of the triterpenoid natural products in this Thai plant.