



CHAPTER VI

SUMMARY AND CONCLUSION

1. The survey of *P. mirifica* plant in 10 provinces was carried out during 1998-2000. Mostly, the plants were found to be co-habitated with the bamboo in the deciduous forest on the slant, slope and mountainous area containing of the loamy, gravel and sandy soil texture.
2. It was found that there were differences in the flowers and seeds. The color of dark purple was found in Chiangmai province and the color of purple-blue was found in the other sites. The seeds were varied with colors, patterns and shapes.
3. Since the plants were commonly found in Chiangmai and Kanchanaburi province, the seeds were collected for the study in the field trial. Comparisons between the botanical character as well as the growth and the yield of the tuberous root production showed no differences. Furthermore the percentage of protein, fat, fiber and ash content were not different while the percentage of starch content of the Kanchanaburi variety was found to be higher than that of the Chiangmai variety.
4. *P. mirifica* that are derived from different place of Thailand showed different in pattern TLC bands. TLC densitometry results revealed that the amount of puerarin content in the collected tuberous root from various provinces was

also different as well as in the field grown which the plant were grown in the same piece of land in the same environment. The Kanchanaburi variety exhibited higher puerarin content than that of the Chiangmai variety. It could be mention that the geographic and genetic factors played an important role on the chemical and puerarin contents

5. The external characteristics and the proximate analysis could not help much to discriminate the difference between variety except for the starch content. TLC densitometry could be used for sorting out the plants with demanded particular active ingredient for example, puerarin.