CHAPTER VI

CONCLUSION

- 1. Antioxidant activity of the plant extracts was ranked from *M. collettii*, *B. superba* and *P. mirifca* and *P. lobata*, respectively.
- 2. Non-mutagenicity in the plant extracts was ranked from *B. superba*, *P. lobata*, *P. mirifica* and *M. collettii*, respectively. However, the cytotoxicity was found at high concentration of *M. collettii*, *P. mirifica*, *P. lobata* and *B. superba*, respectively.
- 3. Antimutagenicity of the plant extracts was ranked from M. collettii, P. lobata, P. mirifica and B. superba, respectively.
- 4. Non-induction of micronucleus as well as non-mutagenicity in the plant extracts was ranked from *P. mirifca* and *P. lobata*. *B. superba*, *M. collettii*, respectively. The plant extracts exhibited no cytotoxicity in animals.
- 5. *M. collettii* exhibited the highest antioxidant activity and antimutagenicity, including cytotoxicity. These results revealed that *M. collettii* might be developed into anti-cancer products.
- 6. P. mirifica and P. lobata exhibited no induction of micronucleus and non-mutagenicity. The results revealed that P. mirifica with high estrogenic activity, has no risk in term of mutagenicity.
- 7. B. superba exhibited high antioxidant activity and antimutagenicity but less than M. collettii. However, B. superba exhibited no cytotoxicity in animals.
- 8. The data exhibited in this study could be benefit for the selection of plant to be used as source of high antioxidant, non-mutagenic and high anti-mutagenic activity.