

CHAPTER 6

Conclusions

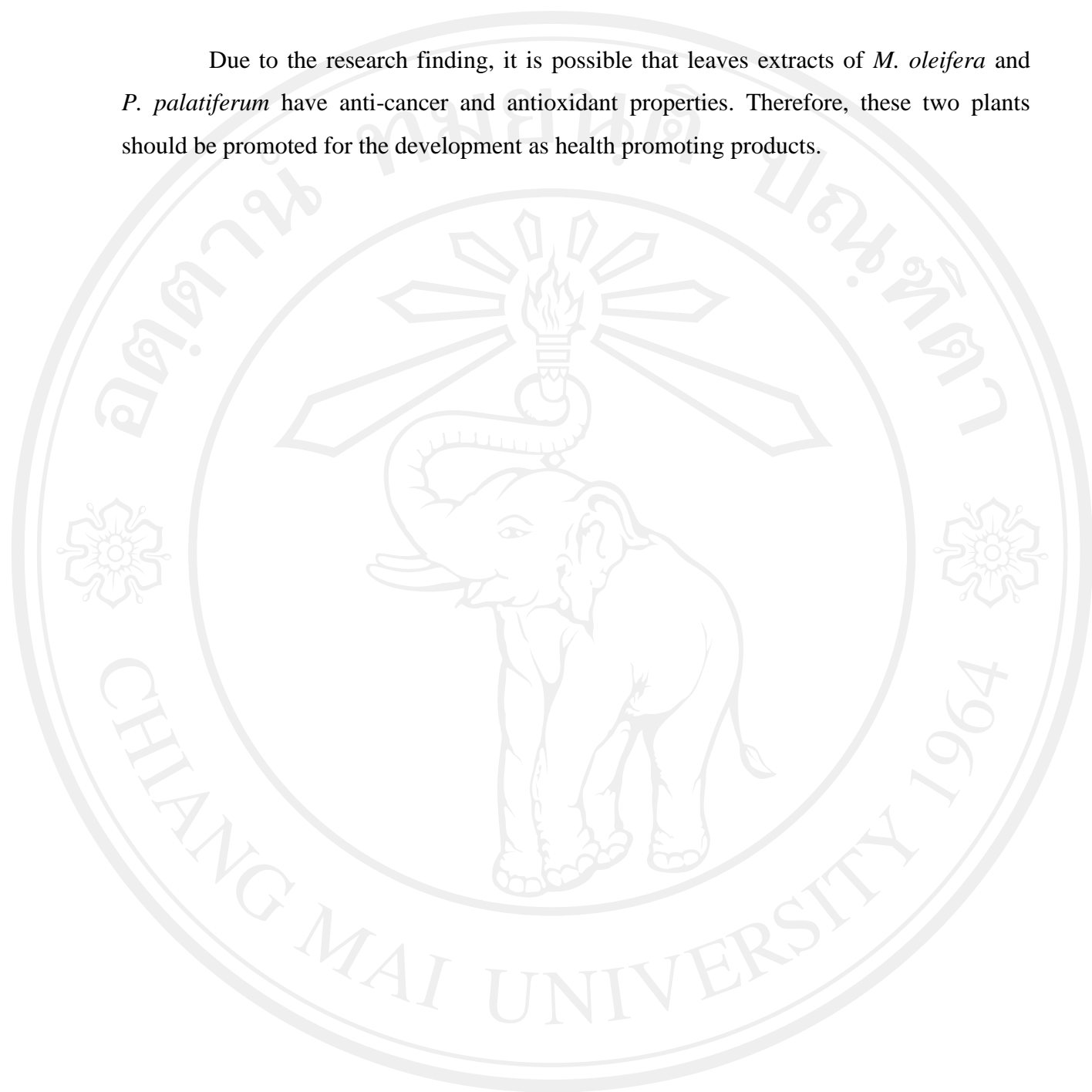
According to the research, the efficiency of anti-cancer and antioxidation from *M. oleifera* and *P. palatiferum* extracts could be concluded as follows;

1. The effects of aqueous, ethanol and hexane extracts of *M. oleifera* and *P. palatiferum* were found to be toxic against the three types of colon cancer cells lines (HCT15, SW48 and SW480) as the concentration and time increased. Moreover, the *M. oleifera* extracts were more effective in inhibiting cell proliferation than the *P. palatiferum* extracts and all extracts have no mutagenic effects.

2. The capacity of all extracts from *M. oleifera* and *P. palatiferum* in inhibiting and scavenging reactive species (ABTS and DPPH) and also the level of total phenol and ascorbic acid were found to be equal. The analysis of component of the two plants extracts showed many active intergradients including, tannin, cardiac glycoside, terpenoid, flavonoid, saponin, phenolic, steroid and reducing sugar. Besides, glycone was found only in the *P. palatiferum* extract and anthraquinones was found only in the *M. oleifera*. However, alkaloid and coumarin were not found in any extracts.

3. The aqueous extracts of *M. oleifera* and *P. palatiferum* leaves have an anti-peroxidative activity by reducing MDA level in serum and liver and also increase SOD in erythrocyte in a dose-dependent manner.

Due to the research finding, it is possible that leaves extracts of *M. oleifera* and *P. palatiferum* have anti-cancer and antioxidant properties. Therefore, these two plants should be promoted for the development as health promoting products.



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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