



<b>Thesis Title</b>	Reprotoxicity Test of Extracts from <i>Stemona</i> spp. on Male Rats
<b>Author</b>	Ms. Jittikan Intamong
<b>Degree</b>	Master of Science (Biology)
<b>Thesis Advisor</b>	Lect. Dr. Supap Saenphet

### ABSTRACT

*Stemona* spp. are widely used as botanical insecticides. However, a few scientific paper about the effects of the *Stemona* spp. extracts on the reproductive function has been reported. Thus, the current study was carried out to evaluate the effect of the ethanolic extracts of *Stemona* sp. and *Stemona aphylla* on the function of the reproductive system organ in male rat. The ethanolic extract of these species (at doses 300 and 500 mg/kg BW) were administrated to each treated group (n=8) for 45 days, control group was received distilled water. The testes, prostate gland, epididymis and seminal vesicle weights and sperm density were not different from those of control group. But, MDA levels in all treated groups, revealed a dose-dependent increased in testicular MDA level, especially there was significantly increase at 500 mg/kg BW of *S. aphylla* ( $p<0.05$ ). The histological changes in reproductive organs were found vacuolization in epithelium of seminal vesicle in rats administrated with *Stemona* sp. extract at the dose of 500 mg/kg BW only whereas the vacuolation in epithelium of seminiferous tubules were recognized in all treated groups. The results suggested that *Stemona* sp. extracts even given at 500 mg/kg BW had less affected to reproductive system of the preclinical (rats) models in view of testicular histology, MDA levels and sperm density than *S. aphylla* extracts.