

SUMMARY OF DISSERTATION

Name of Doctoral candidate: **Bui Thi Thu Ha**

Dissertation title: “**Study on the experimental anti-tumor effects of the roots of *Panax Notoginseng* (Burk.) F.H. Chen, Araliaceae) grown in Vietnam before and after steaming process**”.

Specialty: **Pharmacology - Clinical Pharmacy**

Code of specialty: **9720205**

Name of the advisors:

1. Assoc. Prof. Vu Manh Hung, PhD.

2. Prof. Nguyen Thanh Hai, PhD.

Name of academic institute: **National Institute of Medicinal Materials**

Summary of the dissertation

1. Objectives

- Study on the effect of steaming processing method on saponin content of the roots of the *Panax Notoginseng*.
- Study on experimental anti-tumor effects of NP(H) and NP(O) and some saponins isolated from the roots of *Panax Notoginseng*.
- Evaluate acute toxicity, subacute toxicity of NP(H) and NP(O) after steaming.

2. Methods

*2.1. Study on the effect of steam processing method on saponin content of the roots of *Panax Notoginseng*.*

- Extracting, isolating and determining the structure of the main saponins present in the steaming and non-steaming samples.
- Investigate the change of active ingredient content in saponins before and after steaming at different conditions using HPLC.

*2.2. Studying the effects of 6 saponins isolated from the roots of the *Panax Notoginseng* and the experimental antitumor effects of NP(H) and NP(O).*

- Evaluate *in vitro* the antitumor effects of 6 saponins isolated by the method Monks A et al. (1991). - *In vivo* assessment of cytotoxicity and ability to stimulate programmed cell death (apoptosis) of highly quantified NP(H) on the mice