Chapter V

Conclusion and Recommendation

Isolation from the stem bark of *Neolitsea aureo-sericea* Kosterm. (Lauraceae), the newly described species in Thailand, afforded a 1.40% yield of crude alkaloids. It contains alkaloids of aporphine, pavine and tetrahydroisoquinoline types. Four isoquinoline alkaloids isolated from this plant, have been identified as isoboldine, bisnorargemonine, norcinnamolaurine, and reticuline. These alkaloids are known to occur in certain Lauraceous plants.

Isoboldine was reported to be found in *Neolitsea fuscata* (Thwait.) Alston (Gunatilaka *et al.*, 1981). Reticuline was previously isolated from *N. daibuensis* Kamikoti and *N. aciculata* Koidz. (Lu and Hong, 1977; Kozuka, Takeuchi and Sawada, 1984). They are also found in certain other Lauraceous plants.

There are many reports on the pharmacological action of these three types of isoquinoline alkaloids. The tetrahydrobenzylisoquinolines such as papaverine are known as a smooth muscle relaxant and some are vasodilators. Aporphines act mostly on nervous system, for examples, apocodeine is used as an antiemetic, bulbocapnine and isothebaine affect on the central nervous system. Boldine has a mild sedative, diuretic, antiparasitic action and increases the secretions of the liver and salivary glands (Shamma, 1972 d). Isoboldine is one of the insect antifeedants. For the

pavine type, there is no report on the pharmacological action.

From the informations mentioned above, the pharmacological studies of these alkaloids, norcinnamolaurine, reticuline, isoboldine and bisnorargemonine should be done.

The phytochemical studies of the minor alkaloids from the bark and in other part of this plant should be further studies. The works should be done on other species of *Litsea* and *Neolitsea* as well in Thailand.