## **CHAPTER 1**

## INTRODUCTION

Thai forest is a tropical forest consisting of vast diversification of plant species (Pongsawai, 2000). Under the present development of the country, people are more aware of the protection of the natural resources and there are many studies concerning how to make use of the tropical plants that have economic potential. Thai forest had been under wide exploitation by human (Gardner et al., 2000). Many plant species were brought out from the forest and the forest itself is also facing natural disaster e.g. flood, drought and seasonal change that cause the reduction of plant varieties in the tropic. At present about 70 percents of the forest area was lost and a number of them have become many small forests scattered all over the country (Aungsuratana, 1995; Gardner et al., 2000). Plant collection and conservation are needed and some of plant species can be developed as the ornamental plants especially the native creepers as they are widely found in the forest and have never been utilized. Creepers can be used as house plant and garden decorations as ground covers or hedges (Pongsawai, 2000). There are many species of native creepers naturally grown in Thai forest. They can adapt themselves to different climates and environment. In order to reach these goals, more research are needed to find out how to use those native plants as an ornamental or pot plants (Kasaechai, 1997).

The purpose of this research was to study the potential of the native creepers widely found in the tropical forests of Thailand and to improve them to be ornamental plants.

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## The objectives of these studied were:

- 1. To collect the native creepers naturally grown in Thai forest at Doi Khunwang and culture them in low land to study their adaptation.
- 2. To study the botanical characteristics of those collected plants such as taxonomy, morphology, anatomy, physiology, cytology and DNA fingerprinting and propagate them for commercial trials.



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