Chapter 11

The Current and Future Status of Floristic Provinces in Thailand

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ABSTRACT

Two databases containing distribution data of species and specimens show that within Thailand preferably four floristic or phytogeographical regions can be discriminated (areas with a typical, unique and distinct plant composition): the Southern, Northern, Eastern and Central Region. They differ from the seven regions used at present in the Flora of Thailand Project. Modelling the effects of slight climate changes due to global warming shows that the floristic regions will be different in 2050. Not only will the areas differ, but the numbers of species per area will decrease dramatically, although species from outside Thailand may migrate into Thailand. Predictions contain a high degree of uncertainty, and they may never come true as they are strongly influenced by small, currently unpredictable effects. Nevertheless, the loss of biodiversity and its consequences for climate, economies, health, et cetera, are already becoming noticeable. Therefore, the protection and improvement of biodiversity should become the main focus of attention for all governments in the region.

1. INTRODUCTION

Species are generally not randomly distributed. Plants and animals originate via evolution and this always happens in a geographically restricted area. Thus, it is not surprising that man has searched for patterns in these distributions, that is in the areas in which species are found. One means of

finding these patterns is to examine if certain areas can be characterized by species which are in combination typical for the area. The resulting regions are called, in the case of plants, floristic or phytogeographical regions. Usually, a country/continent is completely subdivided into these areas and these are mutually exclusive.

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