

# Production of Aromatic Plants in Asia - An Overview\*

**Narong Chomchalow**

**Office of the President, Assumption University**

**Bangkok, Thailand**

## *Abstract*

*Aromatic plants are plants that possess aromatic compounds, most of which are essential oils which are volatile in room temperature. They have traditionally been used as raw materials for extraction of essential oils (which, in turn, are used in the flavor and fragrance industries), as well as the sources of spices, herbs, and other natural products such as traditional medicines, pharmaceuticals, cosmetics, botanical pesticides, insect repellents, herbal teas/drinks, etc.*

*Asia is well known throughout the world as ‘the Land of Aromatic Plants’ because it possesses favorable climatic conditions suitable for the growth and development of aromatic plants. Other names like ‘the Land of Spices’, ‘the Land of Traditional Perfumes’, also indicate the popularity of aromatic plants in Asia. Such plants have been used commercially as spices and as sources of raw material for essential-oil industry from the dawn of history.*

*Aromatic plants were originally collected from the wild. Due to overexploitation, many species have become extinct or scarce so that they have to be cultivated. The present paper provides information on the list of species of aromatic plants, either collected from the wild, or those cultivated in countries in Asia. It also discusses the cultivation of major aromatic plants, and the advantages of cultivation, the genetic improvement and the cultural improvement of aromatic plants.*

**Keywords:** *Aromatic plants, essential oils, spices, herbs, flavor, fragrance.*

## **Introduction**

### **What are Aromatic Plants?**

Aromatic plants (AP) are plants that possess aromatic compounds, most of which are essential oils which are volatile in room temperature. These compounds are synthesized and stored in a special structure called gland which is located in different parts of plant such as leaves, flowers, fruits, seeds, barks and roots. These essential oils can be extracted by various physical and chemical processes such as steam distillation, maceration, expression, *enfleurage*, and solvent extraction. They are mainly used as flavors and fragrances.

However, from ancient times, these plants have been used as raw materials for cosmetics, pharmaceuticals, botanical pesticides, etc.

### **Importance of Aromatic Plants**

AP can be divided into four groups based on how they are utilized, viz.:

- *As raw materials for essential oil extraction:* This is the major use of AP and is the one dealt with in this paper.
- *As spices:* These are plants in which their non-leafy parts are used as a flavoring or seasoning.
- *As herbs:* These are plants in which their leafy or soft flowering parts are used as a flavoring or seasoning.