EUCALYPTUS GLOBULUS

COMMON NAME: Eucalyptus globulus (in Australia it is called Tasmanian Blue Gum)

BOTANICAL NAME: Eucalyptus globulus

INTRODUCTION

Eucalyptus globulus is one of the most commonly used essential oils. A major use of the oil is for flavouring food, with candies and chewing gum being the most popular products. In fragrance compounds its refreshing impact and “cleanliness” is of great importance in toiletries (toothpastes and mouth refreshing products), as well as in various household cleaning products. The same effect is used by perfumers in fine fragrances. It is also used in pharmacy as an antimicrobial agent, especially in respiratory tract infections and similar problems. It is a very common and efficient ingredient in nasal and sinus sprays and also in cough sweets, ointments and chest rubs and stickiers to ease breathing difficulties. For the same purpose it is widely applied in aromatherapy. It has invigorating properties and is used as a skin anti-inflammatory agent as well as a panacea for rheumatic ailments. Eucalyptus globulus oil is used for massage and in healing spa baths as well as for sports massage (for muscle fatigue). It can also be used as an insect repellent.

China is the world’s dominant supplier of eucalyptus oil produced from E. globulus. The two traditional producing areas, in the western part of Yunnan, are Dali and Chuxiong/Baoshan prefectures. Two other important areas are around Kunming and in the southern part of Yunnan, including Honghe and Wenshan prefectures (Ni Bo, 2005).

China produces around 17,000 tonnes of crude E. globulus essential oil of which around 10,000 tonnes were exported in 2015 according to customs data from China. The crude oil contains 45-52% eucalyptol.

PRODUCTION AND PROCESSING CHARACTERISTICS

In all the producing areas, oil production was one of the aims of establishing the eucalyptus plantations and the total area of plantations is around 4.6 million hectares. Plantations are mainly found in the western and southern parts of Yunnan Province. In fact, in the southern part of Yunnan Province, the extraction of eucalyptus oil is the major commercial producer. In China, these trees are widely used for constructing timber roof supports in mines. Eucalyptus trees reach maturity after five years of growth. In order to help the tree grow better the farmers have to trim the foliage periodically. Whether to extract eucalyptus oil from the leaves or not, the cutting of leaves is indispensable work. During the initial growing period, farmers have to prune the trees twice a year and this work can be reduced to once a year three years after. The harvesting and distillation season varies depending on the production area:

- Dali: May/June to December
- Chuxiong: October to March
- Kunming and southern part of Yunnan: Non-stop year round activity

The distillation of crude oil is mainly located in the western and southwestern parts of Yunnan Province. Oil distillation is of two kinds. In the first kind, the farmers use their own stills to distill the leaves from their own farms or purchased from local owners by other farmers. Their only investment is the still which costs around US$400 and the farmers start the process when they have collected enough leaves. The second kind is where areas of land with eucalyptus trees are leased from the local government. Rural workers are then hired to collect and distill the leaves. The stills are provided by the contractors.

Rectification of crude eucalyptus oil is undertaken by almost 10 factories in Yunnan Province. They collect the crude oil and produce E. globulus oil 80% or any other specification according to the customers’ requirements. The factories are able to process 20,000 tonnes of crude oil per year (Le Li, 2009).

SOCIAL AND ECONOMIC CHARACTERISTICS

It is estimated that around 500,000 people are engaged in the eucalyptus globulus oil industry in China.

CONCLUSION

The production of eucalyptus globulus oil amounts to around 17,000 tonnes (of crude oil) per year, making it the largest essential oil in China and a critical income provider to 500,000 people.

REFERENCES:

- ISO 770:2002. Crude or rectified oils of Eucalyptus globulus