# Study on Resources of Tea Tree in Hainan Province and Its Development and Utilization

Dongmei Chen 1\*, Jinwu He 1\*, Weiwei Fan 1\*

<sup>1</sup> Sanya Aviation & Tourism College, Sanya, Hainan, 572000

Abstract: This paper describes the distribution of Hainan tea plantations, the flowering of tea flower and yield, Hainan tea industry industrial restructuring and product upgrades, usher in a new period of development and prosperity in the international tourism to the construction of the background, the great potential for the development of the tea industry, However, tea tree resources have not been exploited and utilized. Tea companies and tea plantation operators are also exploring the possibility of using tea tree flowers. Therefore, carrying out research on tea tree flowers is of great significance to promote the development and utilization of tea tree resources.

Keywords: Hainan, tea flower, tea industry, development and utilization

#### 1. INTRODUCTION

Tea tree flower [Camellia sinensis (L.) O. Kuntze] is a complete flower, both sexes, insect media flowers, usually composed of 5 to 9 petals, petals in the 200 to 300 stamens, pistils located in the center of the stamen population. Tea tree flowers with enhanced immunity, anti-aging, anti-oxidation, anti-tumor, hypoglycemic, lipid-lowering, antibacterial and anticancer and other effects. In recent years, with the continuous research on tea flower, tea tree flowers and fresh leaves found that the chemical composition is similar; and tea tree pollen protein, amino acid, vitamin B family are high, low fat content, is a high quality protein nutrition source.

On January 4, 2013, the Ministry of Health of China released the "Notice on Approving 7 New Resources and Foods such as Tea Tree Flower" (Ministry of Health Announcement No. 1 of 2013), and approved Tea Tree Flower, Saltberry Seed Oil, Fruit oil, skin oil, fruit tree, Cordyceps fruiting bodies of Acacia fruit and tea cane leaf straws fermentation mycelium for the new resources of food. The development and utilization of tea tree resources have become the new target of tea production and processing enterprises.

2. HAINAN TEA FLOWER BASIC CONDITIONS Hainan tea concentrated in Qiongzhong, Dingan as the core from the southwest to the northeast of the oval area, a total of 14 counties in the tea area (city) according to the size of tea arranged as Ding'an, Qiongzhong, Tong, Qiongshan, Tunchang and so on. In general, Wuzhishan as the center, along Wuzhishan Mountain Range and Limushan Mountain, the tea

cultivation area decreases with the altitude decreasing, while the tea plantations below 50m are not planted. Hainan Island cultivation of existing varieties of tea (Department) 80 more than one. About 50 varieties introduced, there are more than 30 islands. Hainan tea is the most representative of Wuzhishan Hainan wild tea, Hainan is currently cultivated tea varieties are mainly Hainan big leaf species, large-scale Yunnan and Taihong species of middle-mainly. Hainan has a good climate for growing tea and its ecological environment. Tea flowers bloom almost year-round and have relatively long flowering periods, making tea tree resources very rich and high-quality tea tree flowers. However, tea tree flowers in Hainan Island have not been well-established for a long time Used, often discarded as "waste".

Hainan Baisha, Qiongzhong, Ding'an, Wuzhishan and Baoting are dominated by big-leaf tea trees. The main flowering season of tea trees in these areas is from July to August, and in other months there are a few flowers and flowers. Wuzhishan area is the main producing area of wild tea in Hainan. The flowering season of wild large-leaved species is mainly from November to February of the following year. Wild tea trees have less flowering and smaller flowers. Hainan Wuzhishan and Chengmai planted tea plantations in the middle of the tea plantations, tea flower May - September for the flowering, flowering gradually after September, flowering longer, but in November each year to February the following year, flowering up to maximum output.

In the season with the highest yield of tea tree, each tree of large leafy tea tree can pick 0.6-0.8kg of flowers and / or buds, and about 1500 tea trees per acre of tea plantation, so 900kg ~ 1200kg of flowers or buds per acre of tea garden can be picked; Each tree of tea tree can pick flowers or buds of 0.8kg ~ 1kg, so the middle of the tea garden per acre can pick flowers or buds 1200 ~ 1500kg. At present, Hainan owns about 2,000 mu of cultivated plantation of middle-grade tea tree and nearly 10,000 mu of bigleaf planted acreage. Therefore, the yield of tea tree flower is also considerable.

# 3. HAINAN TEA INDUSTRY DEVELOPMENT STATUS QUO

Hainan Province was once the major tea producing province. Hainan Agribusiness has set a record of more than 100,000 mu of tea plantation area and its

products are well sold to more than 50 countries and regions. However, due to many factors such as policy, market and production cost, In 2008, the area of Haiken Tea shrunk to less than 10,000 mu. The four major tea factories in the South China Sea, Tongshun, Lingtou and Baisha, both red and temporary, left the "Baisha Green Tea" with painstaking support.

In January 2010, the State Council issued "Several Opinions of the State Council on Promoting the Construction and Development of Hainan's International Tourism Island", and the construction of Hainan's international tourist island has officially started its construction. With the help of the east wind of the international tourist island, the rapid development of tourism in Hainan, the optimization and adjustment of the structure of agricultural industry and the new development opportunities brought to the tea industry in Hainan, the major tea factories in Hainan have expanded their scale, readjusted their varieties and structures, Processing technology, improve product packaging, develop high-end tea market, Hainan tea industry is a single species from the traditional, extensive processing extensive variety, finishing, high value-added modern tea industry transformation and upgrading. Winter Fair Shanghai South popular hot tea, highlighting the great potential of Hainan tea brand, Hainan tea has also become a characteristic tourism products in Hainan, Hainan industry will usher in a new situation of prosperity and development.

#### 4. HAINAN TEA TREE UTILIZATION STATUS

At present, the research on tea flower in China mainly focuses on the detection and extraction of the functional constituents of tea flower, the research on the optimization of tea flower drink and processing technology. Some tea producing areas have already launched the tea flower drink. The finished tea flower tea has been sold on the Internet platform .

Hainan tea industry re-revitalization of development, but also on the development of tea products put forward higher requirements, and tea tree flowers as a by-product of tea, did not get a good development and utilization. From the major tea plantations in Hainan point of view, the tea tree picking and processing, are letting them naturally fall, Wuzhishan coconut fairy biotechnology Co., Ltd., general manager of Ms. Zheng Lijuan introduction, the company has done a simple utilization test, tea tree flowers have a bitter astringency, With a floral fragrance of tea tree, slightly sweet, dry brewed drinks, like tea with floral, suitable for drinking. What causes tea tree resources have not been developed and utilized? After research, analysis of the main reasons for the following one aspect:

Camellia flowers on the market before the market mostly dry products, but no more suitable for stable production of molding process, and the market products are relatively rare, consumer acceptance is low. Difficult to determine the product push to the market may produce benefits.

Flowering tea flower season is generally only about 2 months, can not achieve full-year picking production, continuous production, it is difficult to achieve economies of scale.

Tea flower picking harder than picking tea, only suitable for picking when budding, and picking high labor costs, the need for higher market prices, in order to achieve better returns, there is no market price reference standard, it is difficult to measure Picking and processing bring benefits.

Tea companies and tea plantation operators are also exploring the utilization of tea tree flowers, hoping to give full play to their health effects, while generating revenue for the enterprise. Therefore, the study of the functional components of tea flower, processing characteristics and health effects on the development and utilization of tea is important, at the same time, tea production enterprises, you can also try to develop tea tree tea products, calculate the reasonable pricing, put in the market, do a good job Publicity, so that people know tea flower, flower tea to understand tea tree flowers.

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