

TECHNICAL SPECIFICATIONS FOR REGISTRATION OF GEOGRAPHICAL INDICATION

1. Name of the Geographical Indication

Chinese name: 安溪铁观音

Transcription in Latin characters: Anxi Tie Guan Yin

Translation for information purposes: Anxi Tie Guan Yin

2. Category of the product for which the name is protected

Tea

3. Applicant

Name of the applicant: People's Government of Anxi County , Fujian Province

Address: No. 1 Datong Road, Fengcheng town, Anxi County, Fujian Province,
China , 362400.

4. Protection in China

Date of protection: July 8th, 2004

Proof of protection: The General Administration of Quality Supervision,
Inspection and Quarantine of the People's Republic of China (AQSIQ) , Notice
(2004) No. 91

5. Description of product

Anxi Tie Guan Yin refers to the range of protection of geographical indications products under the natural ecological environment conditions, choose Tie Guan Yin varieties of cutting propagation, cultivation and picking, and made into Tie Guan Yin quality characteristics Oolong tea according to the traditional processing technology. Anxi Tie Guan Yin made tea is divided into clean aroma Tie Guan Yin and heavy

flavor Tieguanyin, its quality characteristic has a natural fruity flavor and YIN flavour.

(1) Sensory quality characteristic

Table 1 Sensory quality characteristic of clean aroma Anxi Tie Guan Yin

Project		grade			
		Top grade	Grade first	Grade second	Grade third
Appearance	Tirp-type	Bold, round and tight, heavy body	Sturdy, tight	curly ,sturdy	Curly, approach sturdy
	Color	jade green, frog green obviously	green bloom, frog green obviously	green bloom, frog green	dark green, little yellow
	Whole or broken	Evenly	Evenly	approach evenly	approach evenly
	Cleanliness	Clean	Clean	Approach clean, little tender stalk	Approach clean, little tender stalk
Essence	Fragrance	High aroma	Clean aroma, lasting aroma	Clean aroma	clean and fresh
	Flavor	Fresh and mellow, high and brisk, Tieguanyin-essence obviously	Clean and mellow, sweet and fresh. Tieguanyin-essence obviously	Approach fresh, mellow , brisk, Tieguanyin-essence	Mellow, Sweet after taste、little Tieguanyin-essence
	liquor color	Golden yellow and bright	Golden yellow and bright	Golden yellow	Golden yellow
	the phyllotaxis	Fat and thick, soft and bright, evenly, high aroma, Slightly fragrant	soft and bright, approach evenly, Slightly fragrant	Approach soft and bright, approach evenly, Slightly fragrant	Little soft and bright, approach evenly, Slightly fragrant

Table 2 Sensory quality characteristic of Heavy flavor Anxi Tie Guan Yin

Project		Grade				
		Top grade	Grade first	Grade second	Grade third	Grade fourth
Appearance	Tirp-type	Bold, round and tight, heavy body	More bold, sturdy	Little bold, little sturdy	Curly, approach sturdy	Little curly, little coarse and loose
	Color	jade green , black bloom,frog green obviously	Black bloom, frog green more obviously	Dark green、frog green	Dark green, little auburnish red	Dull green, Auburnish red
	Whole or broken	Evenly	Evenly	Approach evenly	Little evenly	Less evenly
	cleanliness	Clean	Clean	Approach clean, little tender stalk	Approach clean, tender stalk	Less clean , stalk
Essence	Fragrance	Heavy flavor and lasting aroma	Clean and high, lasting aroma	Approach clean and high	Clean and pure , normal	Plain and thin, little coarse
	Flavor	Mellow and thick , fresh and brisk , sweet after taste、Tieguanyin-essence obviously	Mellow and thick, approach fresh and brisk, Tieguan yin-essence obviously	Mellow , fresh and brisk, Tieguanyin-essence little obviously	Mellow, Tieguanyin-essence slightly	little coarse taste
	liquor color	Golden yellow, clear	deep golden yellow, clear	Orange, deep yellow	Deep orange, clean yellow	Orange red, clean red
	the phyllotaxis	Fat and	Approach soft	Approach soft	Little	Less evenly ,

		thick , soft , bright and evenly , red , slightly fragrant	and bright , evenly , slightly fragrant	and bright , little evenly	evenly , auburnish red	coarse and auburnish red leaves
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(2) physicochemical indexes

Table 3 Physicochemical indexes of Anxi Tie Guan Yin

Project	Index
Water (%)	≤ 7.5
Dust tea (%)	≤ 16
Broken tea (%)	≤ 1.3
Total ash (%)	≤ 6.5

(3) Information and requirement of raw materials:

Tea leaves picked from tea Trees within administrative region of Anxi County of Fujian province.

Tea leaves quality : tea leaves should be bold , complete , fresh , evenly : with two “finalized leaf” (that is two relatively mature leaves) , and meet with one of the following requirement :

- ① Slight banjhi (the area of the top leaf is 20% - 30% of the second leaf) are picked three or four leaves and the banjhi;
- ② Medium banjhi (the area of the top leaf is 31% - 70% of the second leaf)) are picked two or three leaves and the banjhi;

③ Full banjhi (the area of the top leaf is 71% - 100% of the second leaf) are picked two leaves;

④ one bud with 4 leaves (4 leaves come from strong tree with buds).

6. Concise definition of the geographical area

Boundary of geographic area : The administrative region of Anxi County, Fujian Province

Steps of production: primary processing: tea leaves→sunning→cooling→rocking→fixation→rolling→baking→raw tea.

Purification process of Clean aroma Tieguanyin: raw tea → acceptance check→ bunch→ embark → sieve→pneumatic separation→stalk extraction and Picking miscellaneous→Tea blending→blending and mixing → mild fire drying→ pack→made tea.

Purification process of Heavy flavor Tieguanyin: raw tea → acceptance check→ bunch→ embark → sieve→ pneumatic separation→ stalk extraction→ Tea blending → toasting → Cooling→ blending and mixing →Picking miscellaneous → pack → made tea.

The process of production should be carried out in a defined geographic area.

7. Link with the geographical area

Anxi Tie Guan Yin is a kind of Oolong Tea which has a consummate and traditional processing flow, is known as an appearance of “green pedicle, green abdomen and dragonfly head, lingering fragrance after seven brewing” and very famous because of its “YIN flavour” integrated embodiment of flavor and aroma as a peculiar quality characteristics of Tie Guan Yin tea varieties. It is obviously different

from the tea products of other tea producing areas; the products are black bloom, shiny, fat and bold, tight and straight and heavy as if made of iron; the liquor color is golden yellow or bright orange; the aroma is fragrant and long; the taste is mellow, sweet and fresh, promoting the secretion of saliva or body fluid and having a sweet cheek tooth if drinking, known as “green leaves rimmed with red, still fragrant after seven bubbles”. The quality characteristics of Anxi Tie Guan Yin are closely related with the climate, soil, environment, culture and other factors of Anxi County:

(1) relationship with the geographical features

Anxi , located on the upper part of Xixi , Jingjiang , southeast of DaiYun Mountain , the triangle part of Xiamen , Zhangzhou and Quanzhou on Fujian Province, northern latitude $24^{\circ}50'$ ~ $25^{\circ}26'$, east longitude $117^{\circ}35'$ ~ $118^{\circ}17'$, the high-lying north-west, south-eastern low. Taihuajian, which is the highest point, is 1,600 meters above sea level; Jingdou country, Chengxiang town which is the lowest point is 32 meters above sea level. It is surrounded by mountains, Pinnacle wins mountain range. There are 2,461 mountains higher than thousands meters, spring following around the peaks; no sea wind can attack the hinterland. Because of its geographical environment, Anxi deserves being called beautiful natural sight and Anxi Tie Guan Yin is black bloom, shiny, tea infusion is golden yellow, it is nicely heavy lasting flavour, tasted with sweet, mellow and thick.

(2) the relationship with climate characteristics

Chemical compositions of Anxi Tie Guan Yin mainly contain tea polyphenols, amino acids, caffeine, tea polysaccharide, pigment, aromatic substances and so on, and the formation and accumulation of substances, part of tea plant secondary

metabolites, are influenced by tea plant metabolites under the certain condition of climate such as light, temperature and precipitation, then have an impact tea quality.

The climate of Anxi county is subtropical marine monsoon climate; the average temperature is 16°C to 21°C; the annual sunshine time is 1,850 hours to 2,050 hours; the time when accumulated temperature of the county overtops 10°C is 259 days to 338 days; Frost-free period is 260 days to 350 days; the four seasons are distinct throughout the year with no-hot summer and no-cold winter. Anxi county possesses the climate conditions which is an important factor to form high quality Tie Guan Yin, such as a moderate amount of light, good scattered light, large temperature difference between day and night caused by high altitude and abundant rainfall caused by the wind without interference. The climate conditions are suitable for the natural growth of tie guan yin tea trees, conducive to increase of amino acid content and decrease of the ratio of tea polyphenols and amino acid, accumulation of tea aroma precursors, and increase of aroma substance content including nerolidol, fanny ene, indole, benzyl ethanol, anti - 2 - hexene aldehyde in Tie Guan Yin, which characteristics make Anxi Tie Guan Yin obviously phonological and have an appearance of fat and bold, curly tight and heavy. The color of clean aroma Tieguanyin tea is green and oily; the liquor color is green-yellow and bright; the aroma is clean and high, fresh and brisk and long. The color of Heavy flavor Tieguanyin is black bloom with obviously sand green; the liquor color is golden or orange; the aroma is heavy fragrant and long; the taste is mellow, sweet and refreshing.

(3) the relationship with soil conditions

Anxi Tie Guan Yin has favorable site conditions; the soil is mainly mountainous and sandy; PH value is 4.5 to 6; it is red soil at an elevation of 700cm or less while yellow-red or yellow soil at an elevation of more than 700cm; the soil texture is loose; the soil layer is deep; it has a high content of organic matter, and is rich in mineral nutrients, especially high content of manganese, zinc, molybdenum in soil, which is highly desirable for tea growing. Studies have shown that manganese can promote the formation of amino acids, vitamins and tea polyphenols in tea plant, zinc can improve the content of carbohydrate which is conducive to the formation of amino acids in tea, and molybdenum content was positively correlated with soil pH coinciding with growing demand for acidic soil to Tieguanyin plant. Therefore, Anxi county soil with high content of manganese, zinc, molybdenum has a non-negligible contribution to form the characteristics of high quality tea.

(4) Relationship with human characteristics

Anxi is the main tea producing area, with a long history about a thousand years, according to “Chinese classic of tea” and “annals of Anxi County”. Later the local growers have found Tie Guan Yin in the Qing Yongzheng, dating back nearly 280 years of history. Especially in 1978, asexual reproduction technology was invented in Anxi, namely “tea tree short cutting seedlings method”. Tieguanyin clonal varieties cultivated by the method have good adaptability, stable provenance and difficult variation, which excellent characters can be passed from generation to generation and provide tieguanyin native provenance for the breeding production. Hence, asexual reproduction technology is also an Anxi's great contribution in the history of tea in China. The higher agricultural colleges textbook “Manufacture of

tea” says that green tea (Oolong) was created by laboring people in Anxi , Fujian in Qing yongzheng three to thirteen years(1725-1735). Tie Guan Yin originates in Xiping town, Anxi. There are two kinds of views about it origin, “WANG say” and “WEI say”. At the beginning of the 21st century, Anxi people's played to the collective wisdom to innovate machining process of Tie Guan Yin in traditional inheritance, such as controlling the temperature and humidity, reducing the effects of bad weather on machining process by the adoption of technology and modern equipment. These innovations have resolved the tea season problem influenced by climatic conditions especially high temperature in the summer, greatly improve the quality of summer tea, and have been widely applied in producing areas of various Tie Guan Yin tea.

Anxi Tie Guan Yin is one of the top ten famous tea in China, favored by customers inside and outside the country because of “YIN flavour” and good quality, has been to the world by “Maritime silk road”, sold well both at home and abroad, and popular in Europe and the United States, especially southeast Asia as “overseas Chinese tea” at the beginning of the 20th century. With the excellent quality and the “YIN flavour”, Anxi Tie Guan Yin is one of the favorite teas to consumers and has a good reputation at home and abroad. According to Xiamen harbor history: England have bought 1,800 to 1,864 tons of Oolong tea such as Anxi Tie Guan Yin every year from Xiamen harbor between 1858 to 1864, and 4,500 tons in 1877. Since the reform and opening up, especially since the 1990 s, Anxi county Party committee, the county government pay special attention to the development of Anxi Tie Guan Yin , developing “high quality, high-quality goods, famous brand” and “sustainable

development” strategy. Through kinds of tea culture activities, Anxi tea industry developed rapidly, remarkable achievements have been made in the production and business activities of Anxi Tie Guan Yin in Anxi, and the product quality have been improved.

Origin sales model have gradually transferred to modern sales model such as direct sales, distribution, wholesale transfer of monopoly, electricity and other modern forms. In the domestic, five markets has formed including Fujian, Guangdong, Yangtze valley, the north and west market. Abroad, markets have gradually expanded to more than 60 countries and regions such as Russia, Europe and the United States through Japanese and Sudeste Asiático. The amount of exports of tea to Europe in our county showed a trend of increase with an average annual rise of 7.5% a year from 2014 to 2016, and total tea exports amounted to 100 tons which output value reached 262.81 million yuan in three years.

Especially, Anxi Tie Guan Yin with public brand identity was awarded the first of China gold medal teas included in the one hundred world expo in 2015 Milan's world expo, which was another international award following “expo China top ten famous tea” in the 2010 Shanghai world expo. In December 2016 , Anxi Tie Guan Yin brand was worth 142.438 billion yuan as number one in tea rated by the state administration of quality supervision and China Association for the promotion of brand building.

8. Specific rules concerning labelling and using (if any)

None

9. Control body / control authority responsible for checking the respect of the product specifications

Market and Quality Supervision Commission of Anxi County, Fujian Province