Specification of Zhenjiang Xiang Cu

1- Product Name

镇江香醋 Zhenjiang Xiang Cu

2-Product Description

Zhenjiang Xiang Cu is a kind of brewed vinegar with special fragrance made in a specific area that is Zhenjiang City in China. The color of Zhenjiang Xiang Cu is strong lustrous reddish brown with umber. It has a strong fragrance of fried rice and brewed products. It is dense and soft in taste with a comprehensive sour touch including acetic acid, lactic acid, malic acid, succinic acid, citric acid and gluconic acid, but not astringent in particular. It tastes delicious and slightly sweet. Zhenjiang Xiang Cu has a lasting delicate flavor, which gets stronger as time passes. The major physical and chemical indexes are as following:

Specification	4.5%	5.0%	5.5%	6.0%
total acidity (calculated based on acetic acid) in g/100 ml ≥	4.50	5.00	5.50	6.00
fixed acid (calculated based on lactic acid) in g/100 ml ≥	1.00	1.20	1.40	1.60
amino acid nitrogen (calculated based on	0.10	0.12	0.15	0.18

nitrogen) in g/100 ml ≥				
reducing sugar (calculated based on glucose) in g/100 ml ≥	2.00	2.20	2.30	2.50

By applying a traditional unique techniques called Solid State Stratified Fermentation, Zhenjiang Xiang Cu is made under the conditions specific to the city in terms of geography, climate, cultural background, raw materials and water quality. The brewing procedure includes over 40 processes, about 70 days of fermentation and storage of over 180 days. Based on the length of storage period, Zhenjiang Xiang Cu is divided into two categories, namely “Fragrant Vinegar” in common sense with a storage period over 180 days, and “Mature Vinegar”, which refers to Zhenjiang Xiang Cu with a storage period over 365 days.

3-Defenition of the Geographical Area

Zhenjiang Xiang Cu is made in a specific area -- Zhenjiang City of China. Zhenjiang City has been enjoying a long reputation of ’City in the mountain forest and Home of savory vinegar’. The region of Zhenjiang is located in the southeast of China and on the southern bank of Yangtze River, covering an area between 31°37′—32°19′ north latitude and 118°58′—119°58′ east longitude. It is comprised of stretching hills, fertile land, interlaced river network, vast stretches of eyots and ports along the river. The name of the city

Zhenjiang originated from its surrounding by hills on three sides and facing the river, meaning "guard of Yangtzee River". The region of Zhenjiang is composed of Jurong City, Danyang City, Yangzhong City, Dantu District, Jingkou District, Runzhou District and Zhenjiang Development Zone. The total population of the city is 2.996 million and it covers a total area of 3,847 square kilometers, among which hills account for 51.19%, dykes 19.7%, plains 15.5% and water surface 13.79%.

4- Proof of origin

The manufacturer of Zhenjiang Xiang Cu has purchased the raw materials from the specified area according to the technical specification. The inspectors have surveyed all the raw materials purchased to ensure their quality and put the qualified materials into the storehouse strictly in batches after inspection. The inspectors make records for quantity and quality of raw materials, certificate of origin, and the purchased time.

Water can only be chosen to put into the production which is from the protective zones after inspection. The water will never be chosen in the production which is far away from the protective zones.

The procedure in production of Zhenjiang Xiang Cu is a continuous processing, which is made from making fermentation, fermented glutinous rice, vinegar's parched rice colour, making drunkenness and satiety, turning drunkenness and satiety, sealing up the drunkenness, pouring vinegar, fried vinegar, aging (storage), filling, etc..

All the working procedures have be finished in the same factory within the scope of protective zones. The same batches of products

are of the same specification ones which are made from same batches of raw materials at the same production cycle.

The products in each batch must be inspected in quantity and quality. The information, such as the production time, quantity and quality, must be recorded, being kept in files in accordance with the provisions. Each bottle of vinegar is labeled, on which it contains the product name, manufacturer, batch number, production date, manufacturer address, main raw materials, technical specification, and the standard to be implemented.

5-Production Method

First, use local premium wheat, barley and green peas originate from Zhengjiang as materials to make pieces of Daqu, which is rich in saccharifying strains,. During the process of making Daqu, it is essential to control the purity, cleanness and percentage of raw materials and the moisture and temperature of Daqu pieces so as to guarantee the quality.

Cultivate the special bacterial strains of acetobacter pasteurianus originate from Zhengjiang. In the meantime, select, cleaned and scoured materials such as sticky rice, wheat bran and rice husk originate from Zhengjiang. It is essential to eliminate impurities and bacteria to ensure good quality.

Mixed clean and cooked sticky rice with Daqu in specifically designed ceramic containers to saccharify and liquefy for fermentating into rice wine broth (alcoholized sticky rice congee). It is essential to strictly control the temperature and stir the materials in time to achieve desired alcohol and acid content in

order to ensure the quality of rice wine broth.

Mixed rice wine broth, wheat bran and rice husk together, stir and inoculate them for the production of solid brewing mass, which is placed in containers for fermentation. Frequently stir the brewing mass by layer with additional alcoholized nutritional liquid and rice husks. Control temperature so as to to increase the carrier for the growth of acetic acid bacteria. At this stage, the key point for quality control is to carefully stir the brewing mass by layer, precisely follow the operation procedures, strictly control the temperature of the brewing mass and add materials in a timely manner.

After reaching full fermentation, seal the brewing in order to maintain good fermentation environment for further brewing. At the same time, fry and steamed local high quality rice to scorched rice congee for use.

Rinse the mature brewing mass (with lactic acid reaching specified level) with light vinegar so as to extract the vinegar liquid from the brewing mass. Fried rice (scorched rice congee) and edible salt are added proportionately for strengthening of color and savor and adjustment of density and acidity.

After rinsing and settling vinegar retrieved, Steam them under strictly controlled constant temperature for a certain time. This is done in order to eliminate contamination, adjust taste, deepen coloring, control density, decrease turbidity, and further promote the composition of some nutritional elements and facilitate vinegar liquid mature. Matured vinegar shall be stored in specially designed sealed ceramic containers for over 180 days for further post fermentation.

6-Link to the Geographical Area

Zhenjiang is located in the southeast of China, facing the Pacific Ocean. Influenced by the marine climate, Zhenjiang belongs to the typical humid monsoon climate with a transition from a warm temperate zone to a subtropical zone. In this area, the annual average hours of sunshine is 2,050.7 hours, the rate of sunshine is 46.8%, the annual average temperature is 15.4℃, the average humidity is 77% and the annual average precipitation is above 1,000mm. It is humid and mild all year round. Zhenjiang is located at the confluence of Yangtze River and the Grand Canal, whose terrain is comprised of green low hills, fertile land, interlaced river network, vast stretches of eyots and ports along the river, being a wavy area full of green in a nice, bright and humid climate. It abounds in such agricultural plants as rice, wheat, barley and green pea with rich resources of farm and sideline products such as wheat bran and rice husk, etc. The humid climate and greening of Zhenjiang are conducive to the yield and reproduction of acetic acid bacteria. The hills in Zhenjiang are mainly comprised of rocks including limestone, sandstone, shale, dolomite, marble and granite, etc. Water in mountains and springs in Zhenjiang gather in rivers, lakes and wet lands through the infiltration of stones, in which contributes to the rich content of mineral materials, pure quality and lightly sweet flavor, which is most suitable for the manufacture of vinegar.

People in Zhenjiang started to make vinegar 1,400 years ago and created a bright culture of vinegar. When Tao Hongjing, a royal consultant in the Liang Dynasty, retreated in Maoshan of Zhenjiang, he recorded the usage of Zhenjiang Xiang Cu (savory

rice vinegar) in his writing *Bencao jing jizhu*, a commentary on the earliest known Chinese pharmacopoeia, the *Shennong bencao*,. Record was found in the Medicine Classics of China that "vinegar made in Hangzhou and Shaoxing counties of Zhejiang province is of good quality, while those made in Zhenjiang of Jiangsu is actually the best". Lu Mingshan, an agriculturalist in the Yuan Dynasty of China recorded in detail the early brewing techniques of savory vinegar in his book *Nongsang Yishi Cuoyao*. Zhenjiang Savor Vinegar was awarded the gold award in the Southern Seas Commodity Exposition for its unique delicious flavor as early as in the Qing Dynasty.

There is a long cultural history of vinegar in Zhenjiang. Zhenjiang Xiang Cu has become the name card of the city. Zhenjiang Xiang Cu is regarded nowadays excellent products for gourmet, cosmetics, health care, leisure, gift, guest entertaining, and even land fertilization and stimulation of (plant) growth. Zhenjiang City is a city of vinegar culture .

7- Inspection Body

Zhenjiang Municipal Bureau of Quality and Technical Supervision of Jiangsu Province

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8-Labelling

The label of Zhenjiang Fragrant vinegar is printed, which is affixed permanently on the package bottle for convenient recognition and reading. Main contents on the label including as follow: product name (Zhenjiang Fragrant vinegar), techniques (solid fermentation), category of vinegar (brewed vinegar), main ingredients, net weight, the name of manufacturer, the address of manufacturer, production date and product standard code, etc.

9-Local Legislative Requirements