



WHITE TEA

白茶

EXPERIMENTAL GUIDE

Intern project
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INTRODUCTION

As part of my internship at Obubu Tea Farm, this project is an experimental guide based on my experience processing pressed white tea.

Working with tea and spending time in the tea fields are the moments I enjoy the most, and I am deeply grateful to Obubu for giving me this opportunity. Also to Pei Chen Tea Palace, in Argentina, my first guides on the tea path, and the mentors who shaped my understanding of tea production.

In this guide, you will find a brief introduction to the history of white tea, followed by a detailed look at my own processing journey from experimentation to tasting.

I began by making small “pocket teas” to test different processing and pressing methods, and eventually processed around one kilogram of fresh leaves for the final project.

Through this project, my intention is not only to document the technical steps, but also to share the learning process behind them: the challenges, surprises, and small discoveries that emerged along the way. White tea processing may seem simple, yet it requires sensitivity, patience, and constant attention to nature.

My hope is that this guide becomes a useful reference for future interns and tea enthusiasts who wish to continue experimenting, exploring, and finding their own connection with the craft of tea.

WHAT IS WHITE TEA

White tea is one of the six main categories of tea, along with green, yellow, oolong (wulong), black (red in China), and dark/post-fermented teas (black in China). It is known for its simple and delicate process, traditionally involving withering and drying under the sun or in the shade.

One of its defining characteristics is the presence of buds, which must appear in any type of white tea. The plucking standard can vary from bud only, bud and one or two leaves, and in some cases even bud and up to five leaves. This gentle process preserves much of the natural shape, color, and fine silvery hairs of the young leaves, giving white tea its characteristic appearance.

Another distinctive feature is its connection to health and tradition: historically in China, white tea was valued not only as a refined beverage but also for its perceived medicinal properties, being rich in antioxidants and considered cooling and restorative.

Because of the minimal intervention, white tea tends to have a light flavor profile, often described as sweet, floral, fruity, or honey-like, with less bitterness or astringency compared to other teas.

HISTORY OF WHITE TEA

White tea is considered one of the most recent of the six major categories of tea.

It first appeared in 1796 in Fujian, China, but it was only in 1976 that it was officially recognized as one of the six traditional tea types.

The practice of pressing and aging white tea began much later, around 2004, opening new possibilities for storage and flavor development.

In its early days, white tea was mainly produced as an export tea for Europe, with limited local consumption in Asia. It was not until the trend of pressing and aging white tea gained popularity that domestic appreciation grew, and white tea started to establish a stronger presence within Asian tea culture.

WHITE TEA IN JAPAN

White tea arrived in Japan mainly through imports from Fujian, China, during the 20th century, initially as a product of curiosity for specialized markets.

Experimental production:

In Japan, some producers began experimenting with white tea towards the late 20th century and early 21st century, mainly in:

- Shizuoka (the region with the highest tea production).
- Kagoshima (Kyūshū), with a warm climate suitable for early harvests.
- Kyoto/Uji/Wazuka, on a small scale by artisanal producers.

Current state

Production remains very limited and niche, with small batches aimed at export and experimentation. Within Japan, there is almost no tradition of consuming white tea, as the domestic market strongly prefers sencha, hojicha, and matcha. However, there is a growing academic and experimental interest, especially in pressed or aged teas, inspired by the Chinese model.

TYPES

OF WHITE TEAS

The classification of white teas depends on the harvest standard. While a bud is always required, different plucking combinations are used.



PROCESSING METHODS

SILVER NEEDLE (白 毫银针 – BÁIHÁO YÍNZHĒN)

- Plucking standard: bud only.
- Origin: Fuding, Fujian.
- Profile: delicate, floral, sweet, and light-bodied.



PEONY CROWN (牡丹冠 – MǔDĀN GUĀN)

- Plucking standard: one bud and one leaf.
- Origin: Fuding, Fujian Province, China.
- Profile: balanced and fragrant, with honey and white flower notes.

WHITE PEONY (白牡丹 – BÁI MǔDĀN)

- Plucking standard: one bud and two leaves.
- Origin: Fuding and Zhenghe, Fujian.
- Profile: balanced and fragrant, with honey and fruity notes.



**LONGEVITY
EYEBROW (寿眉 -
SHÒUMÉI)**

- Plucking standard: one bud and three to five mature leaves, from the autumn harvest.
- Origin: Fuding and Zhenghe, Fujian Province, China.
- Profile: notes of honey, dried fruits, wood, and faded flowers

Used to make aged teas.



**EYEBROW TRIBUTE
(贡眉 - GÒNGMÉI)**

- Plucking standard: one bud and two or three to five slightly mature leaves from the summer harvest.
- Origin: Fujian Province, China — mainly from Zhenghe and Fuding regions.
- Profile: subtle woody, fruity, and honey-like notes. The liquor is slightly darker, and the aroma more rounded and mellow.

Used to make aged teas.

**AGED WHITE TEA
(紧压白茶 - Jǐnyā
BÁICHÁ)**

- Plucking standard: usually made from later-harvest white teas such as Shoumei or Gongmei, using larger and more mature leaves.
- Origin: Fujian Province, China. The practice of pressing white tea began around 2004.
- Profile: compact tea cakes, bricks, or small touchas that can be aged for years.

IS PRESSED WHITE TEA DIFFERENT?

THE SHORT ANSWER: **YES.** BUT WHY?

Pressed white teas are generally made with summer and autumn leaves, which means the quality is slightly lower than that of spring teas. That's why we press them. After being pressed, they can be left to mature for a couple of years (similar to wine aging). Over time, the flavor becomes stronger and more complex. It's common for pressed white teas to develop deeper aromas and flavors, reminiscent of wood, tobacco, or aged leaves.

As white tea ages, the chemical composition of the leaves continues to evolve.

Over time, slow oxidation and natural fermentation take place, gradually breaking down catechins and other polyphenols into more stable and mellow compounds. This process reduces bitterness and astringency, while enhancing sweetness, body, and depth of flavor.

During storage, amino acids and sugars also interact, creating warm and complex aromas. The fresh floral and fruity notes of young white tea transform into richer tones of honey, dried fruits, wood, and herbs.

Aged white teas often carry sweet, woody, and slightly medicinal fragrances, with hints of dried fig, date, molasses, cedar, and gentle spice. Some even develop balsamic, resin-like, or tobacco nuances, depending on storage conditions and time.

As a result, the liquor becomes warmer in color, smoother in texture, and deeper in taste, offering a comforting and nostalgic character highly valued among tea drinkers.



TASTING GUIDE

TEA TASTING

METHOD

ISO 3103 - STANDARD TASTING

ISO 3103 is the International Standard for Tea Preparation for Sensory Evaluation.

It provides a unified method to prepare tea so that different samples can be compared under the same conditions during professional tastings or analytical assessments.

The purpose of this standard is to eliminate variations in brewing technique — such as temperature, leaf quantity, or steeping time — ensuring that evaluations are consistent and reproducible.

- Teaware

A standard white porcelain tasting set is used (like the one shown), ensuring uniform brewing conditions.

- Water:

Near-boiling water of the highest possible quality.

- Tea ratio:

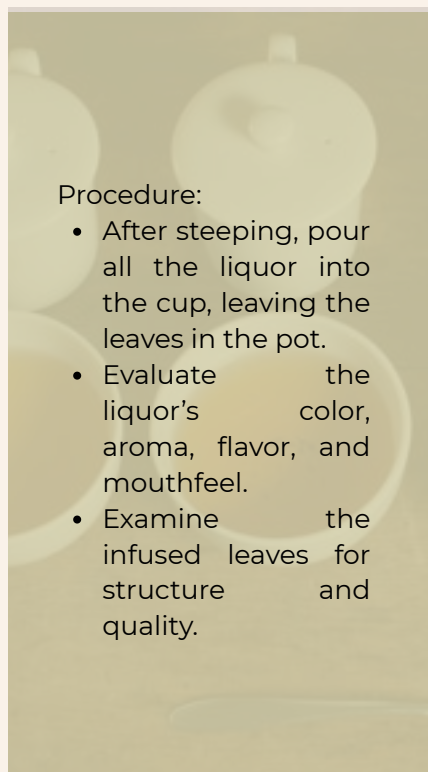
1 g of tea per 50 ml of water.

- Steeping time:

Exactly 6 minutes.

Procedure:

- After steeping, pour all the liquor into the cup, leaving the leaves in the pot.
- Evaluate the liquor's color, aroma, flavor, and mouthfeel.
- Examine the infused leaves for structure and quality.



WHITE TEA TASTING

WHAT IS GOOD

Dry Leaf Appearance

- Natural curved shape
- Plucking standard need to present buds
- White trichomes
- Tricolor
- Uniform size and shape
- Whole leaves, not broken

Aroma (Fragrance)

- Possible notes: Fresh, floral, honeyed, or fruity notes, melon, or dried apricot, bakery, dried alfalfa, Azhar,
- Profile: not green, not fermented.

Liquor (Infusion)

- Pale yellow to light golden color
- Bright and clear
- Suspension trichomes

Taste (Flavour)

- Naturally sweet and mellow
- Low astringency, no bitterness
- Fresh and pure character
- Notes of honey, flowers, melon, or dried fruits
- Evolving aftertaste, long and refreshing

Mouthfeel

- Silky, smooth, and clean texture
- Medium body
- Long and sweet aftertaste (hui gan 回甘)

WHITE TEA TASTING

WHAT ISN'T GOOD

Dry Leaf Appearance

- Dull or brownish color (indicating oxidation or poor drying)
- Uneven size or mixed materials
- Lack of buds or trichomes
- Broken or crushed leaves
- Dusty or faded appearance

Aroma (Fragrance)

- Stale, musty, or earthy notes (a sign of moisture or poor storage)
- Overly grassy or hay-like smell (underwithering)
- Burnt, smoky, or baked aroma
- Flat or absent fragrance (old material or excessive exposure to air)

Liquor (Infusion)

- Cloudy or murky liquor
- Dark brown color (indicating over-oxidation or poor preservation)
- Lack of brightness or transparency

Taste (Flavour)

- Bitter, harsh, or astringent taste
- Flat and short flavor without sweetness
- Overly grassy, sour, or stale notes
- Unbalanced flavor profile (too watery or too heavy)

Mouthfeel

- Rough or drying sensation on the tongue
- Watery or thin texture, no body
- No lingering aftertaste (hui gan)
- Unpleasant coating or chalky feeling



EXPERIMENTATION

EXPERIMENTATION AT OBUBU

EXP. 1

Date: 22/9

Tea field: Office

Temp: 29° - 20°

Processing:

Day 1: Whitering for 3 hs and shade the rest of the day

Day 2: Whitering for 2 hs in the morning and shade

Day 3: Whitering for 2 hs and shade

Tasting:

- Dry leaves: natural curved shape, one bud two leaves, present buds with white trichomes, tricolor , uniform size and shape, whole leaves, not broken.
- Aroma: fruity, dried apricot, dry wood, little earthy, flat,
- Liquid color: Golden orange, tea strikes, reddish halo and cloudy liquor.
- Flavor: sweet, honeyed, fruity, mellow, floral aftertaste, flat, medium body, mild flavor, refreshing, silky and clean texture, medium and sweet aftertaste
- Infused leaves: entire leaves, brown and green, high fermentation and oxidation.
- Aroma (infused): fruity, floral, honeyed.



EXP. 2

Date: 30/9

Tea field: Office

Temp: 29° - 19°

Processing:

Day 1: Whitering for 2 hs and shade the rest of the day

Day 2: Whitering for 2 hs in the morning and shade

Day 3: Whitering for 6 hs and shade



Tasting:

- Dry leaves: natural curved shape, very brown leaves, small in size, plucking standard: one bud and one leaf.
- Aroma: dry leaves, dried fruit, apricot jam, citrus.
- Flavor: mint, bitter, citrus, sweet, bitter again, acidic.
- Liquid color: reddish-brown, bright.
- Infused leaf: very brown, entire leaves.
- Aroma (infused): ripe fruit, low complexity, green notes, jam-like.

EXP. 3

Date: 8/10

Tea field: Pocket tea stolen from a field on the way to Inari

Temp: 31° - 21°

Processing:

Day 1: Whitering for 2 hs and shade the rest of the day

Day 2: Whitering for 3 hs in the morning and shade

Day 3: Whitering for 3 hs and shade



Tasting:

- Dry leaves: natural curved shape, one bud two leaves, present buds with white trichomes, tricolor but a lot of dark leaves, uniform size and shape, whole leaves, not broken.
- Aroma: fruity, dried apricot, blueberry, intense, Panettone
- Liquid color: Light yellow, tea strikes, orange halo, clean.
- Flavor: sweet, honeyed, fruity, mellow, floral, light body, mild flavor, refreshing, silky and clean texture, short aftertaste.
- Infused leaves: entire leaves, brown and dark green, high fermentation and oxidation.
- Aroma (infused): fruity, floral, honeyed with some grasy notes.





**PRESSING
EXPERIMENTATION**

PRESSING

PRESSING METHOD

As part of the experimentation process, three pressing tests were carried out. All tests were performed using objects that can be easily found and are accessible to anyone.

The first step consisted of measuring 5 grams of tea—the amount indicated for a single serving—and exposing it to steam to soften the leaves. Below, I will describe the three pressing methods.



Ice cube mold

Note: Best method for producing a large quantity, but the pressing needs improvement to achieve a more compact result.

Advantages:

- Fastest method
- Several units can be made at the same time
- Easy to replicate
- Uniform results

Disadvantages:

- Hard to maintain consistent pressure on the leaves, resulting in a lighter compression
- Less aesthetic shape compared to the other methods



Cloth



Advantages:

- Round shape similar to Pu-erh balls
- More compact pressing
- Easy to place the leaves inside the cloth
-

Disadvantages:

- Slow method because each ball has to be made individually
- Each one takes approximately 3 minutes
- Requires significant manual force

Note: Best method for small quantities

Cloth bag

Note: The most difficult method for small quantities.



Advantages:

- More aesthetically pleasing shape
- Creates a flattened circular form
- More compact pressing

Disadvantages:

- The stitching may break after making several units
- Difficult to place the tea inside the bag
- Difficult to remove the tea once pressed, and the shape may break in the process
- Since you cannot see the leaves until you open it, the final shape may show more imperfections

PRESSING

Final observation

I decided that I will use the second method, since the quantity is small, the shape is the most aesthetic, and it is easier to make than the third one.





WHITE TEA MAKING

PROCESSING

DAY 1

- Date: 27/10/2025
- Harvesting from 9:30 to 12
- Field: Sugi Monsen
- Cultivar: Yabukita
- Harvest standard: Bud and 4 or 5 leaves

OBSERVATIONS

- Tea leaves are different. Some are smaller and more mature, other ones younger and bigger.
- Weight: 1123.7 kg



PROCESSING

- Sun exposure: From 12:15 to 14:15 (cloudy)
- From 14:15 inside the Shed

DAY 2

- Date: 28/10/2025

PROCESSING

- Sun exposure: From 9:15 to 12:00 (cloudy in the morning and more sunny after 10 am. Sun is not very strong)
- From 12 inside the Shed



OBSERVATIONS

- Tea leaves are still green. Buds started to be dried. I can see white trichomas.
- Aroma is not intense, still smell green.

DAY 3

- Date: 29/10/2025

PROCESSING

- Sun exposure: From 9:15 to 13:00 (cloudy day, sun is not strong)
- From 13:00 inside the Shed

OBSERVATIONS

- Tea leaves are dried, however there are still some big leaves that are flexible and green.
- Aroma is not intense. But smell dried now.



Although it is not a common practice in white tea production, for my experimentation I decided to bake the white tea balls for 20 minutes at 70°C in an attempt to caramelize the sugars.

WHITE TEA TASTING

FINAL PROJECT

Dry leaves: large leaves, plucking standard: one bud and up to three leaves, mostly green in color.

Aroma: soft, green, asparagus, blueberry.

Flavor: very gentle, sweet, citrusy, white flowers.

Liquor color: Light yellow,

Infused leaves: very green, showing very little oxidation.

Aroma (infused): mint, fresh green grass.



WHITE TEA PRESSING

After two weeks of degassing and sorting the smallest leaves, it was time to press the tea.



I used a bamboo steamer and a manual cloth-pressing technique.

NAMING AND PACKAGING

Name:

Kanji: 紅葉香

Romaji: Kōyōka

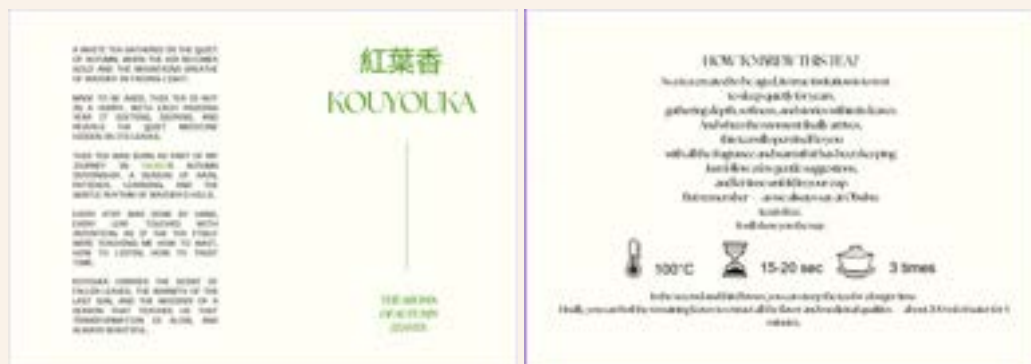
Autumn Foliage Aroma

Paper: Washi paper

Stickers design and prototype



Card



PHOTOS



CLOSING THOUGHTS

The experience of making tea is not only beautiful, but also hard. As any tea farmer quickly learns, nature and weather determine not only the quality of the tea leaves and the final tea, but also whether you can harvest at all. The first day I planned to harvest, it rained the entire day, and that became my first lesson: we depend on nature, but nature does not depend on us.

I had read many times that white tea is simple and the easiest tea to process. Let me say that I disagree. Processing white tea may look easy, but in reality it is not. For three days you need to take care of the leaves constantly: making sure they don't receive too much sun, but also not too little; protecting them from rain; and checking that the final moisture level is correct after three days, because you cannot use a dryer.

Moreover, the quality of a good white tea depends deeply on proper processing, it is not just about letting the leaves dry by themselves. And once the processing is done, the tea teaches you patience. The experimentation with different pressing methods was demanding as well. I don't feel that I found the perfect way yet; it is something to keep playing with.

Finally, creating this guide is my contribution for future interns and farmers who wish to continue experimenting. I would be truly happy to know that more people keep developing this in the future. Obubu is the perfect place to play, explore, and learn. Thank you, Obubu, for giving me the possibility to do what I love the most: making tea.

And now, it is simply time to wait for the tea to age and taste it again in a couple of years. Nobody knows how much time will pass, or how many adventures will come, before the moment when I, and the people who receive these tea balls, meet this tea again. And nobody knows what experience, feeling, or reason will lead someone to heat water, sit for a moment, and try this tea once more.