

LOVING THE LEAF

# THE TEA PLANT, CAMELLIA SINENSIS

All true tea comes from Camellia sinensis, an evergreen shrub that is native to southwestern China's Yunnan province. Three original varieties of Camellia sinensis are widely recognized. They are var. assamica, var. chinensis (or sinensis) and var. cambodiensis. The assamica plant is native to northeastern India's Brahmaputra River valley region, Assam, and is known for its broad leaves, ability to thrive in hot, humid, low-lying environments and for making a robust cup full of body and color. Assamica is generally, but certainly not always, planted in black tea producing regions like Assam, East Africa and Sri Lanka. The heritage tea trees in Yunnan are var. assamica.



Tea plant, Camellia sinensis

The chinensis variety is known to be the original tea plant indigenous to China and is known for having a smaller leaf, a multi-stalked trunk and for making an aromatic, flavorful cup. Chinensis has small leaves and a hearty constitution so it is planted at high elevations and in areas with difficult climates.

Var. cambodiensis is used in tea research stations around the world in the development of new tea cultivars and for scientific purposes. It is not grown or processed for consumption.



Tea picker in Darjeeling

#### ASIA

According to legend, tea was discovered by the great herbalist and Emperor Shen Nung in ancient China in 2737 BC. Legend tells that while he was meditating under a tea tree, the wind blew and a leaf fell into his cup. He was so impressed with the meditative and restorative properties of the ensuing brew that he popularized the consumption of tea amongst his people.

For thousands of years, tea consumption was relegated to China before spreading, largely by Zen Buddhist monks, to other parts of Asia such as Japan, Korea and Taiwan in the 1100s. The Buddhist lineage of tea respectfully regards tea as a spiritual guide and plant medicine for body, mind and spirit and has developed ceremonies to honor and connect with the Leaf.

Throughout Asia, tea was viewed as medicine and as part of a spiritual practice. The Zen monks, who loved tea for its ability to bring them into a meditative calm, alert and focused headspace, were largely responsible for spreading the cultivation of the leaf. They also developed ceremonies around tea that are still performed today.



Tea pickers in Darjeeling



Japanese tea field

#### TIBET

Tea moved to Tibet in the dowry of a Chinese princess during the Tang dynasty (618-907 AD). The Tibetans became so fond of the bricks of fermented tea that they would add churned yak butter and salt to it to make "pocha", known as one of the four pillars of Tibetan life. Tibetans traded war horses to China for this fermented tea from Pu'er, in Yunnan, China, to Tibet, along what is now called the Tea Horse Road.

### INDIA

Tea import began from China to India as early as the 7th century along the Southern Silk Route. The British began growing tea plants, stolen from China, in the 1800s to break the Chinese monopoly on tea. The East India Trading Company was built to handle this trade. Around the same time, native tea was discovered growing wild in Assam, India. Black tea production took over the country with British cultivation. As tea drinking grew across India, it evolved to suit local tastes with the addition of local spices, milk and sugar; hence, masala chai ("spiced tea") in Hindi, was born.

#### MOROCCO

The Maghreb region, including Northern Africa and Turkey, had its first taste of tea by the 1100s. Nomadic Berber tribes traveled there by caravan along ancient trade routes, bringing tea from China. When the tea was blended with potent healing herbs from the Atlas Mountains, Moroccan Mint Tea was born.



Hand-firing tea leaves in Northwestern India



Traditional Moroccan Mint Tea

### SRI LANKA

Once the coffee blight wiped out the coffee industry in Sri Lanka in the 1800s, tea moved in to take its place. Plants brought from India were cultivated by the British to serve the endless British appetite for black tea. Ceylon tea is known to be of very high quality and flavor in the black tea market. Culturally, Sri Lankan tea is very similar to Indian tea culture, which is essentially a localized version of British tea culture.

#### EUROPE

Tea became popularized in Britain in the early- to mid- 1600s in the dowry of Catherine de Braganza, a Portuguese princess who was married to King Charles II. There, tea was enjoyed by the upper class which had developed a taste for black tea. In an effort to break China's monopoly on the tea trade, the British began planting it in their colony, India, in the 1800s. At the same time, they discovered a native variety of tea growing wild in Assam, India and being consumed as a health tonic by the local people.

The British have been famously obsessed with tea ever since, particularly black tea, which they have grown, processed and traded in areas like India and East Africa and where they have maintained some level of power and influence. They continued the Asian ritual of tea as a time to unwind and connect with friends and family, but with their own spin (milk, sugar, sandwiches and sweets) and called it "afternoon tea" or "high tea".

Meanwhile, in Eastern Europe, tea houses became a symbol of the Bohemian lifestyle and people enjoyed poetry and philosophy alongside their tea.



Afternoon tea in Britain



Traditional Turkish tea, simit and cheese

## TURKEY

Tea likely made its way to Turkey as early as 400 BC, but it was not popularized there until the late 1800s. In the 1920s, Turkey began growing tea on the fertile banks of the Black Sea, and today, they produce clean, local and lively black tea for Cay, a daily staple of life in the land of the crescent moon.

#### RWANDA

There is a special place in our hearts for Rwanda. We are continually impressed by the resiliency of her people, the fertile rolling green hills that hold her vibrant tea fields and the wholesome, delicious and nutrient-dense food grown there. If there ever was one, Rwanda is a land of milk and honey!

Tea was only recently introduced there (in the 1950s), but the world of black tea lovers has been astounded by the color, strength, flavor and overall quality of the teas in Rwanda. As it turns out, Rwandan tea is ideal for making a bold and bright masala chai, like ours. We use Rwandan tea exclusively for our original masala chai and weave it in anywhere else we are able!



Rwandan tea pickers



Hibiscus Elixir tea

## **AMERICAS**

Tea made its way to the Americas with colonization but became an out-of-fashion symbol of British rule and taxation without representation around the time of the American Revolution, when the colonists famously threw tea overboard in protest during the Boston Tea Party. Today in North America, tea is having a renaissance. Americans are looking to tea for its health benefits, flavors, and for the conscious, positive, healthy lifestyle it helps achieve. We are trading our low quality tea bags for higher quality loose-leaf teas, full leaf tea sachets and low sugar ready to drink teas.

# ORIGINS

There are two lineages of tea production: Buddhist and British.

#### BUDDHIST

Zen monks spread the cultivation and processing of tea from China to Japan, Korea, and Taiwan (which used to be called Formosa; hence "Formosa Oolong"). All of these origins are considered classic tea origins and in these areas, tea was treated as plant medicine and a spiritual guide. This lineage responsible for the cultivation of primarily green, white, oolong and puerh.

#### BRITISH

The British affinity for black tea, which is known in China as red tea, led to the cultivation of this kind of fully oxidized tea in British colonies like India and Sri Lanka (then known as Ceylon; hence "Ceylon tea") from the 1600s onwards. The British viewed tea as a commodity to be bought and sold and as a pick-me-up beverage; hence the historic issues with poverty and agrochemicals that Fair Trade and Organic certifications aim to alleviate.



Tea grower in Japan



Firepot Breakfast tea

#### NEW

New origins are being developed all the time. Of local importance are both the burgeoning Hawaiian and northwestern United States tea terroirs. Other important origins to specialty tea are Nepal, which began growing in earnest in the 1990s and is now producing world-class teas; East Africa, which developed a tea industry in the 1920s and is now the largest exporter globally of black tea; and other Asian regions such as Vietnam, Bhutan, Korea and Australasia.

# PROCESSING METHODS

Tea can be produced in one of two methods: Orthodox or CTC ("Crush, Tear, Curl").

## ORTHODOX

The Orthodox method of tea processing requires the tea to be processed by hand or by machines that mimic hand rolling. This ensures that only quality leaves and buds are picked and that they stay whole. Most of the tea for the specialty tea industry is made using the Orthodox method, as it preserves the aromatic oils in the leaf that make a full-flavored cup.



Hand-sorting tea leaves in Nepal

### CTC

The Crush, Tear, Curl method was developed primarily for the black tea industry to process tea more quickly and prioritizes color and strength of a tea, rather than aroma, flavor and visual appeal. This method utilizes machines to crush and tear the leaves, resulting in tea that resembles small pellets. Because of the smaller size leaves, they oxidize much faster, saving even more time. These leaves are primarily used in tea bags, iced teas and blends and are known for their fast infusion time and ability to deliver a very bold cup. While CTC teas are not generally considered "specialty", there are some very decent ones as well as Fair Trade and Organic ones on the market, and they serve a specific niche in the overall tea market.



CTC black tea factory in Assam

# HARVEST

### PLUCKING

Most quality teas are picked by hand. There are many types of plucking styles used by garden managers; each tea calls for a specific pluck. Also, plucking is an essential part of tea plant maintenance. A common term in the specialty tea industry is "Two Leaves and a Bud", which refers to the "fine pluck"—the most common pluck for specialty teas. The "Imperial Pluck" refers to the terminal bud of the plant and the leaf just below it.

## **FLUSHES**

A flush is a harvest in tea terms. The first flush of the spring is known for its extreme aromatics due to high levels of essential oils stored over winter in these first, tender leaves of the year. In many cases, first flush is the most sought-after flush of the year. Subsequent flushes are known for other particular characteristics like unique flavor or yield, depending on origin and climate.

Depending on the origin and climate, there are generally between three and six flushes a year. Ideally, a tea plant is only harvested once a year to maintain optimal health, but most tea grown as a commodity is harvested more frequently.



Hand-plucking tea leaves in Rwanda



2018 Gopaldhara Darjeeling First Flush

# TEA TYPES

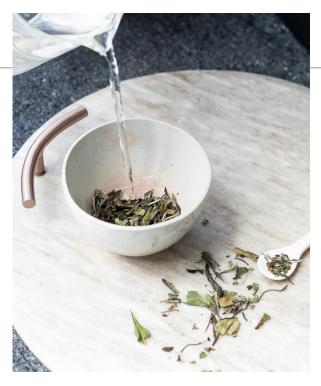
Our ten types of teas are distinguished by processing method, oxidation level, cultivar, place of origin and historical importance.

## WHITE

White tea is the least processed of all the tea types. In the processing of white tea, the terminal bud of the plant is plucked and dried. White teas have very delicate flavors and are less astringent than other tea types. White teas are authentic only in Fujian, China but produced around the world.

## GREEN

Green tea is not oxidized. After being harvested, the leaves are immediately steamed or pan fired to stop the oxidation process. This stage of production is called "kill green". This allows the tea leaves to keep their distinct green color, high levels of antioxidants and delicate vegetal and floral notes. Green tea is processed predominantly in Japan and China with the Japanese tea makers steaming the leaf and the Chinese makers roasting it. Firepot's Genmaicha, Kukicha and Gyokuro are Japanese green teas. Moroccan Jasmine Mint and Himalayan Mountain are examples of roasted green teas.



Fujian White Peony tea



Himalayan Mountain tea

#### YELLOW

Yellow tea is a very rare tea type made in China and Korea. It is processed very similarly to green tea, but undergoes a post processing fermentation by heaping, or slow drying. This changes the taste of the tea, making it more mellow and smooth and accentuating notes of dried apricot and moss. For those interested, the word Huang refers to yellow tea and may help if you'd like to buy one to try.

# TEA TYPES

### DARK

Dark tea is a forgotten class of tea in the West. Known as "black tea" in Malaysia and China, it is any tea that undergoes a post processing fermentation where living bacteria is added to the leaf. Shou puerh is a black tea. Another famous black tea is Liu Bao.

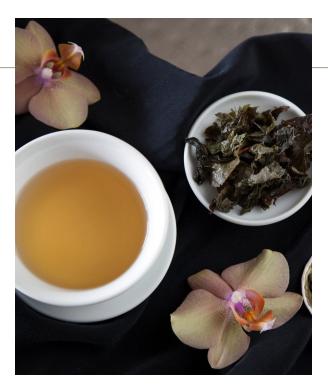
## SEMI-OXIDIZED

The manufacture of semi-oxidized tea is an art form, resulting in flavor notes ranging from fruity, sweet and floral to mineral, roasted and earthy. These teas are defined only by processing method (the partial oxidation of the leaf) and not by cultivar or origin.

## OOLONG

Oolongs are also semi-oxidized teas. However, they are made with specific cultivars and processing methods in specific origins. In the same way that all champagne is from Champagne, France and is made with specific varieties of grape, all Tieguanyin (Iron Goddess of Mercy Oolong) is from Anxi, China and made with specific processes and cultivars.

Firepot's house oolong is a Tie Kwan Yin ("Iron Goddess of Mercy") cultivar tea from Anxi, Fujian, China.





Iron Goddess of Mercy tea

# TEA TYPES

## PU-ERH (POO-ERR)

This tea is grown exclusively in and around the county of Pu-erh in Yunnan China. Sheng pu-erh is a raw, green tea called "mao cha". When the mao cha is steamed and fermented with added bacteria, it is called "shou" pu-erh, or "cooked" or "ripe" pu-erh. Both Sheng and Shou pu-erhs may be aged anywhere between a few months to several decades to deepen their flavor and enhance their health benefits.

## AGED

Aged teas are known for their earthy and woody aromas, robust smooth flavors and health benefits. They have developed a cult-like following in recent years.

#### RED

Red tea is fully-oxidized tea that is produced in Taiwan, China, Japan or Korea. In the East, fully-oxidized tea is called "red tea" rather than 'black tea." In the Buddhist lineage of the growth of tea, meaning in places where the Buddhists were responsible for cultivating and producing tea (China, Korea, Japan, Taiwan), the name is red tea rather than black tea.

#### **BLACK**

The most commonly drunk tea in the West is black tea. Black tea is completely oxidized tea that was grown and processed in the British lineage of tea production, meaning that is from India, Sri Lanka, Africa and other origins cultivated and colonized by the British, or Western market. These teas are distinctly not from Taiwan, Japan, Korea or China. They offer a cup with more developed tannins, strength and body.





Firepot Breakfast tea

# CAFFINE

## AMOUNT BY TEA TYPE

Recent research disproves two outdated theories regarding caffeine and tea:

- Most of the caffeine is extracted during the first 10 seconds of steeping.
- 2. The less processed a tea is, the lower its caffeine content.

It used to be believed that the order of caffeine content in tea, from lowest to highest, was: white, green, oolong, black. Now we know that the amount of caffeine in your cup is dependent upon varietal, terroir, manufacture and steeping. For example, a Long Jing Shi Feng, a famous Chinese green tea, was recently found to contain over twice as much caffeine as a robust, black Assam breakfast tea. It also was found to release caffeine even after steeping for 10 minutes.

# CAFFEINE IN COFFEE VS. TEA

When compared to coffee, tea is known to give a more alert feeling over a longer period of time. This is because the catechins (polyphenols) in tea bind to caffeine and slow its release. The caffeine in coffee is released into the bloodstream in 2-5 minutes and dissipates within 2-5 hours. The caffeine in tea is released slowly for 10 hours in the body.

The tea leaf actually has more caffeine, gram to gram, than the coffee bean. In most instances, though, coffee is brewed using more product, by weight, than tea. For example, you would use about 10 grams of ground coffee beans to make a 6 ounce cup, while you would use only about 5 or 6 grams of tea for a 6 ounce cup, depending on the tea.



Fujian White Peony tea



Kagoshima Kukicha green tea

# BOTANICALS

Also known as tisanes and herbal infusions, botanicals are caffeine-free.

Botanicals such as chamomile, peppermint, hibiscus and rooibos are not actually teas because they are not derived from Camellia sinensis. They are more accurately called tisanes (from the French word "herbal infusion"), botanicals or herbal infusions. They are usually fruits, dried flowers, roots, herbs, plants, or a combination of these infused with boiling water. Most botanicals are caffeine-free, but some, like Yerba Mate and cacao, contain some caffeine. Firepot's Hibiscus Elixir and Indian Rose Garden are examples of caffeine-free botanical infusions.



Hibiscus Elixir



Indian Rose Garden



Green rooibos after harvest and before processing in Clanwilliam, South Africa

# STFFPING

It is important to remember that at the end of the day, tea is just water and leaves, and taste is highly subjective. However, as tea experts, we set specific parameters for steeping our teas so that they can be enjoyed to their highest potential.

These parameters are:



### TEMPERATURE

Very high temperatures extract more tannins, create a more astringent cup and can burn off both amino acids and volatile, fresh aromas. If astringency, strength and body are desired, a very hot or boiling temperature may be ideal. Very aromatic green teas will show best when steeped below 160°F. For example, our Hoshino Gyokuro.

Most of our teas are steeped between boiling and 160°F for a balanced cup with refreshing and satisfying astringency, body and strength, and also the captivating aromatics inherent to the tea's varietal and processing technique.

#### TIME

Flavor, caffeine and other chemical compounds are released into water at different rates between one second and 20 minutes. By understanding how a tea is supposed to taste, we set an infusion time that is ideal for that tea.

#### WEIGHT

The industry is moving towards using more leaf (coupled with shorter steeping times) for more concentrated flavor notes. Most of our teas are steeped using just under one gram per ounce.

#### WATER QUALITY

Water quality is critical, so we recommend using filtered or spring water. One can study the exact effect of a water's pH and mineral content on tea to craft the most perfect cup, but for our purposes, we start with filtered or spring water. It is fun to taste your favorite tea in different environments with different waters; you will discover just how different the same tea can taste!

# CUPPING

To evaluate and compare teas, professional tea tasting is employed. Following the exact same protocol each time will ensure consistent cupping and dependable observations.

#### FOLLOW THE STEPS BELOW

- 1. Line up as many cupping sets across a tasting table as there are teas to taste.
- 2. Place each packet or sample of tea just above each cupping set on the table.
- 3. Fill each cup with 2 grams of tea and pour out the remainder of the tea from the packet into a tray in front of each cupping set.
- 4. Fill each cup, one at a time, with 3.5 ounces of boiling water. Boiling water is used to draw out all flavors in the tea, good and bad, for accurate tasting.
- 5. Steep for 5 minutes.
- 6. Decant each tea, one at a time in the order that they were poured, taking as long to decant as you did to pour, into tasting bowls, being sure to tilt the cup slightly downwards so that all the liquid drains out.
- 7. Firmly shake the cup upside down so that the leaves fall into the inside of the lid. Then you can place the lid, leaves up, on top of the cup to smell the aroma of the steeped leaves.
- 8. Wait at least 5 minutes to taste, as flavors are easier to detect in tea that is around 180°F or below. Once teas reach around 100°F, the flavor notes begin to dissipate.
- 9. When cupping a tea, evaluate the appearance of both the wet and dry leaf, the bouquet of both the dry and wet leaf, the color and clarity of the liquid, flavors, aromas, the feel of the tea on the mouth. Teas can also be brewed with their specific cupping parameters (rather than 2 grams of tea/3.5 ounces of boiling water/5 minute steeping time) in tasting cups for consumption or education.



Cupping teas for tasting