

Camellia sinensis

[Synonyms : *Camellia bohea*, *Camellia chinensis*, *Camellia thea*, *Camellia theifera*, *Camellia viridis*, *Thea assamica*, *Thea bohea*, *Thea cantoniensis*, *Thea chinensis*, *Thea cochinchinensis*, *Thea grandifolia*, *Thea macrophylla*, *Thea sinensis*, *Thea stricta*, *Thea viridis*, *Theaphylla cantonensis*, *Theaphylla lanceolata*, *Theaphylla laxa*, *Theaphylla viridis*]

TEA is an evergreen shrub or tree. Probably native to eastern Asia, (from Assam in India, Tibet and China to Cambodia and Vietnam), it has small fragrant, white flowers with many yellow stamens.

It is also known as *Arbol del té* (Spanish), *Arbre à thé* (French), *Çay* (Turkish), *Cha* (Chinese, Japanese, Sinhalese, Thai, Urdu), *Chá* (Brazilian, Portuguese), *Chaa* (Hindi), *Chaay* (Hindi), *Chá-da-Índia* (Portuguese), *Chaha* (Kannada), *Chai* (Bengali, Hindi, Punjabi, Russian, Sinhalese), *Chainoe derevo* (Russian), *Cha-no-ki* (Japanese), *Chá-preto* (Brazilian, Portuguese), *Chay* (Iranian, Urdu), *Chaya* (Tamil), *Chè* (Vietnamese), Common tea, *Hiina teepõõsas* (Estonian), *Ichibi* (Japanese), *Kamelia* (Polish), *Macani* (Kikuyu), *Pianta del tè* (Italian), *Planta del té* (Spanish), *Shay* (Arabic), *Te* (Danish, Kannada, Sinhalese, Swedish), *Tè* (Italian), Tea tree, *Tebusk* (Danish), *Tebuske* (Swedish), *Tee* (Finnish, German), *Teekameelia* (Estonian), *Teepensas* (Finnish), *Teestrauch* (German), *Teestruik* (Dutch), *Teh* (Hebrew, Malay), *Teyaku* (Telugu), *Tey-ile* (Tamil), *Thaeyilai* (Tamil), *Thay-gas* (Sinhalese), *Thay-kola* (Sinhalese), *Thayilai* (Tamil), *Thé* (French), *Theestruik* (Dutch), *Théier* (French), *Theyaku* (Telugu), and *Tsai* (Greek).

The terminal buds, the flowers and the leaves are used. The leaves are gathered in Summer and Autumn by hand from plants at least 4 years old. They are sorted into large leaves, shoots and small leaves. (The small leaves can be of different qualities which are indicated by their names eg. Flowery Orange Pekoe.) After transportation to the factory they are put in airy surroundings where much of their moisture is lost before, for black tea, being prepared for fermentation in special machines which through oxidation result in the dark colour and aroma associated with tea leaves. The darkened leaves are dried at about 100°C. For green tea, the leaves are steamed in order to retain their colour. The tea leaves are often combined with flowers of other plants such as jasmine (*Jasminum officinale*), lemon (*Citrus limon*), orange (*Citrus sinensis*) or bergamot (*Citrus aurantium* subsp. *bergamia*) to give different flavours. The flowers are also picked and dried, and are sold commercially. In infusion the flowers give a highly aromatic, rich source of mineral salts.

Warning – excessive intake can be addictive and can cause anxiety and gastrointestinal upset. [At least one authority has stated that five daily cups of tea (if equivalent to 600 mg. of caffeine) can cause chronic caffeine poisoning.]

Sinensis means ‘of or from China’.

The name *sinensis* recalls the ritual drink, *ch’a* (a name first used in the 17th Century) which was prepared by the Chinese and by at least the 13th Century her near neighbour Japan as well.

Initially tea was chewed in the form of pressed leaf cakes and very gradually these were used to make decoctions. According to the Chinese, the reign of the legendary Emperor Shen Nung (about 2800 BC) who was known as The Divine Healer, is said to have seen the

advent of tea drinking most probably as a medicinal requisite. 1st Century BC Chinese records refer to it as the elixir of immortality.

Despite its long history however drinking tea is only believed to have started to gain popularity in China from about the 6th Century. The first philosophical and technical recognition of this is said to have appeared in the middle of the Sung dynasty's rule (960-1126) when the celebrated Taoist poet, Lu-yu (1125-1210) [who is still respected in south-eastern Asia today as Chazu, the genie of tea], wrote the *Cha-sing (Classic Art of Tea)*. Then some authorities point to another significant landmark during the first part of the Sung dynasty (960-1279) when the traditional tea ritual materialised. This was devised by the Ch'an sect of Chinese Buddhism as part of a method of contemplation, and it moved with the group to Japan in the 13th Century where it became known as the Ceremony of the Hot Water Tea (*Ch'a-No-Yu*) and was absorbed into the emerging Zen Buddhist culture. The elaborate and demanding practice, out of which also sprang the Japanese flower arranging art of Ikebana, continues in present day Japan. Tea was not drunk with milk in the 13th Century. Occasionally a clotted cream was added by the rich, and sometimes even a mild Chinese pepper.

It should be said that authorities still debate the dates when all these events occurred. Some believe the use of tea as a beverage began in the 5th Century, and some say that the tea ritual had spread to Japan by 593 – or the 9th Century. However it is noted that a Chinese dictionary of 350 is understood to be the earliest known authenticated written reference to the beginnings of this practice.

Before going further it is worth recounting a particularly delightful legend about the plant's origins. It is told that in 516 an Indian missionary prince, called either Dharma or Daruma, was spreading the word in China and after a particularly exhausting session of prayer and fasting fell asleep during his meditation. Apparently he had especially bushy eyebrows and when he awoke, as atonement for his lapse of concentration, he cut them off and threw them on the ground – where they immediately rooted and sprang up as the tea plant with leaves which in decoction provided a stimulating drink.

Green tea (English), Čaj, Čaj zelené (Czech), is both the main and national drink of China and is accredited with medicinal virtues that were recorded 5,000 years ago, when it was considered to be a remedy for bladder ailments, chest inflammation, tumours and abscesses. It is made from the dried, unfermented leaves of the tea plant that yield a greenish-yellow tea with a slightly bitter, 'grassy' taste. This tea is preferred today by the Chinese, and is also drunk by Muslims for whom fermented tea is forbidden. Varieties include Gunpowder, Tychen, Moroccan mint tea and, from Japan, Yamashiro. Green tea is believed to help the digestion of oily food and to stabilize the body's metabolism.

'Black tea', *Tmavý čaj (Czech)*, is consumed in the West especially and is made from fermented dried leaves. It has a much higher content of tannin, caffeine and other stimulants and should not be drunk in excess. The three main types of black tea come from India, Sri Lanka and China.

Another important category of tea, **'Oolong'**, which is less well-known in Europe, but popular in North America, is usually perfumed with jasmine flowers. This tea grown in China, Taiwan and Japan, combines the characteristics and flavour of both green tea and black tea as it is partially fermented.

A further possible category covers the scented teas. These are perfumed with various flowers or fruits, and the most well known is probably Earl Grey which is scented with oil of bergamot (orange), *Citrus aurantium bergamia*.

Tea is represented in the shield of the green and white national coat of arms of Pakistan.

A Captain Goff of the East India Company is believed to have been the first to introduce the tea plant to England before 1739. The plant died however and it was not until 1768 that another was imported and cultivated there successfully.

Tea (the drink) probably arrived in Europe for the first time in the mid-16th Century when a Venetian geographer, Giovanni Battista Ramusio (1485-1557), wrote of something called *scài*. It was likely to have been green tea and had probably been transported along the Asian caravan routes which reached up into Russia. Apparently however known records appear to make no further mention of the plant for another 50-odd years, when an Italian missionary, Matteo Ricci (1552-1610) the founder of the Chinese Jesuit missions, speaks of *cia*.

In the 17th Century black (China) tea was brought to the Netherlands by sea around 1610 and the practice of tea drinking began to invade the mainland of western Europe. It spread rapidly through the royal courts, encouraged by the Dutch and the Portuguese, but it is not believed to have reached English shores until about 1644. Shortly after this, England was to experience her Civil War and domination from 1649 for ten years, primarily by Oliver Cromwell (1599-1658) and in the last year by his third son, Richard (1626-1712). During this period tea still entered the Country but it was to make no significant mark until later in the Century. After the fall of the Cromwells, Charles II (1630-1685) was proclaimed king of Scotland and England in 1660 – and in due time was presented with 2 lb. 2 oz. of tea by the East India Company. But it was not until 1689 (the year that William III ascended the British throne, following James II's (1633-1701) three year reign after Charles' death) that the Company made the first tea imports to England direct from China. Before the end of Charles II's reign however his Portuguese wife, Catherine of Braganza (1638-1705), to whom tea had been no stranger before she arrived in England, had introduced the English court to the niceties of European tea drinking practice – the beginning of a fashion from which the Country appears never to have recovered.

In 1717 Thomas Twining (1675-1741) opened his first tea-shop for ladies in Devereux Court, London. Like coffee houses (*Coffea*), tea-houses had already sprung up everywhere but these were for men only. Enthusiasm for this new fashion was so great that by 1732 it was possible for Vauxhall Pleasure Gardens to be converted into a huge tea garden, and by the 1740s in England tea (with milk or cream) at breakfast and after dinner was customary in many households.

Tea was progressing rapidly towards becoming the English national drink in the 18th Century – consumed by all parts of society. Then in the middle of the Century it became an excessively expensive commodity. George III (1738-1820) imposed very high import duties. A pound of the cheapest quality tea would have cost a skilled worker of that period one third of his weekly wage. It is hardly surprising that smuggling received a massive boost to meet the demand from high and low (even clergy were known to hide tea in the church crypt). In fact it was only after the then English Prime Minister, the younger Pitt (1759-1806) appreciated that in 1784 alone the country consumed 13 million pounds (weight) of tea and **over** 62% of it had escaped duty (as it had entered through the 'back door') that the swingeing import duties were lowered. But in the early 19th Century tea's inexorable progress towards the title of 'national drink' received another temporary setback, this time in the form of snobbery. The rich believed that tea should remain exclusive and many an unwary 'poor' person would be sold a mixture of ashes and sheep's dung. Despite all these obstacles however tea triumphed and by the middle-end of the 19th Century the whole Nation was partaking.

Two of the side effects arising from the introduction of tea to Europe, England particularly, are worthy of note. One arose because the Chinese closely guarded their secret of making

true porcelain. Thus tea china eg. teapots, bowls and saucers, etc., was imported from China, initially with the chests of tea. But the Chinese monopoly only served to spur European potters in their search for a suitable answer. By the end of the 17th Century a French factory at St. Cloud had created a soft-paste substitute and at the 1713 Leipzig Fair Meissen were able to display a hard-paste alternative. At the same time a handle was being added to the tea bowl to avoid fingers being burnt (thus forming the teacup familiar today). Then in 1709 a Polish alchemist discovered the secret of making porcelain similar to that emanating from China and although the procedure was closely guarded it gradually spread among the European royal families because of the cachet associated with the use of such fine china. (This gives some indication of the relatively frenzied competitive environment in which the Staffordshire potteries in England and those in other European countries became established.)

The second side effect of interest was that British 18th Century sugar consumption (*Saccharum officinarum*) rose dramatically – unlike the Chinese, the English sweetened their tea. (No doubt this was assisted by the consumption of sweetened coffee and drinking chocolate.) In 1700 England accounted for 10,000 tons of sugar but by 1800 this had escalated to 150,000 tons. Even with a doubling in population this would mean that each person would have consumed 7½ times more sugar at the end of that Century. It was not until 20th Century sugar rationing during the 2nd World War that sugarless tea was to take a significant and permanent hold in the Country.

As with so many other spices and produce from tropical and Far Eastern countries, tea has created its share of international disharmony, as well as ruthless rivalry between traders. For England, and even more so the United States, one of the well-known relevant incidents is that which culminated in ‘The Boston Tea Party’. In 1646 Peter Stuyvesant (1592-1672) a Dutch administrator, had been appointed director of the New Netherland colony (in due time to become New York) and authorities claim that it was he, four years later, who introduced tea to North America through the colony. George III (1738-1820) ascended to the British throne in 1760 and Britain was subjected to crippling taxes on many imported commodities, including tea, as mentioned earlier. As yet unaware of the increasing magnitude of lost revenues from smuggling at home, George III under monopoly arrangements with the East India Company also imposed a tax on the tea imported by the settlers in the North American British territories. England and her rapacious Exchequer were geographically weeks away on the other side of the Atlantic and for all practical purposes (in the modern idiom) must have seemed to the settlers to have existed on another planet. These taxes must have been the tip of the iceberg as they were one of many demands made on the English colonists for England’s benefit. Another example was the mandatory cultivation of hemp (*Cannabis sativa*) for the sails and rigging of English cargo ships. Also they had no voice in the English Parliament (in fairness, a situation shared by most of the British population at that time) – and all, could ultimately have been summed up in the famous slogan

No taxation without representation.

which, it is disappointing to learn, is unlikely to have been said by anybody at that time. (Subsequent research by historians has unearthed the slogan’s first appearance in 1820 when it was attributed to James Otis (1725-1783), the American statesman, who had died roughly 40 years beforehand.) The colonies reacted by buying contraband tea from the Dutch who managed to exacerbate the situation by selling it to the colonials at a lower price. No doubt put out by this manoeuvre George III instructed the East India Company as his agent to obtain the unpaid taxes. The Company itself was already being threatened with bankruptcy as it had a ‘mountain’ of unsold tea in its London warehouses (no doubt due to the taxation and smuggling at home). The instruction however culminated in a

dramatic act of defiance. On 16th December 1773 around 1,000 North American settlers boarded 3 British tea ships moored in Boston harbour and, without harming the crews, dumped hundreds of tea chests waiting to be unloaded into the water.

To this point tea had dominated coffee (*Coffea*) for American colonists but the Boston Tea Party, the then imminent American War of Independence and ultimately the American Civil War of the 1860s were to be contributing factors in swinging the pendulum in the opposite direction – a reverse which has been maintained to this day. In contrast to the North American Atlantic Seaboard however coffee had dominated the scene in Britain and was to continue to hold sway until the mid-18th Century. This saw the Indian and Ceylonese (Sri Lankan) coffee plantations experience a devastating attack of rust fungus which sent the price of coffee so high that the British were from then on to become a nation of tea drinkers – and Ceylon was now ready to become an important tea exporter as tea plantations were destined to replace her previous coffee crop.

Towards the mid-19th Century the English, Dutch and Danish tea clippers began to be built. (The first ‘tea clipper’ is said to have been designed by the Americans.) Cargo ships with their heavy loads were taking 12 to 15 months to reach the North Atlantic from the Far East and these special fleets, with their raked masts and streamlined hulls, could not only carry far more goods, when properly loaded, but also more than halve the journey time. (They ‘clipped’ the wind and absorbed every scrap of it into their massive sail area.) They plied the seas between the Far East and the West – and annually vied with each other on the speed with which they could load tea in the Canton River and hurl the first bale onto the dockside in London. Of all of the tea clippers the British HMS *Cutty Sark* built in 1867 probably springs to mind first – yet she only carried tea eight times.

The 19th Century was also to see the establishment of tea plantations, controlled by the Europeans, in south-eastern Asia. First the Dutch introduced tea cultivation to Java (now an Indonesian island) once she had regained control of the Island in 1816. In 1823 employees of the East India Company found tea plants growing wild in hilly Assam although this discovery was not immediately appreciated. The plants were thought to be a different tea species instead of a variety of the Chinese plant, and the tea leaves from them which reached England in 1838 happened to attract unfavourable reports. Then the Royal Horticultural Society sent Robert Fortune (1813-1880) to China in 1848 to collect ornamental plants, and he also brought back tea seeds and seedlings for the East India Company’s plantations that had begun to be established in the Himalayan foothills in the 1840s. These new plants failed and the native plants from Assam began to be viewed in a new light. In Ceylon tea had already been grown since 1828 but now, with the introduction of wild tea plants from Assam, this industry took off there and the first tea plantation in Ceylon was set up in 1867. The interruption of trade caused by the so-called Opium Wars of 1893-94 in China only served to accelerate the development of the Indian and Ceylonese tea projects further. Plants from Assam were also introduced to East Africa, primarily Kenya, Uganda and Tanganyika (now Tanzania) at the beginning of the 20th Century.

Tea, for export to the West, only continued to be cultivated on a large scale in China and Japan until the 19th Century. It is still preferred from there today both in Arab countries and Russia. In the former unfermented tea is not just an enjoyed drink but, particularly for Moslems, a libation to Allah in thanks and an important symbol of hospitality. All Arabs drink it and in most circles the preparation demands respectful ritualistic ceremony. The Russians also have a long tea drinking tradition. The leaves were brought in caravans overland from China and this route is mentioned in the first known Russian references to the commodity that date from 1618. Unlike western European countries, the Russians drink tea from glasses with lemon, sugar, or rose petal jam.

Of all the mainland western Europeans, the French are believed to be the largest tea drinkers – one to two glasses per month. But that quantity fades into insignificance in the northern off shore British Isles.

Earlier reference has been made to drinking tea in North America but its interest to North American Indian tribes has been omitted. Records show that some tribes such as the Oweekeno, Haisla and Hanaksiala all of from British Columbia (Canada) did take to drinking this beverage – and the Makah Indians in the Washington area on the other side of the Continent put the leaves to medicinal use as they applied them in poultices to stem bleeding.

There are many views on how best tea as it is drunk in the West should be prepared, but one of the earliest explanations is understood to have originated from missionaries who had been out in China. Their advice was that tea should be allowed to stand only as long as it took to say the Pater Noster slowly. Perhaps it should be mentioned here that to many other nationalities today's traditional English tea drinking habits are considered almost barbaric and certainly quaint. This is partially illustrated by one French story which contends that in the 20th Century during both World Wars I and II, regardless of the heat of battle at the time, British armies laid down their arms at five o'clock in the afternoon in order to take tea. Not only that but that the Germans were courteous enough to recognize the ritual and complied with the temporary cessation of hostilities. Apparently the French and nationals in other European continental countries, believe that English 'tea time' is five o'clock precisely and is sacrosanct and they are also convinced that, in addition to warm beer (can it be possible) the English prefer cold tea.

Like other commodities tea was not exempt from adulteration. By the end of the 18th Century in Britain, her Parliament had to pass an Act which would not only stop much of the countryside being despoiled but also condemn unfair trading by tea merchants. These merchants were trying to make 'a quick buck' by buying 'smouch' (dried ash leaves which had been curled on copper plates) and mixing it with the tea. Green China tea was contaminated with dried thorn leaves painted with verdigris, and one way of adulterating Indian tea was to mix the genuine 'fresh' leaves with used tea leaves (collected from 'below stairs' in rich houses, or from the kitchens of coffee shops or hotels) which had been painted with a gum solution and black lead.

Medicinally, an infusion of tea can help to ease neuralgic headaches. In China it is used to treat diarrhoea and dysentery.