

Evolution of Chinese Ancient Tea Technology and Its Transfer to British India

Vithiyapathy Purushothaman¹, Song Wei^{1,2}

¹School of Humanities and Social Sciences, University of Science and Technology of China, Hefei, China

²School of Public Affairs, University of Science and Technology of China, Hefei, China

Email: vithiyapathy@gmail.com

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Abstract

From recorded history, tea has emerged as a refreshing drink for humans. Tea-producing technology has developed through various dynasties in China. The Silk Road trade and maritime silk route exported tea to destinations in the east, west, south, and southeast Asian counties and African and southern European ports. When the thirst for tea increased in the western countries and their colonies, Europeans began tea trading in the 17th century by establishing the East India Companies. British East India is one of the European traders to exchange silver with China for buying tea. However, Britain found it a costlier trade for them to pursue for a long time. Thus, it found an alternative in the land of the Assam region in northeast India. Tea seeds and farmers were initially brought from China to establish the tea industry. It has also planted teas in other areas of India and tested the possibility of tea production using ancient tea cultivation knowledge from China. Therefore, the British successfully transferred ancient knowledge and tea manufacturing technologies from China to establish the tea industry in India. The paper will analyze the evolution of ancient tea manufacturing knowledge of China and inquire how Britain transferred it along with the tea seeds and farmers for establishing and developing the tea industry in British India.

Keywords

Ancient Chinese Tea Technology, Indian Tea Technology, British India

1. Introduction

Tea plants (*Camellia scinesis*) are found in countries in the Himalayan region. Yunnan province in China also hosts these wild tea trees. From the history of China through various dynasties, the tradition of tea drinking has emerged (Ukers, 1935: pp. 1-7). Tea production attained export quality by producing

brick and cake tea that was traded to the pilgrims through the southwest Silk Road (Forbes, 2011). Interestingly, some notable teas such as Songluo, Bohea, tun-xi, bohea, gongfu, and xiaozhong produced from China were shipped through the Maritime Silk Route (Liu, 2020: p. 28). As a result, tea welcomed European traders to the east for shipping teas from China (Ukers, 1935: pp. 23-65). During the journey of Robert Fortune to China in Sung-lo and the Bohea hills, he noticed that the tea grew in the region of 25° to 30° North latitudes (Fortune, 1852: p. 272). He then recorded the tea processing techniques of Zhejiang and Fujian Province. Tea production is widely seen in the Yangtze River region, originating from western China (Lu, 2014, p. 485). When the British were trading tea with China, it exchanged Silver for buying tea which it felt was a costlier exchange in the long run. Thus, it began searching for alternate production in its colonies. The major criteria for the British botanist were keen to find similar geography, soil, and favorable conditions for growing tea. Therefore, after several attempts, the Assam region in the Himalayan ranges has become the home for the tea cultivation testing for the British. Beyond all, the tea manufacturing methods have been studied from China, and the formers have been imported for trailing the cultivation and production of tea (Fortune, 1852: pp. 1-20). Chinese ancient tea manufacturing has served as a base for establishing the tea industry in British India. Thus, the study focuses on examining the historical records and observation of the historian's statement on the shift of ancient tea technology from China to India during the colonial period and further understanding the development of tea technology in India. Therefore, the paper undergoes in-depth studies of China's ancient tea technology knowledge and its technology transfer to India during the colonial period.

2. Literature Review

The book "A Journey to the Tea Countries of China: Including Sung-Lo and the Bohea Hills" written by Fortune (1852) provided his experience and observation of the tea cultivation and tea-growing regions in China during the colonial era. He mentions the ancient Chinese methods of tea practice and highlights how the tea seeds from China were brought to the Assam region in India. Edward Money (1878) wrote the book, "The cultivation and manufacture of tea," which details the ancient manufacturing practices and throws light on how tea cultivation in China grew from Yunnan to the Eastern delta region in Southern India. Benn (2015), on the other hand, describes the evolution of tea culture and cultivation in China during different dynasties. He explains briefly in his book "Tea in China: A Religious and Cultural History."

Additionally, Ukers (1935) wrote the book "All About Tea" in two volumes. They described how the tea culture in China and India evolved during the colonial era and how the tea seeds and farmers were transferred to British India to establish the tea industry in the peninsula. The two books "A true history of tea" and "Tea: A Global History" written by Hoh and Mair (2009) and Saberi (2010),

respectively, show the origin and spread of tea cultivation. He describes how the British spread tea cultivation methodologies in its colonies, starting from its first transfer to Assam. [Martin \(2011\)](#) wrote the book “Tea: the drink that changed the world,” which highlights the transfer of tea seeds and farmers. “For All the Tea in China, How England Stole the World’s Favourite Drink,” written by [Rose \(2010\)](#), highlights and strengthens the argument of the ancient tea technology transfer from China to India during the colonial period. The study is further supported by the book “The Empire of tea” written by Alan Macfarlane and Iris Macfarlane in 2009 elaborates on expanding tea cultivation, exchanges, and modernization. [Liu \(2020\)](#) reported the book “Tea War: A History of Capitalism in China and India,” which hints at the evolution and transfer of ancient tea technology during the colonial period. Therefore, further studies and research papers strengthen the research objective and provide various sources and an in-depth understanding of China’s ancient tea technology knowledge and culture. It also shows how ancient knowledge was transferred to India during the British colonial period.

3. Objective

- 1) To analyze the evolution of ancient tea manufacturing knowledge in China and
- 2) To examine how Britain transferred the tea seeds and farmers for establishing and developing the tea industry during British India.

4. Evolution of Ancient Chinese Tea Technology

Ellis states that as per the historical records, Shen Nong, the emperor in western China, discovered tea while boiling water in the remote hills of Yunnan in the Himalayan region ([Zhen, 2002: p. 2](#)). When he felt the leaf’s freshness, it became his favorite drink, and the practice led to cultivation and production ([Ellis et al., 2015: p. 7](#)). Notably, even today, these wild tea trees are found in the Ailao mountain reserves in China, which grow up to 23.6 meters long. According to Ukers, the historical records of 400 A.D. it calls tea “Kuang Ya” 400 A.D ([Ukers, 1935: p. 397](#)). China’s literature and historical record show that it has excelled in the formula of tea cultivation to consumption. The ancient records of tea Cha Jing written by Lu Yu, become an encyclopedia of tea manufacturing that brief every traditional tea cultivation and manufacturing ([Liu, 2020: p. 29](#)). Ben explains Lu Yu’s tea boiling method described in the chapters of Cha Jing, where it is mentioned that the tea leaves are dropped in hot water to generate their essence in the filtered water. Secondly, the most famous method other than boiling is mixing powdered tea with hot water ([Benn, 2015: pp. 111-112](#)). In making Gong Cha, the tea buds are plucked and soaked in the water before steaming. The tea leaves were left to rinse in cold water when the tea was steamed. This method of making tea involves repeatedly pressing the tea to filter out the juice as per the condition of the tea. Once the pressing process is completed, the dry

tea leaves are kept in the pot to make a fine-dried tea cake. These drying methods depend on the thickness of the cake. Rinsing, steaming, blowing, drying, and pressing was done manually and using ancient machines. During the Song to Yuan dynasty, for more than three hundred years, tea technology evolved for steamed green tea to produce stir-fried green tea. The process of steaming changes the bitter taste of the tea, and thus the aroma also differs from the natural method of tea making. There are certain famous teas in China which lasted throughout history. From the time of trying to steam the tea to make the tea cake, the evolution of tea has produced various flavors of tea, such as green tea, yellow tea, White tea, Oolong tea, Black tea, and post-fermented tea (Yan et al., 2020: pp. 135-143). During the Ming Dynasty, tea was produced by adopting frying techniques. It makes loose-leaf tea and has been compressed to produce cake teas suited for preserving and transporting (Zou & Lin, 2018). Wuyi mountain grew the tea by allowing it to wither in the sunlight, pressing it with hands, and tossing it to make the tea leaves gain brown edges. It led to the development of the semi-oxidation process of teas (Hoh & Mair, 2009: pp. 116-117). Further, the approach adopted to produce Songluo in Huizhou and Anhui province tea production, along with the Longjing tea, gained popularity and became the most expensive tea among tea traders in China (Jiang, 2019: p. 83). During the Ming Dynasty, the cake teas produced in the Fujian province adopted the Songluo tea-producing method to enhance the taste further (Liu, 2020: p. 28). Wuyi Mountains then improved the Bohea black tea, which even the silk road trade distributed worldwide. Bohea tea has adopted a similar methodology of tea manufacture. Samuel Ball states the method of tea manufacturing methodology. He describes that after harvesting, the tea leaves were spread in the bamboo trays in the sunlight for drying. And then, it is roasted in a hot iron pan for frying to produce the brown edges in the leaves. Therefore, when cooled, it becomes ready for packing and transporting in bamboo containers (Ball, 1848: pp. 103-110).

China has mastered tea manufacturing and produced various types of tea that have become an icon of the Chinese culture based on its producing region. The development of tea production emerged through various dynasties, such as tea masters evolved during the Song dynasty. More than the production, consumption, and distribution have become a unique formula in Chinese tea drinking. Tea masters used to carry all the required equipment for tea making to deliver delicious teas. However, this practice transformed in the Ming dynasty when the Tea houses emerged and became a hotspot for tea drinkers where the methodology of tea making found the spot. Later due to the popularity it gained in China, tea evolved as a significant entity in the silk road trade during the Qing dynasty (Liu, 2010: pp. 108-110). Compressed tea, such as Brick and cake tea, were traded in the southwest, western, and maritime silk routes. This method is adopted to preserve the freshness of the tea.

European countries received tea through the silk road for over three decades

(Ukers, 1935: pp. 23-35). China maintained its leading role in the tea trade until the East India Company trade began (Brockway, 1979: p. 24). Therefore, China mastered the significance of tea manufacturing methodologies from cultivation to packing and exporting (Chaudhuri, 1978: pp. 386-389). Tea-producing methods in China focused on the significant procedure that follows withering, rolling, oxidation, and drying to produce the orthodox way of tea making. These processes, in detail, follow methodologies involving mass labor for cultivation, manufacturing, packing, and exporting.

5. Transfer of Tea Plants and Ancient Cultivation Methodologies from China to India

In 1497, the Portuguese initiated the sea routes to the Far East. It traded with India, China, and littoral states in the Indian Ocean. Father Jasper De Cruz from Portugal visited China in the late 15th century. He returned to Dutch with the tea gift. Thus, it marks the tea trade's origin between western countries and China (Sigley, 2015: pp. 319-341). It is noted that the British used tea for medicinal purposes and originated as apothecaries (Martin, 2007: p. 36). When the interest and demand for tea grew in the west, the English East India Company became the British East India Company on December 31, 1600, to increase the trade with Asian countries (Lawson, 2014: p. 20). In the early 17th century, the Sino-European tea trade began its flourishing journey. The Dutch, Portuguese, and British merchants purchased tea from Canton, China, under the banner of the East India Company of respective countries (Ellis et al., 2015: pp. 14-16). The British import of tea gradually increased from a few hundred in 1670 to 38,390 lbs in 1689. Decade over a decade, the tea import from Britain increased drastically. In 1701, it peaked at about six million lbs of tea trade in 1760. Tsai (2003: p. 71) states there is a dramatic growth in the tea demand for the next five years when the British exported 5,600,000 lbs of tea from China. The British exported tea chests from China consisting of Bing, Songluo, and Bohea teas. These teas were produced in the mountain Anhui and Zhejiang regions (Ovington, 1689: p. 308). When Botanical science was developing, the British began searching for an alternative to trading tea to meet the west's demands. The major criteria for Searching were focused on similar climatic and geographical conditions suitable for tea cultivation, therefore, leading to the experiments of tea cultivation in the Assam region.

Around the 1780s, the British began to put the idea of transplanting Chinese tea into practice. In 1780, British Army Officer Col. Robert Kyd initiated this garden's first tea plants experiment (Thomas, 2006: pp. 165-177). In 1788, Lord Hawkesbury, chairman of the Board of Trade, and William DeWayne, then chairman of the East India Company, with the then President of the Royal Society and manager of Kew Gardens, for the transfer of Chinese tea to India. The proposal demand for corresponding financial and theoretical support was sent to the United Kingdom to implement tea tree planting in East India or West India colonies to supply British tea consumption. It is suggested as an alternative

to the cost of importing tea from China. The proposal was kept as a draft due to the risk of transplanting the Chinese tea and successfully developing it in the Indian garden. Subsequently, Joseph Bank sent botanists through his contacts with the East India Company and his relationship. By time to obtain tea seeds and seedlings from China to carry out transplanting experiments in British Botanical and Indian colonies (Lees, 1863: p. 21). Bank studied the plants, and by knowing the experiments of Kyd, he suggested tea experimentation in the Calcutta Botanical Garden. The trials for cultivating Chinese tea plants were also conducted in 1788 by importing the tea plants from Canton (Warren Royal Dawson, 1958: p. 698).

As far as most of the previous transplanting practices were concerned, the sea voyage from China to India took at least a month. Therefore, caring for live tea seedlings long-distance was very difficult—most tea seedlings withered during transportation. Tea seeds were also tricky to germinate and grow due to bumps until the advent of “Ward Box” in the 1830s when plant hunters in the Empire saw the hope of improving the survival rate of transplants. A ward box is an air-tight glass container for protecting plant growth. It can protect the plants in the box from collision caused by the sea waves and wind during long-distance transportation in the ship. In the beginning, the United Kingdom used it first to transplant living specimens from South Africa and Australia. Later, researchers who had a rich horticultural experience tried to transform it. According to China and India’s climatic conditions and natural environment, he tried to place shallow moist soil in a Ward box and sow tea seeds into some mulberry saplings planted on the upper floor, and the box was closed. The improved Ward box simulates the natural conditions of tea villages in eastern China and the Himalayas in an enclosed space. The transpiration of mulberry saplings can provide suitable moisture for germinating tea seeds, stabilize the temperature in the box, and create an appropriate environment for tea seeds. The micro-climates in which the plants grow allow the Chinese tea seeds to grow generally after a long journey to Calcutta. This is the performance of the British Empire’s application of the natural history accumulated during the colonial expansion process to transplanting Chinese tea (Allen, 1906: p. 2). Therefore, Britain’s investigation of the growing environment of Chinese tea trees and the search for suitable places for tea cultivation in India can be regarded as both imperial colonial expansion’s political and economic efforts. Additionally, it is the practice of imperial naturalists to recognize and transform exotic nature.

When Banks told De Venezia that India’s Haar, Kuqibihar, and Ranpur were the most suitable areas for growing tea because the climate in the region between Bengal and the Himalayas is very similar to that of Chinese tea gardens. When researchers visited China for the second time, they inspected the natural conditions of Songluo Mountain in Huizhou (present Xining County, Anhui Province). He used the nature of England as a frame of reference to describe the local ecology. He found the local rocks were like England, with identical red calcareous sandstone. Additionally, the vegetation has the characteristics of plants

commonly found in England or northern India. When he finished his research in China and visited the East India Company's tea plantations near the Himalayas, he compared the nature of the Himalayas with China. The flora in the Himalayas is like the vegetation in the middle and high mountains at the same latitude. Species found in the Himalayas can also be seen in Wuyi, Zhejiang, Jiangxi, and other places in China.

When these plant hunters investigated the natural growth conditions of Chinese tea trees and the possibility of developing tea gardens in India, they translated nature into cognition. They strip local natural conditions one by one from their original ecological whole and re-weave them into a globally unified natural order and categorization based on empires. In this system, nature becomes a suitable language. If the system's climate, soil, and other conditions are similar, the translation and planting of tea seeds can be realized.

Brockway mentions that Robert Fortunes' journey to tea-producing counties in China resulted in collecting and transferring 2000 tea northeastern and 17000 tea seeds from China through Canton (Brockway, 1979). The transplanting of Chinese tea and the developing of Indian tea in the United Kingdom are "like parallel worlds running simultaneously." While transplanting Chinese tea to India, the other side is also constantly investigating the existence of wild Indian tea. The British at that time lacked confidence in the quality and yield of Indian tea, so they continued to introduce Chinese tea and mixed it with it. Over time, it has become difficult to tell the difference between Indian wild tea and Chinese tea in tea gardens. British political control of the Indian colonies and the increasingly stable tea production in Indian tea plantations led imperial tea growers to shift their focus from transplanting Chinese tea to large-scale cultivation of Indian tea plantations. Ukers (1935: p. 135) states that the reports of Col. Later of British India in 1815 describe the usage of tea by Singpo hill tribes in north-eastern India. These tribes consumed wild tea by adding oil and garlic. The initial tea garden experiment had many twists and turns. Britain's search for Indian wild tea began by investigating whether the natural conditions in India could grow Chinese tea but accidentally discovered those fantastic wild teas in Assam, north-eastern India, in 1823.

Additionally, Arya (2013: p. 399) highlights the indigenous medicinal usage of tea in northeastern India. It is essential to seek the geographical proximity of the region where the Yunnan and Tibet province of China is situated near the Assam region and belongs to the Himalayan Hill range. When wild tea trees were discovered in the hills of Assam, British EIC abolished the tea trade with China in 1833 (Greenberg, 1969: p. 179). In May 1834, the agent of Assam reported to the Indian Tea Board that there were wild native tea trees in the Xinfu district of Pishan and pointed out that Assam was a favorable location for cultivating tea trees. The Calcutta Botanical Garden officially identified the specimens. In 1835, the Indian Tea Board established a scientific investigation mission. Unlike the mission in 1834, this investigation focused on studying the possibility of promoting the cultivation of wild Assam tea and investigating the most suitable lo-

cation for the tea plantation test garden. Assam tea took the lead in becoming the representative of Indian tea. In January 1839, the first batch of Assam tea was sold out at the London auction house. Assamese tea is bound to have the day to keep pace with Chinese tea. In 1839, the Presidency of Fort. St. George began experimenting with tea cultivation methods. In previous experimental plantings, botanist George Samuel Perrottet tried bringing China-type tea plants from the Calcutta Botanical Gardens to Nilgiris for testing (Grigg, 1880). In 1839, the first tea consignment of eight Chests was shipped from India to London for public auction. Followed by two-thirds of experimental tea was sent to the companies in 1840.

At the same time, Assam Company was chartered by the East India Company and obtained 2/3 of the experimental tea gardens in Assam and the qualification to operate free of charge for the first ten years. At the same time, Chinese tea trees and Assam tea seeds transported from Calcutta Botanical Garden began to grow together in Chittagong, Gumen, Teratun, and other tea gardens in India. British tea growers have improved wild tea and planted it with Chinese tea to enhance its quality of wild tea. To improve tea species, tea planters are keen to reclaim new land to develop tea gardens (Money, 1878: pp. 222-271). In 1843, researchers arrived in China for the first time. He successfully visited the green tea-producing areas around Ningbo and the black tea plantations in Fujian. After his inspection, the records showed China's varieties, planting, and tea-making methods. Benefiting from the success of the first visit, the East India Company entrusted researchers with visiting China twice in 1848 and 1853. The researcher's second visit focused on collecting high-quality tea seeds for the East India Company and hiring experienced Chinese tea growers and tea-makers to teach them how to cultivate and process tea. Researchers arrived at the Botanical Garden in Kolkata, India, three years later with 8 Chinese tea workers and tens of thousands of tea saplings and seeds (Barpujari, 1963: p. 223).

From the 1850s, the British colonial government intended to support the cultivation of the tea industry in India, promulgated the Assam Rules to stipulate that land could be rented, and the investment interest of imperial tea planters was stimulated (Money, 1878: pp. 222-271). Thus, in 1852, the first tea company in India paid the final dividend for tea. Therefore, it is considered the first company to be formed, and the second company was named after the place in Assam. It is called Jorhat Company. In 1853, the East India Company sent researchers to China to collect tea seedlings and tea seeds, recruit more tea workers, and ask them to inspect the Chinese scented tea's production process. Researchers sent his extensive collection of high-quality tea seedlings and tea-making equipment two years later to Calcutta, India, together with the 17 tea workers he had recruited. Researchers' investigation activities made a significant breakthrough in transplanting Chinese tea in Britain. He ventured into some important tea areas in China, interacted with local tea farmers, inspected tea planting, tea making, and other craftsmanship, obtained first-hand inspection records, and explained many initially misunderstood issues (Barpujari, 1963: p.

223). Tea was further discovered in the Khasi and Jaintia hills at the beginning of 1856. The same year, on the river Barak's bank, the Assam region's first tea estate was planted at Cachar. At the end of the year 1856, Darjeeling tea cultivation began in West Bengal. In Chotta Nagpur and Chittagong, tea cultivation began in 1862.

During the first industrial revolution from 1760 to 1850, British EIC developed modern tea machinery and methodologies in north-eastern India by upgrading the tea technology using ancient Chinese technology knowledge to fasten the production. It advanced most manual labor processes with machines to strengthen processing accuracy and reduce production time. Its notable breakthrough in the innovation of the Cut, Tear, and Curl (CTC) method of tea making has become a unique model of the Indian Tea Industry, which then produced its black tea market (Ukers, 1935: pp. 375-416). The Assam hybrid tea called Assam Jats produced by Toklai Experimental Station eventually achieved widespread commercial cultivation success in 1853. Thus, Assam began its tea production after that. Inevitably, the result of introducing tea seeds and samples from China, discovering wild tea plants, and transporting Chinese tea growers to India kickstarted the Indian tea industry. The British East India Company imported Chinese tea seedlings up to 1857 for trial plantings in various Indian highlands (Grigg, 1880: p. 541). While experimenting with tea cultivation and the growth of the Assam Tea Industry, the ancient Chinese knowledge of tea technology's cultivation, harvesting, production, packaging, and export served as a knowledge foundation. As a result, the Assam tea industry has pioneered commercial tea cultivation and established the origin of the Indian tea industry.

In North India, seeds imported from China were cultivated in Dehra Doon, Kanga, Ranchi, and Bihar. Importing tea seeds from China continued until 1857 (Grigg, 1880). In this region, the total area of tea cultivation in tea seeds from China continued to account for 6000 ha. In South India, the tea plants from the Calcutta Botanical Garden were planted in Wynaad, Nilgiris, in 1839. Still, the commercial tea plantation began in 1853. In the state of Kerala. The tea has grown in the Travancore region of about 2000 ha since 1859. In 1893, the area of tea cultivation in Nilgiris had estimated to be 1200 ha and 100 ha in Wynaad (Baruah, 2008: pp. 33-39). The modern cultivation and manufacturing practices of Assam tea technology, which has updated China's historic tea technological expertise, have been used to cultivate tea in Nilgiris in Southern India. As a result, Nilgiris establishes the Presidency of Fort. St. George's first tea industry.

The distinctive characteristics of the delicate flavor make the Nilgiri tea an outstanding tea leaf with strength and brightness. Further, it spread to Nilgiris adjacent hills in the Western ghats. Notably, the South Indian Tea Industry is known for its diverse small tea growers in the Nilgiri Hills ranges in Tamil Nadu and Kottayam, Idukki in Kerala (Baruah, 2008). The South Indian Tea Industry, situated in the unique hill ranges of western ghats, is hosting the tea industries. The rainfall and the climate match that of the Assam tea industry, and the mon-

soon, soil, and atmosphere favor the growth of tea to export the tea throughout the year. It is also known as the “Bought Leaf Factory.” It engages with private sectors of small tea growers under the cooperation of the United Planters Association of South India (UPASI) to produce CTC tea production. Therefore, UPASI represents the south Indian tea estate governing body that equates the cooperative member garden by recruiting the labor, providing the necessary technical support, fuel, fertilizers, and construction materials for the tea estates in the remote hill ranges in the western ghats. Cinchona research station has stabilized the tea business’s growth. Later, the tea business under the Presidency of St. George Fort (Madras Presidency) constituted the industry in Tamil Nadu, Kerala, and Karnataka in southern India. It increased its cultivation in Nilgiri Hills and adjacent mountains in the western ghats.

6. Conclusion

The advancement of Indian tea technology was based on China’s ancient tea technology knowledge (Ukers, 1935). The establishment of the Assam Tea industry has then mastered the modern cultivation methodologies of tea production. It then spreads its modern machinery-based tea cultivation methods to the other tea-growing regions in India. The British Indian tea industry’s technological advancements have improved the craft of making tea and increased the beverage’s production, packing, and transportation. However, tea is cultivated in 16 states in India, including Assam, West Bengal, Tamil Nadu, and Kerala. It produces 96 percent of the country’s tea. Notably, 78 percent of the country’s total planted land area is in Northeast India (Arya, 2013). With the vital progress during the Presidency of Fort, St. Gorge, the South Indian Tea industry, become India’s second-largest tea producer in the early 20th century.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Allen, B. C. (1906). *Assam District Gazetteers: Sibsagar*. The Baptist Mission Press.
- Arya, N. (2013). Indian Tea Scenario. *International Journal of Scientific and Research Publications*, 3, 399-409.
- Ball, S. (1848). *Account of the Cultivation and Manufacture of Tea in China*. Longman. <https://doi.org/10.5962/bhl.title.27118>
- Barpujari, H. K. (1963). *Assam: In the Days of the Company 1826-1858* (p. 223). Lawyer’s

Book Stall.

- Baruah, P. (2008). *The Tea Industry of Assam*. EBH Publishers.
- Benn, J. A. (2015). *Tea in China*. University of Hawaii Press.
<https://doi.org/10.21313/hawaii/9780824839635.001.0001>
- Brockway, L. H. (1979). Science, and Colonial Expansion: The Role of the British Royal Botanic Gardens. *American Ethnologist*, 6, 454-455.
<https://doi.org/10.1525/ae.1979.6.3.02a00030>
- Chaudhuri, K. N. (1978). *The Trading World of Asia and the English East India Company: 1660-1760*. Cambridge University Press.
<https://doi.org/10.1017/CBO9780511563263>
- Edward Money (1878). *The Cultivation and Manufacture of Tea* (pp. 178-271). Thacker & co.
- Ellis, M., Coulton, R., & Mauger, M. (2015). *Empire of Tea* (pp. 7-18). Reaktion Books.
- Forbes (2011). *China's Ancient Tea Horse Road*. Cognoscenti Books.
- Fortune, R. (1852). *A Journey to the Tea Countries of China: Including Sung-Lo and the Bohea Hills*. Murray. <https://doi.org/10.5962/bhl.title.96218>
- Greenberg, M. (1969). *British Trade and the Opening of China 1800-1842*. CUP Archive.
<https://doi.org/10.1017/CBO9780511896286>
- Grigg, H. B. (1880). *A Manual of the Nilagiri District in the Madras Presidency*. The Government Press. <https://doi.org/10.5962/bhl.title.27166>
- Hoh, E., & Mair, V. H. (2009). *The True History of Tea*. WW Norton.
- Jiang, Y. (2019). *More than Just a Drink: Tea Consumption, Material Culture, and "Sensory Turn" in Early Modern China (1550-1700)*. Doctoral Dissertation, University of Minnesota. Library Digital Conservancy.
<https://conservancy.umn.edu/handle/11299/211766>
- Lawson, P. (2014). *East India Company: A History*. Routledge.
<https://doi.org/10.4324/9781315845364>
- Lees, W. N. (1863). *Tea Cultivation, Cotton, and Other Agricultural Experiments in India. A Review*. W. H. Allen & Co. <https://doi.org/10.5962/bhl.title.24686>
- Liu, A. B. (2020). *Tea War: A History of Capitalism in China and India*. Yale University Press. <https://doi.org/10.12987/yale/9780300243734.001.0001>
- Liu, X. (2010). *The Silk Road in World History*. Oxford University Press.
- Lu, Y. (2014). *A History of Chinese Science and Technology* (Vol. 1). Springer.
<https://doi.org/10.1007/978-3-662-44163-3>
- Martin, L. C. (2007). *Tea: The Drink That Changed the World*. Tuttle Publishing.
- Martin, L. C. (2011). *Tea: The Drink That Changed the World*. Tuttle Publishing.
- Money, E. (1878). *The Cultivation and Manufacture of Tea*. Thacker & Co.
- Ovington, J. (1689). *A Voyage to Surat in the Year 1689, Giving a Large Account of That City, and Its Inhabitants, and of the English Factory There*. Printed for Jacob Tonson.
- Peal, S. E. (1873). The Tea Bug of Assam. *Journal of the Agricultural and Horticultural Society of India*, 4, 126-132.
- Rose, S. (2010). *For All the Tea in China: How England Stole the World's Favorite Drink and Changed History*. Penguin Publishers.
- Saberi, H. (2010). *Tea: A Global History*. Reaktion Books.
- Sigley, G. (2015). *Tea and China's Rise: Tea, Nationalism, and Culture in the 21st Cen-*

- turey. *International Communication of Chinese Culture*, 2, 319-341.
<https://doi.org/10.1007/s40636-015-0037-7>
- Thomas, A. P. (2006). The Establishment of Calcutta Botanic Garden: Plant Transfer, Science, and the East India Company, 1786-1806. *Journal of the Royal Asiatic Society*, 16, 165-177. <https://doi.org/10.1017/S1356186306005992>
- Tsai, S. Y.-C. (2003). *Trading for Tea: A Study of the English East India Company's Tea Trade with China and the Related Financial Issues, 1760-1833*. University of Leicester.
- Ukers, W. H. (1935). *All about Tea Vol. I*. The Tea and Coffee Trade Journal Company.
- Warren Royal Dawson (1958). *Col. Kyd's Remarks on B.'s Letter Concerning the Botanic Garden Written on 23 Sept 1789 and Presented on 12th Oct 1789 Calcutta, Bengal Public Consultations, 1789, D.T.C* (Vol. 7, p. 513).
- Yan, W., Ge, Z. Z., & Xiong, L. Y. (2020). Research on the Influence of Chinese Tea Technology on the World Tea Industry. *American Journal of Industrial and Business Management*, 10, 135-143. <https://doi.org/10.4236/ajibm.2020.101009>
- Zhen, Y. S. (2002). *Tea: Bioactivity and Therapeutic Potential*. CRC Press.
- Zou, Y., & Lin, X. (2018). Tunxi: Urban Sectoral Agglomeration in a Regional Centre of Tea Trade. In Y. Ding, M. Marinelli, & X. Zhang, Eds., *China: A Historical Geography of the Urban*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-64042-6_5