



SUPREMECY OVER THE GREEN; A HISTORICAL STUDY ON SHIBPUR AND SAHARANPUR BOTANICAL GARDEN

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RESEARCH ARTICLE



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Abstract

Botanical gardens in colonial India were far more than spaces devoted to the collection and display of plants. They were institutions in which scientific knowledge, commercial ambition, environmental transformation, and imperial power converged. Among the most significant were the East India Company's Botanic Garden at Shibpur near Calcutta and the Botanic Garden at Saharanpur in northern India. Established in the late eighteenth and early nineteenth centuries respectively, the two gardens became important nodes in an expanding imperial network through which plants, seeds, specimens, knowledge, and people were moved across India and between India, Europe, and other parts of the world. Their histories reveal how British colonialism attempted to classify, control, transplant, and commercially exploit the natural environment. This article compares the histories and functions of the Shibpur and Saharanpur gardens. It argues that their significance cannot be understood simply through the history of modern botany. Shibpur was closely connected to the East India Company's commercial objectives, including the search for useful timber, spices, food plants, and plantation crops. Saharanpur, meanwhile, became a northern counterpart to Shibpur, particularly suited to the study and movement of Himalayan plants and to experiments in acclimatization. Both institutions depended upon networks of Indian gardeners, collectors, artists, labourers, physicians, and local informants, even though colonial narratives frequently celebrated European superintendents as the principal agents of botanical discovery. The gardens therefore represented a form of "green imperialism": the attempt to turn botanical knowledge into an instrument of economic and territorial power.

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Introduction

The history of colonial India is often narrated through armies, administrative institutions, revenue settlements, railways, and commercial enterprises. Yet another important dimension of imperial power operated through the natural world. Plants were collected, classified, cultivated, transported, exchanged, and transformed into commodities. Botanical gardens became crucial institutions in this process. They were simultaneously laboratories, nurseries, libraries, museums, experimental farms, and administrative centres. In them, the colonial state attempted to make nature legible and useful. Two gardens were particularly important in this history: the East India Company's Botanic Garden at Shibpur, near Calcutta, and the Botanic Garden at Saharanpur in northern India. Shibpur was founded in 1787 under the initiative of Lieutenant-Colonel Robert Kyd, while Saharanpur entered the Company's institutional system in the early nineteenth century and received a formal botanical administration in 1817. The Botanical Survey of India itself recognizes Shibpur as a garden established by the East India Company in 1787 and lists Saharanpur among the principal botanical centres developed under colonial rule (Botanical Survey of India, "Brief History"). The comparison of these two gardens is revealing because they performed complementary functions. Shibpur's position beside the Hooghly River and near Calcutta made it a major centre for the introduction and circulation of plants into Bengal and beyond. Saharanpur situated much closer to the Himalayan region, provided access to a very different ecological zone. Colonial botanists could therefore use the two gardens as interconnected experimental spaces: plants unsuitable for the humid climate of Bengal could be cultivated farther north, while Himalayan and Central Asian species could be collected and studied through Saharanpur.

The history of these institutions consequently raises a larger question: Did botanical gardens merely advance scientific knowledge, or did they also help create an imperial "supremacy over the green"? This article argues that they did both. Their scientific achievements were genuine, but they developed within a political economy that sought to transform India's biological resources into imperial assets.

Objectives of the Study: Objectives of the study are to know

1. Colonial view of establish of botanical garden in India.
2. History of Shibpur and Saharanpur botanical garden.
3. How the two botanical gardens fulfil the colonial interest.

Methodology of the Study: To done the study different primary and secondary sources used. Primary data collected from online archive of British Library. Secondary data collected from books, journals and internet platform. The study is qualitative in nature. Descriptive and historical method used to done the study.

The Colonial Garden and the Logic of Empire

The emergence of botanical gardens in British India must be understood against the background of the East India Company's transformation from a trading corporation into a territorial power. During the eighteenth century, the Company increasingly looked for agricultural and botanical resources that could reduce dependence upon foreign suppliers and increase the profitability of its territories. The founding of Shibpur illustrates this relationship particularly clearly. Robert Kyd, an officer of the Bengal Army, proposed the establishment of a botanical garden in 1787. The Company accepted the proposal because it promised both scientific and economic advantages. Contemporary and later accounts emphasize interests in useful plants, timber, spices, and agricultural improvement. D. Chatterjee's historical account of the garden stresses that its original establishment was closely associated with the Company's desire to increase its commercial wealth rather than simply with the abstract advancement of botanical science (Chatterjee 362–64). This does not imply that the garden was just a commercial plantation. From its earliest years, it became a site of systematic botanical investigation. William Roxburgh, who became superintendent in 1793, transformed the institution into a major centre of botanical study. The Botanical Survey of India's historical account describes Roxburgh as one of the foundational figures of Indian botany and notes his extensive work in collecting, describing, and illustrating Indian plants (Botanical Survey of India, "Central National Herbarium, Howrah"). The garden therefore embodied a fundamental contradiction of colonial science. Knowledge was pursued for its own scientific value, but scientific knowledge also increased the ability of the colonial state to identify resources, evaluate landscapes, move species, and organize economic production. David Arnold's study of Nathaniel Wallich captures this relationship between science and commerce particularly well. Wallich's career at the Calcutta garden, Arnold argues, demonstrates how South Asian plant life could become a form of capital within the East India Company's wider system. Botanical knowledge was consequently embedded in the Company's ideology of "improvement" (Arnold 899-928). The botanical garden was thus not separate from colonial political economy. It was one of its laboratories.

Shibpur: From Company Garden to Imperial Botanical Institution

On the western bank of the Hooghly River, across from Calcutta, the Shibpur garden-now called the Acharya Jagadish Chandra Bose garden was founded. Strategically its location was very important. The political and commercial centre of British Bengal, and the Hooghly was one of the principal arteries connecting the colonial capital to the Indian Ocean. Robert Kyd's initial project developed rapidly. The garden was intended to cultivate plants that might be useful to the Company, and its early history included experiments with timber trees and spices. Kyd's interest in plants was therefore closely connected to the practical concerns of empire. He said that the foundation of the botanical garden as 'common sense' of the colonial govt. The Botanical Survey of India records that he attempted to introduce a wide range of European trees and other useful plants and that the garden eventually contained thousands of plants (Chattopadhyay & Rajbangshi 56-65). The appointment of William Roxburgh as superintendent in 1793 marked a major stage in the institutional development of Shibpur. Roxburgh brought systematic botanical classification to the garden. He also encouraged the preparation of botanical drawings, a practice that became essential because accurate visual representation allowed specimens collected in distant regions to be studied and compared. His work contributed to the development of *Flora Indica* and to the broader formation of botanical knowledge about the subcontinent (Botanical Survey of India, "Central National Herbarium, Howrah"). Shibpur subsequently became a major centre for the circulation of plants. Seeds and specimens came from both overseas and various regions of India. Plants that survived experimentation could be redistributed to other colonial gardens, plantations, agricultural stations, and private cultivators (Thomas 165-177). This movement transformed the garden into a botanical exchange network. Plants were not simply collected and stored. They were moved through space. A species from one ecological region might be transported to another to determine whether it could be acclimatized. Seeds could travel to Britain, while European plants could be introduced into India. The garden's importance increased further under Nathaniel Wallich, who served as superintendent from 1817 to 1846. Wallich's tenure became one of the most important periods in the history of the institution. One of the most significant eras in the institution's history was Wallich's era. The Botanical Survey of India notes his exceptionally long service and his major contribution to botanical collections, including the famous *Wallich Catalogue* (Botanical Survey of India, "Acharya Jagadish Chandra Bose Indian Botanical Garden"). The scale of collecting under Wallich was remarkable. The garden was increasingly connected to a wider scientific network that included the East India Company's administrative departments, European botanical institutions, collectors,

missionaries, medical officers, and naturalists. Yet this network should not be imagined as exclusively European. Indian gardeners and collectors were indispensable to the functioning of colonial botany. They possessed detailed knowledge of local plants, soils, seasons, cultivation techniques, and regional landscapes. European botanists depended upon this knowledge even when colonial scientific publications attributed discovery primarily to European investigators. Shibpur therefore functioned as a meeting point between European classificatory science and South Asian ecological knowledge.

Saharanpur: The Northern Garden of Empire

If Shibpur was the great botanical institution of eastern India, Saharanpur became its northern counterpart. The history of Saharanpur is particularly interesting because the site itself had a pre-colonial history. Modern scholarship has traced the garden to an earlier Mughal-era garden traditionally associated with the name Farhat Bakhsh. Under British rule, the existing garden was gradually transformed into an East India Company botanical institution (Fleetwood 137-166). The Company formally developed Saharanpur as a botanical garden in the early nineteenth century, with George Govan appointed superintendent in 1817. Archival records held by the British Library document official correspondence concerning the garden's management, expenditure, and botanical experiments in 1820–21. The records also reveal interest in vegetables from the hills, teak cultivation, and the introduction of tea plants (British Library, IOR/F/4/660/18324). Saharanpur's geographical position gave it a special importance. It stood much closer to the Himalayan foothills than Calcutta did. This made it possible to cultivate plants whose environmental requirements differed from those of Bengal (British Library, IOR/P/12/28). John Forbes Royle, who became superintendent in 1823, developed this role further. Royle was a physician as well as a botanist, and his work demonstrates the close relationship between botanical science and medicine in colonial India. He collected information on Himalayan plants and medicinal materials and organized collectors who travelled into mountainous regions were also a workplace structured by colonial hierarchies of race, class, occupation, and coercion. The garden's apparently peaceful landscape consequently concealed a political economy of labour (Botanical Survey of India, "Brief History").

Shibpur and Saharanpur as Complementary Institutions

The differences between the two gardens were not simply geographical. They reflected a division of botanical labour within the colonial system. Shibpur was situated in the humid tropical environment of Bengal (Annals of the The Royal Botanic Garden). It was exceptionally useful for introducing tropical plants, maintaining large collections, distributing plants through the Company's network, and connecting botanical research with the commercial infrastructure of Calcutta (Sen 199-239). Saharanpur, by contrast, occupied a climatic position suitable for plants associated with northern India, the Himalayas, Central Asia, and temperate regions. John Forbes Royle explicitly developed the idea that the garden could serve as a place where plants from different climatic regions might be compared and acclimatized (Botanical Survey of India, "Brief History"). The two gardens consequently formed complementary parts of a larger botanical geography. This relationship can be seen particularly clearly in the history of tea. Tea had become a major imperial concern because of Britain's dependence on Chinese supplies. Colonial botanists sought to determine whether tea could be cultivated successfully within British-controlled territories. This project involved the botanical gardens. The Botanical Survey of India identifies the introduction and cultivation of tea among the important achievements associated with the Calcutta and Saharanpur botanical establishments (Chatterjee 362–64). Saharanpur's location was especially valuable for the study of plants from northern and Himalayan environments. Later archival records show that the garden was involved in regions (Botanical Survey of India, "Central National Herbarium, Howrah"). The story of tea demonstrates how botanical knowledge could become a component of imperial economic strategy. The identification of a plant was only the first stage. The colonial project required experiments in cultivation, transportation, acclimatization, plantation management, and commercialization. Botanical gardens helped provide the infrastructure for those stages.

Botanical Knowledge and the Colonial Classification of Nature

Classification was one of the most crucial aspects of both gardens. Colonial botany sought to give scientific names to plants, organize them into systems, describe their properties, and establish geographical patterns. Classification might appear politically neutral, but in a colonial setting it also had practical consequences. Once a plant was scientifically identified, its potential uses could be investigated. Medicinal plants could be studied for pharmacological purposes; timber species could be assessed for forestry; food plants could be tested for cultivation; ornamental plants could be introduced into European gardens. Botanical knowledge therefore transformed biological diversity into a catalogue of potential resources (Kochar 201-216). This process also involved the extraction of knowledge from local communities. Indian healers, gardeners, cultivators, forest users, and collectors possessed extensive knowledge of plants and their uses. Colonial botanists often incorporated this information into scientific descriptions, while the original knowledge holders remained largely invisible in the resulting publications. The garden was therefore a site of both collaboration and unequal power. The same institution could simultaneously depend upon Indian expertise and marginalize its producers. This tension is central to understanding colonial science. The British did not simply bring modern scientific knowledge to a supposedly passive India. They created scientific institutions by combining European systems of classification with information, labour, specimens, and ecological knowledge obtained in India. The resulting science was therefore colonial in its institutional organization even when its knowledge depended upon Indian contributions.

Plants as Imperial Commodities

The economic importance of botanical gardens becomes especially clear when we examine the plants that passed through them. Shibpur participated in experiments involving timber, spices, food crops, medicinal plants, and plantation species (Arnold 899-928). Later records identify the garden with the introduction or trial of plants such as cinchona, rubber, vanilla, eucalyptus, coffee, cinnamon, cardamom, tapioca, and other economically significant species (Ray). These experiments were part of a larger imperial ambition: to reduce dependence on external markets and to create profitable agricultural systems within colonial territories. Cinchona provides a striking example. Its bark could be processed to produce quinine, an important treatment for malaria. Colonial governments consequently became interested in cultivating cinchona in suitable environments. George King, who later became superintendent of the Calcutta garden, was deeply involved in cinchona cultivation and the development of methods for producing and distributing quinine (Chattopadhyay & Rajbangshi 56-65). Botanical gardens thus formed part of a chain linking scientific research with public health, military expansion, plantation agriculture, and commerce. This was one of the central characteristics of colonial botanical science: plants were valuable not merely because they were scientifically interesting, but because they could potentially be made useful to the colonial economy.

The Human Labour behind the Botanical Garden

The monumental history of colonial botany frequently focuses on famous European botanists—Roxburgh, Wallich, Royle, Falconer, Hooker, and King. Their contributions were undoubtedly substantial. Yet the institutional history of the gardens also depended upon a much larger and less celebrated labour force. Gardeners maintained nurseries and experimental plots. Collectors travelled to distant regions. Artists produced botanical illustrations. Medical officers gathered medicinal information. Clerks recorded specimens and correspondence. Local guides helped European naturalists navigate unfamiliar landscapes. The archival record from Saharanpur makes this particularly visible. Hugh Falconer's 1839 report described the organization of the garden, including its departments, buildings, staff, and operations. It even recorded the use of approximately thirty convicts from the local jail as daily labourers in the garden (Botanical Survey of India, "Brief History"). Such evidence complicates the image of the botanical garden as a purely scientific institution. It was also a workplace structured by colonial hierarchies of race, class, occupation, and coercion. The garden's apparently peaceful landscape consequently concealed a political economy of labour.

The Garden as a Site of Imperial Power

The term "imperial botanical network" is useful for describing the relationship among Shibpur, Saharanpur, Kew, Madras, Bombay, plantations, agricultural departments, museums, and other colonial institutions. The movement of plants followed routes similar to those used for the movement of commodities and information. A specimen collected in the Himalayas could be sent to Saharanpur, then to Calcutta, London, or another botanical institution. Seeds could move in the opposite direction. A European plant could be introduced into India, cultivated experimentally, and then redistributed. The garden therefore made empire biological. It connected distant environments through systems of transportation, classification, correspondence, and administration. The idea of 'Supremacy over the green' is helpful because of this. British imperial power did not consist only in controlling territory. It increasingly involved the ability to intervene in ecological relationships: deciding which plants should be cultivated, which species were economically valuable, where they should be transplanted, and how they could be converted into commodities. Botanical gardens helped make this intervention possible. At the same time, however, imperial botanical projects were never completely successful. Plants often failed to acclimatize. Diseases affected plantations. Climatic conditions frustrated experiments. Local cultivation practices could not always be replaced by European methods. The natural environment therefore retained a degree of agency that colonial planners could not fully control. The history of botanical gardens should consequently not be interpreted as a simple story of British mastery over nature. It was an ongoing process of experimentation, failure, adaptation, and negotiation.

From Company Science to Colonial State Science

The nineteenth century witnessed a gradual institutionalization of botanical science. The East India Company's gardens increasingly became connected with government departments and wider scientific organizations. A major turning point came with the creation of the Botanical Survey of India. The Government of India formally constituted the Survey in 1890, with George King, superintendent of the Royal Botanic Garden at Calcutta, becoming its first director. The Calcutta garden became an important headquarters of the new scientific organization (Botanical Survey of India, "Acharya Jagadish Chandra Bose Indian Botanical Garden"). This transition reflected the changing nature of colonial governance after the transfer of power from the East India Company to the British Crown in 1858. The garden at Shibpur itself became known as the Royal Botanic Garden after Company rule ended (Botanical Survey of India, "Brief History"). The institution thus moved from the commercial world of the Company toward the more bureaucratic scientific structure of the colonial state. Yet the underlying relationship between botanical science and economic power did not disappear. Forestry, agriculture, medicine, plantation crops, and economic botany remained major concerns. The nineteenth-century botanical garden was therefore both a scientific institution and an administrative instrument.

Colonial Legacy and Historical Memory

The colonial legacy of Shibpur and Saharanpur is complicated. On one hand, their contributions to botanical science were enormous. They generated collections, herbaria, taxonomic knowledge, botanical illustrations, horticultural expertise, and

networks of scientific communication. Their work contributed to the modern scientific study of South Asian flora. On the other hand, these achievements cannot be separated from colonial structures of extraction. The gardens helped identify biological resources that could be incorporated into imperial economic systems. They facilitated the movement of plants from one region to another without regard for ecological boundaries established by local communities. They also depended upon forms of labour and knowledge that were not always recognized in official accounts. Modern botanical institutions therefore inherit both sides of this history. The Shibpur garden, for example, remains an important centre of plant conservation and botanical research. Its present identity as the Acharya Jagadish Chandra Bose Indian Botanical Garden reflects an effort to place the institution within a broader Indian scientific history rather than leaving it permanently framed through its colonial identity (British Library, IOR/F/4/660/18324). The history of Saharanpur similarly survives through its botanical collections and through the wider history of forestry and plant science in northern India.

Conclusion

The histories of Shibpur and Saharanpur demonstrate that botanical gardens were central institutions of colonial knowledge and power. Their importance lay not merely in the beauty of their landscapes or the scientific classification of plants. They were laboratories of imperialism in which nature was collected, ordered, transported, experimented upon, and transformed into economic possibility. Shibpur, founded in 1787, became one of the most important botanical institutions of British India. Its proximity to Calcutta enabled it to connect scientific research with the commercial and administrative networks of the East India Company. Under figures such as William Roxburgh and Nathaniel Wallich, it became a major centre of botanical classification and plant exchange. Saharanpur performed a complementary function. Its location in northern India placed it closer to the Himalayan ecological zone and made it an important centre for the study, collection, and acclimatization of northern and mountain plants. Under George Govan, John Forbes Royle, Hugh Falconer, and their successors, the garden became connected with wider imperial projects involving Himalayan exploration, medicinal plants, agriculture, and tea. The two gardens therefore reveal the spatial organization of colonial science. Shibpur and Saharanpur were not isolated gardens; they were interconnected nodes in a larger network that included other Indian gardens and European institutions such as Kew. Plants, specimens, seeds, information, and people travelled through this network. Yet the story cannot be reduced to British achievement. Indian gardeners, collectors, artists, labourers, cultivators, healers, and informants were essential to the creation of botanical knowledge. Their contributions were often obscured by the colonial tendency to celebrate European botanists as individual discoverers. The phrase "supremacy over the green" consequently captures both the ambition and the limitation of colonial botany. The British sought to extend political and economic control into the biological world. Botanical gardens helped them do so by transforming plants into objects of scientific classification and economic calculation. But nature, local knowledge, and human labour could never be completely subordinated to imperial plans. The history of Shibpur and Saharanpur therefore belongs simultaneously to the history of science, environmental history, economic history, and colonialism. Their landscapes were no knowledge and power, science and commerce, nature and politics became impossible to separate.

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