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HORTUS MALABARICUS AND THE FORSAKEN LEGACY

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ABSTRACT

Hortus Malabaricus, the monumental treatise on Malabar's rich flora is going downhill in popularity, although it carries a lot of contemporary significance. The great legacy it represents in multiple spheres of knowledge is lost on today's generation. Hortus and its long-awaited English translation have great relevance in the botanical, linguistic and socio-ethnic history of Kerala. The requisites and events that led to the composition of this colossal work is also worth paying attention to. The English translator K. S. Manilal's exploration into the current availability of drugs mentioned in Hortus reveals the alarming diminution of biodiversity on the Western Ghats. Efforts in this direction are particularly valuable in the present era when Ayurvedic medicines are increasingly vitiated by adulterants that take up their role in the mass markets. The English edition supplemented with IPR and Patent information on the drugs renders Hortus as an authentic resource and averts attempts to exploit and misappropriate the medicinal plant wealth of India.

Keywords: Hortus Malabaricus, legacy, history,

INTRODUCTION

A truly herculean effort at knowledge gaining about the Malabar region's rich flora across various kind of experts, countries and time – Hortus Malabaricus, the epic treatise remains highly relevant even today. Despite being the oldest comprehensive printed book on the natural plant wealth of Asia and of the tropic, the treatise focuses on the flora of Western Ghats especially Kerala region. With the historical significance as the first book in which Malayalam appears in print, Hortus also documents the socio-ethnic culture prevalent in Kerala during that period.

This article primarily attempts to unveil the legacy forsaken behind this monumental work which has surpassed centuries of publication and has gained the fame as the pioneer before Linnaean era of taxonomy in Botany. Even a tricentennial after its publishing, "Hortus Malabaricus enshrines the indigenous pre-Ayurvedic knowledge of the hereditary medical practitioners of the Indian state of Kerala" as quoted by Dr. B. Ekbal in the foreword to this epic treatise. Being a representation of the circle of linguistic exchanges from Malayalam in oral form culminating in English, there is solid hope that the legacy behind Hortus is nothing but an exploration of medical history beyond time and borders.

Aim: To recoup the legacy of Hortus Malabaricus in multiple spheres of knowledge

Objectives

- To introduce the content of Hortus Malabaricus in detail
- To unveil the backdrop in which Hortus was composed
- To find out the importance of Hortus Malabaricus in Botanical history – of Kerala and of the world
- To reveal the role of Hortus in linguistic history of Malayalam
- To study the reason behind the significance of Hortus beyond time and borders

Materials and Methods

The entire matter for writing this article was solely obtained through referring books, journals and online reading. The English edition of Hortus Malabaricus and numerous articles based on this were collected on the first hand and were subjected to critical study. Few documentary films made on its basis and news articles related with Hortus were viewed online which could provide further insight into the topic and its background. All the collected items were analysed in depth, observations were made and arrived at final conclusions.

DISCUSSION AND OBSERVATION

The oldest important printed book on Indian medicinal plants in any European language, acclaimed by the scientists in Europe of 17th century as a milestone in the field of plant science, Hortus Malabaricus has gained fame in multiple spheres of knowledge. It was published during 1678 – 1693 from Amsterdam, as a compilation work by Hendrik Adriaan Van Rheede, the then Dutch Governor of Malabar and is perhaps the only authentic record of ancient Malabar's ethnobotanical knowledge available to us today. The only copy of the original Hortus is preserved at TNAU, Coimbatore.

This epic treatise describes several hundred medicinal plants which were successfully used by the 17th century- Ayurvedic physicians along with their medicinal powers and methods of application. The identity of many of the plants described has not yet been accu-

rately established, which would be of considerable interest to Ayurveda.²

Our territory's history with frequent episodes of conquests and conflicts reveal that the first Europeans who landed here were interested only in spot trade and quick profits. During the later Dutch period, VanRheede perceived that along with a scientific exploitation of the local natural resources, a compilation of the well-advanced ethnobotanical knowledge of the natives, undertaken with mutual co-operation, would be more advantageous.³

Reasons behind the keen personal interest of Van Rheede to compose Hortus were manifold. He took up the decision of composing Hortus Malabaricus because of the strong belief that it will greatly benefit the Dutch East India Company. The main benefit among them was of course economic. During wartime the availability of medicines was a headache for the Dutch army. Because, the medicines collected from countries like India by the Arabs and then exported to Europe and Netherlands required to be brought to India again. This resulted in the unavailability of medicines at proper time and the loss of potency of medications. In order to counter this financial loss and difficulty, the Dutch East India Company officials at Ceylone had started search for medicines there about which Van Rheede, the councillor then came to know. This must be understood in the backdrop that with the Portuguese advent, there aroused a great interest among European society to perceive the medical knowledge in Asian countries.

When Van Rheede was appointed as the Dutch commander of Malabar in 1669, there arose disapproval of his former official who had ruled with Ceylon as the Headquarters. VanRheede who strongly believed that Malabar was an important region than Ceylon needed to prove the same. Hortus Malabaricus was composed with this intention too, i.e.: to convert the Dutch Headquarters from Ceylon to Kochi.

Behind this gigantic task of several years to compile and publish, Rheede was assisted by dozens of experts including physicians, scientists, artists, plant collectors, interpreters etc of Malabar and Europe. Among them special mention should be made about brother Mathew, John Caesarius and the 4 local experts – Itty Achuthan, a famous Keraleeya traditional physician, along with Ranga Bhat, Vinayaka Pandit and Appu Bhat (Konkani physician). Inorder to record the medicinal properties of plants he collected, Rheede gathered the local expert scholars around him, who used to discuss the matter thoroughly among themselves, coming to an agreement acceptable to all so that none among them attributed either superior or inferior virtues to the plants. The compiler has beautifully recorded this sort of '*Tadvidyasambhasha*' at the commencement of his epic treatise.

Thus was born Hortus Malabaricus enriched with 12 volumes, description of 780 species of the most important plants of Malabar, supported with 794 unusually beautiful illustrations among which 691 modern species could be traced out and along with each plant is given it's description in Latin and its name in 4 languages(Malayalam, Nagari, Roman and Arabic) in addition to the medicinal properties, methods of preparation and application of the medicine. Malayalam names are written in Roman script. The treatise contains pages in folio size and diagrams in double folio size. The original work has 1616 pages, says Manilal. An example to clarify the format of Hortus –



ODAGA-PALA, which is the third species of Pala, in the language of Brahmins Alego-Cudo, is also a loss tree, with the height as Gurada-Pala, growing in sandy soil.

Root sends itself down less deeply, spreading fibres wide, with dark red and milky bark, which is of bitter and less pungent taste.

Stem (trunk) also becomes one foot thick, with red and milky bark, branches however with ash colour.

Leaves which arise two by two on short green perioles, greatly agree with leaves of the second species, namely oblong round anteriorly cuspidate, milky, nerves also from the rib, which stands out on the lower sides, run out in oblique annular and parallel tract, pronounced only on the lower side, but these are bigger and broader and with less solid texture and inside covered over with more numerous veins between transverse nerves.

Flowers, which arise from above the origin of leaves on short petioles are also white, of five oblong round and narrow leaves, and curved towards one side, which are with dense and thick texture, and not wavy in the margin,

attached to the light calyx with a long and white peduncle, and are of pleasing and fragrant smell.

In the middle is a style projecting from the upper orifice of the base (foomore thick and less compressed, green, more or less a span long, inside als



the siliquae and (with) projecting tuft of silvery filaments only from the anterior eye, and clinging (to the siliqua) through the filaments in one series, with yellow or red colour when they are older.

Its Power

The bark, crushed and drunk (taken in) in acidic milk (butter milk) stops loose motion of bowels. The bark of the leaf is good for flow from the stomach, whether dysenteric or lienteric (a form of diarrhoea, with liquid evacuation of undigested food); as also for hemorrhoidal flow, taken in the same manner. The same cooked in water and drunk is good for numors of the body. The root crushed and cooked with water in which rice was washed, is good for quinsy (severe inflammation) of the throat and neck when washed (with it), helps also for tumors of the body used in the same manner, as also for arrhritic pain, when applied to the affected parts; when the detection is kept in the mouth also relives tooth ache, killing germs in these. The seeds, given in decoction is good for hot fever, as also for the burning of liver and in gout; kills also lumbago.

Holigarna pubescens (Ham.) Wall. ex G. Don, Gen. Hist. 4: 78. 1837; Kruif, Meded. Landbouwhogeschool 81-2: 17. 1981; Sasidh. & Sivar., Fl. Thrissur 280, 1996; Sivar. & Philip, Fl. Nilambur 413. 1997. - Echibes pubescens Ham., Trans. Linn. Soc. London 13(2): 524, 1822. Holambur 2004ggs G. Don, Gen. Hist. 4: 78. 1837 [APOCYNACEAE]. daga-pala Rheede, Hort. Malab. 1: 85-86, t. 47. 1678. The name Kodagapala [Malayalam script on t. 47] is still used; the meaning of kodaga is unknown but there is a place named Kodagu (in present day Coorg. Karnataka) and pala (from pal. milk) refers to the milky sap. The medicinal seeds of Kudaga Pala are called "Kudapal Ari" (ari is seed). This small deciduous tree species is common in waste places and deciduous forests of Malabar. The bark is used for treating stomach problems.

K. S. Manilal, the recent Padmasree winner and eminent botanist who translated Hortus into English admits that all attempts made by him during the past 2 decades to trace out the patent-reference books or any other Indian literature sources from which data were taken for inclusion in Hortus Malabaricus have so far been futile; it may be assumed that none of these local literature sources exist today. Thus if Rheede had not taken the trouble of recording and preserving the valuable ethnobotanical knowledge contained in the above books, they would have been lost forever to the present day society.5 Hortus remains as the only authentic record of this available to us. Manilal put his best in unlocking this knowledge-treasure in Latin and has added the contemporary name, current availability and socio-ethnic importance of each drug in his work besides the plant details thus making it beyond a translation.

In the present medical scenario, the efficacy of Ayurvedic medicines depends entirely on the correctness of plants used in preparing the medicine (in case of plant products), as substitutes would naturally dilute its curative powers. This aspect makes it essential that the accurate identification of medicinal plants described in our ancient literature is ascertained beyond any doubt. By delving deeper into the ethnobotanical knowledge of Malabar and by choosing the correct plants prescribed by the ancient masters for the preparation of medicines, Ayurveda can easily recapture its past prestige and glory.6

The legacy forsaken behind Hortus Malabaricus may be viewed in dual aspects. First among them is pertaining to the botanical knowledge-treasure of ancient Malabar locked in Latin language for about 330 long years. The second one is about K.S. Manilal, the botany professor whose interest and dedication got transformed into a life's mission of translating this mammoth-work into English, but sadly received little recognition in India for this. This must also be viewed in the backdrop that in the same year of publishing his last book on Hortus – in 2012, Queen Beatrix of Netherlands conferred a state honour on him whereas his mother nation took nearly a decade to honour him.

In a critical point of view, Hortus also bears these drawbacks:

- Published without any order
- Elaborated foreign and unknown names of exotic
- Omission of similarities and comparison of these plants with those of Europe

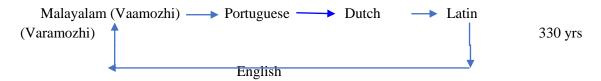
Not used those terms by which the learned botanists have been accustomed according to their practice to distinguish various parts of plants

Still the need and necessity of recouping the legacy behind Hortus is that the Botanical imaginary sketched by this monumental work is inextricably entwined with the eventful historical period it belongs to and Manilal made these connections come alive. The form and soul of English edition appended with IPR and Patent Regime by WTO, made it gain much socio-political and economic significance. Thus Hortus (English Edition) also puts its signature as a powerful resource book to combat any attempt to exploit and misappropriate the medicinal plant wealth of India.

CONCLUSION

Hortus Malabaricus is the proclamation of the fascinating traditional ethnobotanical knowledge of the 17th century – Keraleeya Vaidyas about the medicinal properties of plants. It is a revelation of the history of botanical science. Carl Linneaus, father of modern botany, on several occasions made special mention about the significance of this book, establishing about 250 new species from it.⁷

In the linguistic history of Kerala, Hortus Malabaricus is a name that should never be missed. From the credit of the pioneer book in which Malayalam was printed for the first time, Hortus has traversed through the evolution journey of this language. The height of Hortus is beyond this in history since it has completed the circle of linguistic exchanges; thus, bridging between the knowledge arenas of East and West.



This monumental work also serves as a connecting link between traditional and modern times of Botanical wisdom. Later exploration into the sources of this knowledge has thrown light into the possible extinction of many useful plants from original habitats calling for urgent need to conserve the biodiversity rich zone in Western Ghats.

All these define the identity of Hortus Malabaricus as a great legacy which must never be forgotten. This calls for every scholar and physician dealing with herbs to be at least aware that this glimpsing history lies unnoticed and unexplored in its chronic shelf-life when there is actual need to recoup this legacy.

But our pathetic way of honouring memorials repeats its story in this case also. 400-year-old house of Itty Achuthan finally got the attention of Kerala govt, after it collapsed in rain. Still the twenty-three year long wait of the Hortus Malabaricus Trust for Itty Achuthan Memorial Ayurvedic Museum at Kadakkarappally near Cherthala remains unfruitful though the successive governments have announced funds.

In an era of 'catalogue physicians', where the botanical knowledge -treasures of the past have almost degraded; Hortus remains as a signboard and reminds how the Vaidya should ideally be. The call of Acharya Charaka to collect knowledge on medicinal plants from shepherds, tribes and forest aborigines' echoes through this epic treatise and that's where Hortus Malabaricus turns significant for an Ayurvedic physician.⁸

REFERENCES

- Dr. B. Ekbal's foreward, K. S. Manilal, Volume one of Van Rheede's Hortus Malabaricus, ed 2003.ISBN:81-86397-57-4; Published by University of Kerala
- 2. K. S. Manilal (1984), Hortus Malabaricus and the ethnoiatrical knowledge of Ancient Malabar, *Ancient Science of Life Vol. IV, No.2 October 1984 96-99*
- 3. K. S. Manilal (1984), Hortus Malabaricus and the ethnoiatrical knowledge of Ancient Malabar, *Ancient Science of Life Vol. IV, No.2 October 1984 96-99*

- 4. K.S. Manilal (1984), Hortus Malabaricus and the ethnoiatrical knowledge of Ancient Malabar, *Ancient Science of Life Vol. IV*, *No.2 October 1984 96-99*
- 5. K.S. Manilal (1984), Hortus Malabaricus and the ethnoiatrical knowledge of Ancient Malabar, *Ancient Science of Life Vol. IV*, *No.2 October 1984 96-99*
- K.S. Manilal (1984), Hortus Malabaricus and the ethnoiatrical knowledge of Ancient Malabar, Ancient Science of Life Vol. IV, No. 2 October 1984 96-99
- 7. K.S. Manilal (1984), Hortus Malabaricus and the ethnoiatrical knowledge of Ancient Malabar, Ancient Science of Life Vol. IV, No.2 October 1984 96-99
- Agnivesa, Charaka, Dridabala; Charaka Samhita; commentary by Chakrapani; Varanasi; Chaukambha Sanskrit Samsthan; ed 2001; Sutra sthana; ch 1:120; pp.22.

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