

The conservation of
**BOTANICAL PAINTINGS IN THE COLLECTION OF HORTICULTURE
LIBRARY, LALBAGH, BANGALORE, INDIA**



1. Photograph showing one of the Botanical paintings in a fairly good condition

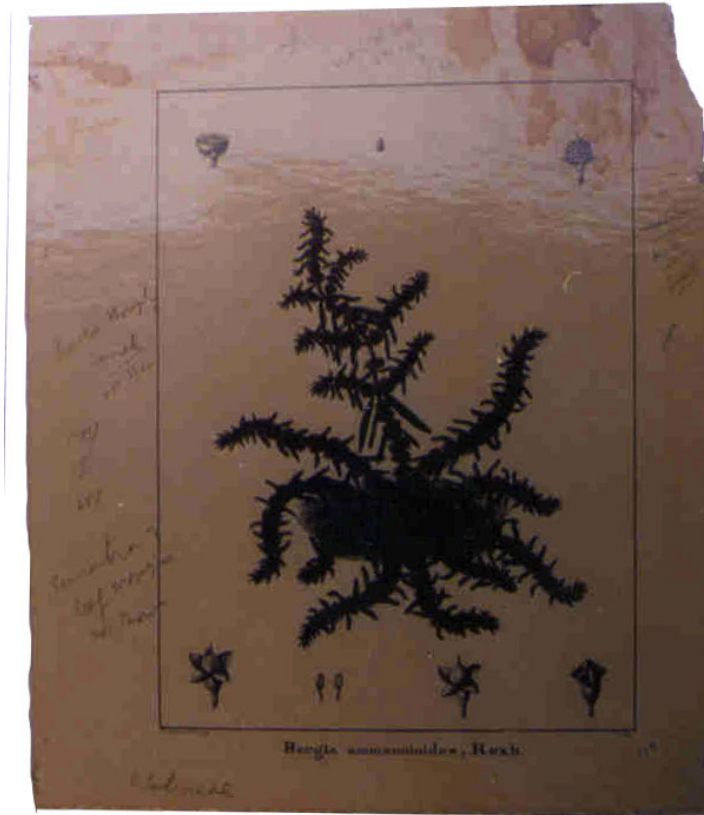
Brief History

This paper outlines a one-year project dealing with conservation treatment of 600 nos. of Botanical study paintings from the Department of Horticulture Library, Lalbagh, Bangalore, the only one of its kind in the state of Karnataka, India.

These remarkable paintings are housed in the Dr. M.H. Marigowda Horticulture Library inside the Lalbagh gardens of Bangalore. Around 1905, the then Horticulture Superintendent of Lalbagh, Mr. John Cameron, a British officer had undertaken the work of identifying and classifying the wide range of indigenous plant and other flora including hybrid varieties. His project included culture collection and also their scientific nomenclature. Feeling the need of a capable artist to assist him in this work, he appointed K. Cheluvayya Raju (a local artist) to illustrate this large and varied collection accurately and realistically.

Cheluvayya Raju hailed from a family of artists of Thanjavur (Tamil Nadu, India). His ancestors were the court painters of Thanjavur rulers. Though a traditional artist of the Thanjavur school, the level of realism achieved by him in these paintings show him up to be match for any academically trained artist.

like the flowers, seeds, leaves, roots, etc. The artist has shown admirable skill in this most realistic depiction. Almost every painting had pencil remarks or some notes written by the supervisors. It was decided to retain them as it was, since they were significant from the study point of view.



Photograph showing stains at the corner of the painting

Materials and Techniques used in the painting

The papers used for all these paintings are of J. Whatman and Co., specially designed for watercolours (evident from the watermark present on the paper). The colours used were Windsor and Newton make watercolours. In some cases, there were instances of using natural colours. The drawings were done using HB pencils.

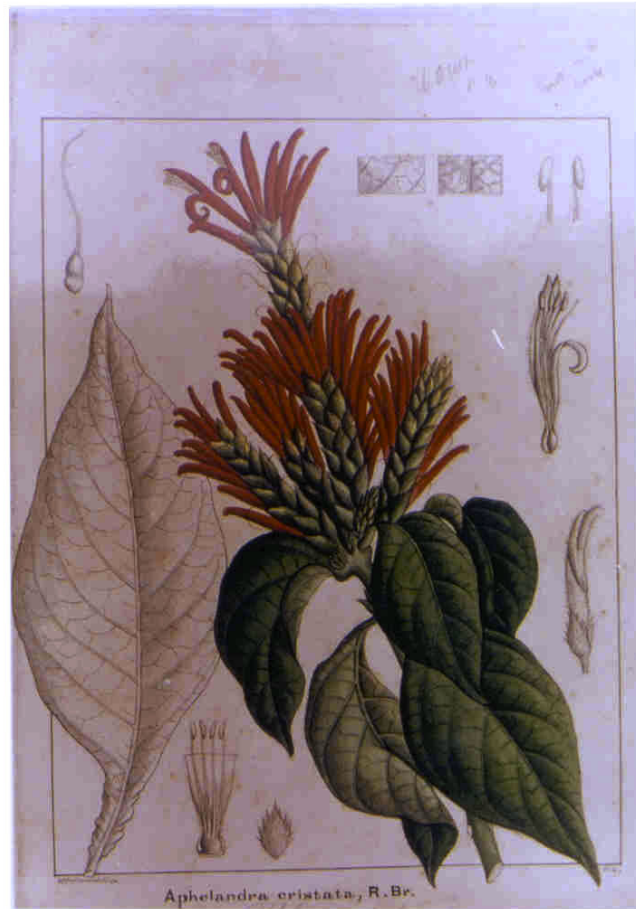
Documentation

The documentation of this vast collection was carried out in order to state their preservation condition

Documentation made included written, photographic and graphic recording at three different stages i.e., prior to commencement, during treatment and after completion.

Examination

The paintings were carefully examined with stereo Microscope. The illuminated hand magnifier also used for over all examination.



Photograph showing various problems i.e., stains, cut edges, discolouration of paper, etc, on painting

CONDITION

a) State of preservation:

The collection was housed in the Horticulture Library non-air conditioned (AC) room, but well ventilated. This room was situated in a beautiful garden and the paintings were placed in a wooden cupboard having sufficient width to place the paintings, covered with glass doors. These paintings were never exhibited, so were neither framed nor mounted. Blotters were placed in between the paintings so as to avoid surface abrasion.

A considerable amount of damage had occurred to the paintings as a result of the way in which they had been previously stored. There were some careless pinning of notes,

directly on the painting (refer photo no.2) leading to rust stains, abrasion on the paint layer, etc. In some cases, paintings were kept overlapped carelessly over the years, resulting in creases, fold marks, cut edges, etc. Stains and insect



Photograph showing various problems i.e., stains, cut edges, darkening of the paper, etc. on one of the paintings

excreta marks were also found due to lack of maintenance. Loss of paint was also noticed on a few paintings.

b) 4. Overall condition:

Surface dust and dirt, stains created by water, flies, mosquitoes, etc., foxing marks, tears, brittleness of the paper, fold marks, bad edges were the problems present. Though some problems mentioned above were existing, the quality of the paper and the paint used were so good that these were not difficult to handle and not in an unacceptable condition.

Identification of colours

The colours used were Windsor and Newton make water colours. In some cases, there were instances of using natural colours. The colours were not very fugitive.



Photograph of one of the conserved paintings

However, as they were water-based colours, wet cleaning was not carried out. Local application of moisture were used, where were required.

Identification of paper

The Whatman paper could sustain wet-technique but it is better to use this technique only on the verso. These papers responded well to humidification in the humidifier.

Treatment

Cleaning

To begin with, the water colours were cleaned using a soft brush from both the sides. The stains of various types caused by rusting, water and insects were treated locally by introducing moisture on a suction table. In some places where the stains are bit hard the mixture of IMS and water with heated spatula were used to reduce the stains. Though there were traces of stains left after the treatment, it was decided to stop the cleaning at that stage, as the colours used were susceptible to water.

Relaxing

After the cleaning, the paintings were humide and relaxed between blotting paper and cotton felt under low pressure about a week to make sure that there will no further distortion on paper. This helped in removing the minute creases, fold marks and stiffness of the paper.

Repairs and Reintegration

Torn edges and small cuts, holes and fold marks were treated with Japanese tissue strips with jagged edges and pasted using starch paste. In-filling was done only on a minimum number of objects using tinted tissue pulp or pieces.

Mounting

Though there was lack of space for displaying all the 600 botanical paintings, all of them were given a standard mount of two pieces of museum board (100% cotton acid-free board) as they were frequently used for references by the botanical research scholars. Since we did not find suitable paper for inlay mounting straight away paintings were placed on window cut mount. One has an aperture (window) cut out of it and the other is the backside board. From the rare side of the window a supported window mount was cut and pasted completely leaving about 2cm gap from all four edges. This is to avoid the direct touching of mount board to painted paper in the corners. The two are hinged together along the long edge to produce an overthrow mount opening from right to left. It was also advised to frame a few of them and display it at the library.

Storage

These collections show the variety and diversity of botanical studies. They are important for a number of reasons. They also show the academic developments of botanical drawings in India, their uses and the developments of the botanical study. The project enabled a sustained period of work to be carried out and did more than fulfill the initial aim.

The same wooden cupboard (well-seasoned) with glass window was suggested for storage. Inside the cupboards, the newly mounted paintings were kept flat inside the shelves. It was suggested to keep a bag of silica gel in each shelf to check the fluctuating RH. A non-acidic paper was provided for every painting to be placed in between each of them. Periodical examination of the paintings and periodical airing was suggested.