MEMORANDUM OF UNDERSTANDING BETWEEN BOTANICAL SURVEY OF INDIA (BSI), KOLKATA AND

THE NATURAL HISTORY MUSEUM, SOUTH KENSINGTON, LONDON, UNITED KINGDOM

			UNDERSTAI					
of Feb	201 % , at		between	Botanical	Survey	of India,	Kolkata,	India,
represented	by Dr. Par	amjit Singh,	Director, ho	aving its A	dministrat	ive Heada	quarter at	CGO
Complex, 3r	d MSO Buil	ding, Block F	, 5 th Floor, D	F Block, Se	ector 1, So	alt Lake Ci	ty, Kolkata	z-700
064, West I	Bengal, Indi	a (hereinaft	er referred o	as 'BSI' whi	ich expre	ssion shall	unless exc	luded
by or repug	nant to the	context be	deemed to	include his	s successo	or or assig	ns) of the	FIRST
PART								

AND

The Natural History Museum, UK, represented by Sir Michael Dixon, Director, whose principal place of business is at Natural History Museum, South Kensington, Cromwell Road, London SW7 5BD, UK and additional museum site at Tring, Hertfordshire plus storage facilities at Wandsworth, South London (hereinafter referred as 'NHM'which expression shall unless excluded by or repugnant to the context be deemed to include his successor or assigns) of the SECOND PART

BACKGROUND

- A. NHM was established in 1753 as part of the original British Museum. The British Museum Act 1963 made the British Museum (Natural History) a separate and independent institution with its own Trustees; the Museum and Galleries Act 1992 changed the Museum's formal title to The Natural History Museum. The Museum is a non-departmental public body with the mission to maintain and develop the collections, and use them to promote the discovery, understanding, responsible use and enjoyment of the natural world. The museum is expert in science-based taxonomy, identification and biodiversity science, contributing to conservation worldwide and so enhancing quality of life. The Museum is a scientific centre of global significance and one of the world's leading visitor attractions for engagement with the natural world. NHM is sponsored by the United Kingdom Department for Culture, Media and Sport which is ultimately responsible to Parliament for NHM's activities.
- B. In pursuit of its not-for-profit mission, NHM works together with international partners to:
 - Collect and curate plant material, including seeds, herbarium specimens and tissue samples for DNA extracts;

- Carry out scientific research projects to better evaluate and conserve plant biodiversity, for example, taxonomic verification of herbarium plant material;
 and
- Exchange plant material with other research institutes for further scientific study world-wide; and
- C. BSI, Kolkata is the premier Institute in India under the Ministry of Environment, Forest and Climate Change, Government of India engaged in botanical research. It has ten regional herbaria in different geographical regions of India. The primary objectives of the Institute are:
 - * To undertake floristic surveys and document the plant wealth of the whole country.
 - * To publish National, State and District floras, and the flora of Protected areas, fragile ecosystems, etc.
 - * To collect, identify and distribute materials which may be useful to other research or educational institutions.
- * To act as the custodian of botanical collections of the country in well-planned herbaria.
 - * Ex-situ conservation of threatened taxa in the botanical gardens of the institutes in different biogeographical regions of the country.
- D. NHM and BSI, Kolkata have worked together over many years on mutually beneficial projects focused on the study of the flora of India, exchanging specimens on loans and wish formally to recognise this long-standing relationship, and to promote its continuance for many years into the future. The collections from India are historical and we wish to add in the modern time series.
- E. The parties to this MoU are committed to implementing, in letter and spirit, the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora ("CITES"), the 1992 Convention on Biological Diversity ("CBD") and relevant national and regional laws and regulations concerning biodiversity including laws relating to access to plant genetic resources, associated benefit sharing and traditional knowledge.

Institutional Coordinators

- 1.1 For NHM, Director, Sir Michael Dixon
- 1.2 For BSI, Kolkata: Director, BSI
- 1.3 The Institutional Coordinators shall be responsible for overseeing and taking forward the activities of their respective institutions pursuant to this MoU.



Areas of Cooperation

- 2.1 NHM, London and BSI, Kolkata wish to work together to collect, study and conserve plant material such as seeds, herbarium specimens and tissue samples for science and to create and exchange associated data and images. All cooperation will be implemented in accordance with CITES, the CBD and relevant national and regional laws and regulations concerning biodiversity including laws relating to access to plant genetic resources, associated benefit sharing and traditional knowledge.
- 2.2 Areas of cooperation may include, but will not be limited to:
 - (a) Continued collaboration and support in specific joint projects already underway;
 - (b) The conducting of joint fieldwork expeditions, to be carried out in accordance with all applicable access laws and regulations and in accordance with all applicable permits, prior informed consents and/or licences and in an ecologically sustainable manner;
 - (c) The one way transfer of duplicate plant material (the "Material") and associated data and images (respectively, the "Transferred Data" and the "Transferred Images") by BSI, Kolkata to NHM, London, and vice versa, to be used as set out in Article 3.
 - (d) Capacity-building in the areas of Systematic botany and Conservation to ensure greater long-term conservation of plant genetic resources in India;
 (e) Attendance by scientific staff members of BSI, Kolkata at relevant training courses and seminars run by NHM, London;
 - (f) Support by NHM, London to training initiatives at BSI, Kolkata;
 - (g) Collaboration on ex situ and in situ conservation in India, including species and habitat conservation assessments;
 - (h) The exchange of relevant institutional literature;
 - (i) Generation and dissemination of appropriate scientific information to encourage and facilitate conservation by, for instance, joint publications in peer-reviewed journals; and
 - (j) The preparation and submission of applications to national and/or international bodies for funding to enable further collaboration between NHM, London and BSI, Kolkata.
- 2.3 The technical detail of the above-mentioned areas of cooperation will be developed and reviewed on a regular basis by NHM, London and BSI, Kolkata in accordance with available funds.
- 2.4 Access to plant material and information would be subject to all relevant extant domestic regulations of the participants as well as international laws to which either of the participants is a party.

Use of the Material by NHM, London

- 3.1 The Material and the Transferred Data and the Transferred Images shall be accessioned into the NHM collections at South Kensington, London.
- 3.2 BSI, Kolkata confirms that NHM, London shall be permitted to use the Material and the Transferred Data and the Transferred Images for scientific research by NHM staff and by authorised visitors to NHM, and for the purposes of education and long-term conservation. The Material and the Transferred Data may be digitally imaged and, together with the Transferred Images, may be published in freely available botanical databases available on the internet and/or used by NHM for publicity and fundraising purposes.
- 3.3 Scientific research carried out on the Material may include, but will not be limited to:
 - (a) Herbarium studies, such as the comparative observation, characterisation, analysis, databasing and imaging of the herbarium specimens to better understand their identification and classification, including the carrying out of sampling for pollen, DNA and anatomical preparations;
 - (b) Genetic studies, such as DNA extraction and banking, PCR amplification, DNA sequencing and fingerprinting and DNA barcoding from tissue samples, for use to infer phylogenetic relationships or to study and help conserve the diversity of genes and genomes at the population level.
- 3.4 NHM shall not, without the prior written consent of BSI, Kolkata, sell, distribute, transfer or use the Material and/or the Transferred Data and the Transferred Images for profit or for any other commercial application.
- 3.5 NHM may loan or supply the Material or any derivatives from the Material and the Transferred Data and the Transferred Images to other institutions for the purposes of scientific research or education, provided that such loan or supply is on terms which prohibit commercialisation.

ARTICLE 4

Permissions to collect, transfer, study and conserve the Material; Notification of Transfer

- 4.1 BSI, Kolkata shall work with the appropriate Indian authorities and relevant stakeholders, and NHM shall work with the appropriate British authorities, to facilitate the acquisition of the necessary authorisation(s) to enable the lawful collection and transfer of the Material from BSI to NHM and vice-versa.
- 4.2 Each party shall, on request, provide the other with reasonable assistance in obtaining the necessary authorisation(s) to enable the lawful attendance of appropriate staff

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- personnel at relevant courses, workshops and research projects in India and in the United Kingdom.
- 4.3 All plant material transferred by BSI, Kolkata to NHM shall be listed in a Notification of Transfer, a proforma copy of which is attached at Annexure 1. All plant material transferred by BSI, Kolkata to NHM which is listed in a Notification of Transfer shall be transferred pursuant to the terms of this MoU.
- 4.4 The signature of the authorised representative of BSI, Kolkata on a Notification of Transfer shall confirm that the plant material has been collected and is being transferred into the collections at NHM in accordance with all applicable laws and regulations, permits, consents and/or licences.

Benefit Sharing

5.1 NHM and BSI, Kolkata shall work together to share fairly and equitably the benefits that may arise from the collection, study and conservation of the Material and the Transferred Data and the Transferred Images.

Benefits to be so mutually shared may include, for instance:

- Informing one another of the results of relevant scientific studies;
- Sharing specimen data and images, where appropriate;
- Sending specimens on loan for taxonomic studies between both Institutes
- Providing one another with copies of relevant subsequent publications;
- Informing one another of relevant opportunities for formal or informal training and/or study by appropriate staff personnel at BSI, Kolkata or at NHM; and
- Acknowledging BSI, Kolkata and the origin of the Material in publications arising out of this collaboration; and
- Joint authorship in papers being published
- 5.2 The parties also agree to consider whether it is appropriate to effect the sharing of any benefits arising from the collection, study and conservation of the Material and the Transferred Data and the Transferred Images with other relevant stakeholders.

ARTICLE 6

Expenditure

During the period of collaboration each party will bear its own cost and expenditure of any kind, like expense on exchange of research materials, travel expenses, etc.

Duration, Renewal and Amendment

- 7.1 This MoU will come into force on the date of the final signature. It will be valid for Five [5] years from that date.
- 7.2 This MoU can be renewed for further periods of Five [5] years through mutual agreement expressed in writing.
- 7.3 This MoU can be amended at any time through mutual agreement expressed in writing. Such amendments, once approved by the parties, will become part of this MoU.

ARTICLE 8

Termination

- 8.1 Either party may terminate this MoU by giving the other party three [3] months' notice in writing.
- 8.2 A party (the "Non-defaulting Party") may by notice to the other party (the "Defaulting Party") terminate this MoU with immediate effect if the Defaulting Party is in material breach of any provision of this MoU which is not remediable or, if remediable, is not remedied within a period of thirty (30) days after the Non-Defaulting Party has given notice to the Defaulting Party requiring such breach to be remedied.
- 8.3 Articles 3, 5 and 6 shall survive termination or expiry of this MoU unless mutually agreed to the contrary, such mutual agreement being expressed in writing.

ARTICLE 9

Dispute Resolution, Jurisdiction and Choice of Law

- 9.1 In the event of any dispute between the parties, the parties shall use their best efforts to settle amicably all disputes and differences arising out of or in connection with this MOU or concerning the interpretation or performance thereof through the diplomatic channel without recourse to any legal remedy. The Director of BSI, Kolkata and the Director, NHM/Director of Science, NHM will communicate using their best efforts to resolve the dispute or disagreement.
- 9.2 If the dispute cannot be so resolved, the parties will refer it to an independent mutually agreed expert or, in the absence of any agreement between the parties ask that expert to recommend a resolution of the dispute.
- 9.3 Neither party may commence any proceedings in any court of law in relation to any dispute arising in connection with this MoU until it has attempted to settle the dispute

by use of the procedure set out in this Article and that procedure has failed to produce an outcome satisfactory to both parties, provided that nothing in this clause shall prevent either party seeking a preliminary injunction or other judicial relief at any time if in its judgment such action is necessary to prevent irreparable damage. With a view to ensure proper settlement of a dispute between the parties, a decision has to be taken at the appropriate level, with a view to provide settlement of disputes amicably through panel of Arbitrators to be appointed by MOEF to adjudicate the dispute as per Arbitration and Conciliation Act, 1996.

ARTICLE 10

General

- 10.1 This MoU in no way restricts either party from any involvement in similar activities with other public and private organisations and individuals.
- Nothing in this MoU shall be construed as placing a financial commitment upon either party.
- 10.3 Neither party may use any brand name, logo, trade mark or other similar mark of the other party without the prior written consent of that other party.
- Subject to Article 10.5 and save that NHM, shall have the right to acknowledge BSI, Kolkata and the origin of the Material in publications arising out of this collaboration in accordance with Article 5.1, neither party may make any press release or other public statement relating to this MoU or the relationship established under this MoU without prior written consent of the other party.
- 10.5 BSI, Kolkata acknowledges that NHM may be subject to obligations relating to freedom of information, for example, under the Freedom of Information Act 2000. NHM will make reasonable efforts to inform BSI, Kolkata of any proposed disclosure under freedom of information obligations in relation to this MoU or the relationship established under this MoU, but shall not be bound to obtain the prior consent of BSI, Kolkata to any such disclosure.
- 10.6 BSI, Kolkata agrees to keep confidential, and use only for the purposes of carrying out its obligations under this MoU, any documents, information or other data relating to the business or affairs of NHM, London.
- 10.7 Each party acknowledges that the other party may be prevented, either temporarily or permanently, from carrying out projects under this MoU by reason of force majeure.
- 10.8 Any notice or other document to be served under this MoU must be delivered by hand or sent by registered mail or international courier service to the address below or to such other address as has been notified to the sending party.

For NHM: Head of Science Policy and Communication, the Natural History Museum, Cromwell Road, South Kensington, London SW7 5BD, United Kingdom.

For BSI, Kolkata: Director, Botanical Survey of India, CGO Complex, 3rd MSO Building, Block F, 5th Floor, DF Block, Sector 1, Salt Lake City, **Kolkata** 700 064, West Bengal, India

- 10.9 All notices or documents shall be deemed to have been served at the date and time of delivery of the said notices or documents to the recipient party.
- 10.10 Nothing in this MoU is intended to, or shall be deemed to, constitute a partnership or joint venture of any kind between the parties, nor constitute either party the agent of the other for any purpose. Neither party shall have authority to act as agent for, or to bind, the other party in any way.
- 10.11 This MoU is personal to the parties and neither party may assign or charge any of its rights under or the benefit of all or part of this MoU or transfer, delegate or subcontract any of its duties or obligations under this MoU.
- 10.12 Each party shall execute such deeds or documents or do such acts or things as may be necessary to give full effect to the provisions of this MoU.

THE PARTIES TO THIS MEMORANDUM OF UNDERSTANDING SHOW THEIR AGREEMENT TO ITS TERMS BY SIGNING BELOW:

Signed:

For and on behalf of The Natural History Museum, Cromwell Road, South Kensington, London, SW7 5BD, UK

Name: Sir Michael Dixon

Position: Director
Date: 14 Feb 2018

Signed:

For and on behalf of the President of India Botanical Survey of India, Kolkata, West Bengal, India

Name: Dr. Paramjit Singh

Position: Director
Date: 14 Feb 2018

Annexure 1

PROFORMA

NOTIFICATION OF TRANSFER

The following plant material is transferred to the Board of Trustees of the Natural History Museum, Cromwell Road, South Kensington, United Kingdom ("NHM") in accordance with the terms and conditions of the Memorandum of Collaboration between BSI, Kolkata and NHM, London, dated [insert date].

By signing this Notification of Transfer, BSI, Kolkata hereby confirms that the plant material and associated data has been collected and is being transferred into the collections at NHM, London in accordance with all applicable laws and regulations, permits, consents and/or licences.

DATE COLLECTED	COLLECTION No.	FAMILY	GENUS or SPECIES	No. OF HERBARIUM DUPLICATES
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DATE:

For and on behalf of Botanical Survey of India, Kolkata, West Bengal, India

Name: Dr. Paramjit Singh

Position: Director

SIGNED:

DATE:

For and on behalf of the Board of Trustees of the Natural History Museum, Cromwell Road, South Kensington, London SW7 5BD, UK

Name: Sir Michael Dixon

Position: Director

A copy of this document signed by BSI, Kolkata will be forwarded to NHM, London with each consignment of plant material. NHM, London will countersign this copy and return it to BSI, Kolkata as acknowledgement of receipt by NHM, London under the terms of the Memorandum of Collaboration

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