



MEMORANDUM OF UNDERSTANDING

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The memorandum of understanding is made on this date of 08th May, 2017 between the **Central Silk Board** (CSB), a statutory body created by an Act of Parliament, namely the Central Silk Board Act, 1948 functioning under the Administrative control of Ministry of Textiles, Government of India, having its Board's Secretariat at BTM layout, Madivala, Bangalore represented by its Member Secretary who has authorized the Director, Central Sericultural Research and Training Institute (referred CSR&TI), Pampore to execute this MOU on behalf of the Board, hereinafter referred to as "**CSR&TI**" which expression shall mean & include its representatives, successors in office and assigns of the ONE PART

AND

Whereas, **University of Kashmir** is a pioneer research institute at state level contributing to the Human Resource Development in the fields of research and education in Jammu & Kashmir. The University is committed to provide an intellectually stimulating environment for productive learning to enhance the educational, economic, scientific, business and cultural environment of the region represented by the Registrar, hereinafter termed as "**University**", which expression shall mean & include its successors, representatives and assigns of the OTHER PART.

Whereas CSB is a R&D Institute for the Development of Sericulture Industry in the Country. Under this MOU, the focus is to conduct collaborative research in the project entitled "**Evolution of superior mulberry variety suitable for temperate region through somatic hybridization**", to achieve the objective viz., to produce a superior mulberry variety through the somatic hybridization, the CSR&TI has consulted the University for availing their services and the University has agreed to the proposal of the CSR&TI and accordingly both

the parties have entered into this MOU defining their respective roles and responsibilities in achieving the objective of this collaborative project.

Whereas, the Central Sericultural Research and Training Institute (CSR&TI), Pampore is a pioneer and prestigious Sericultural Research Institute located at Pampore, Jammu & Kashmir State, having an international repute in the field of Sericultural Research. The Institute has brought out some technologies, products, which have gained popularity among the stakeholders of the Silk Industry. The CSB has authorized the Director, CSR&TI Pampore (J&K) to implement this collaborative project with University of Kashmir as per the project document enclosed to this MOU which forms part and parcel of this MOU.

Whereas, the University of Kashmir, recognizing the importance of scientific cooperation and mutual benefit to be derived from such pursuits of this MOU has offered its services to collaborate with CSR&TI to conduct collaborative research in the project, entitled **“Evolution of superior mulberry variety suitable for temperate region through somatic hybridization”**, to achieve the objective *viz.*, to produce a superior mulberry variety through the somatic hybridization

I. Roles & Responsibilities of CSR&TI, Pampore

CSR&TI, Pampore will work on the following components of this project

1. Ploidy level Identification of selected mulberry varieties
2. Isolation of protoplasts from diploid mulberry varieties
3. Evaluating the viability of isolated protoplasts
4. Protoplasts fusion by Electro cell manipulator
5. Evaluating the viability of fused protoplasts
6. To supply the several explants and fused protoplasts to University of Kashmir to regenerate the plantlets in *in vitro* conditions
7. Certain chemicals and glasswares related to work will be utilized in the University of Kashmir to carry out *in vitro* culture studies.
8. Data collection, compilation and analysis

II. Roles & Responsibilities of University of Kashmir, Hazratbal, Srinagar

In addition of making available the laboratory facilities at Centre of Research for Development, University of Kashmir for the Scientist (Dr.Gulab Khan Rohela) of CSR&TI, Pampore till the project period, the University will work on the following components of the project.

1. Induction of callus from fused protoplasts
2. Somatic embryogenesis
3. Regenerating the plantlets from callus and somatic embryo's
4. Raising the Mulberry plantlets (Somatic Hybrids from the fused protoplasts)
5. Acclimatization of raised plantlets to field conditions through green house phase

General Terms and Conditions:

Article – I Areas of co-operation and collaboration

Prof. Azra Nahaid Kamili, Dean, Biological Science, Professor, Centre of Research & Development, University of Kashmir, Srinagar will carry out the *in vitro* culture studies and will provide the raised somatic hybrids to CSR&TI, Pampore to further carrying out the field level studies.

Article – II Funding

The Budget of 39.90 Lakh allocated for the entire project as detailed in the project document under 'Part-IV-Budget Particulars' will be utilized and accounted by CSR&TI, Pampore in terms of Planning and execution of the project out of the funds allocated to CSR&TI, Pampore under R&D head. No Fund will be provided to the Centre of Research for Development, University of Kashmir. However, the chemicals and materials required for the component of work to be carried out at collaborative institute will be provided by CSR&TI, Pampore.

Article – III Confidentiality

All the information that is gathered from the collaborative work will be treated as the joint property of CSR&TI and University of Kashmir, Srinagar and any utilization of the information / materials will be based on mutual consent.

Article – IV Patent and commercial products

Patenting and commercialization activities from the outcome of the project will be credited equally to both parties.

Article – V Duration, Termination and Modification of MoU

The MoU shall remain in force for a period of three (3) years from the date of execution of the project. This period may be extended by mutual consent of both parties. However, it may be discontinued or amended at any stage based on mutual consent.

Article – VI

Both the parties shall use all their expertise and extend necessary mutual support to implement this project to accomplish its objective in letter and spirit.

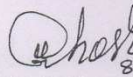
Article – VII

There shall be half yearly review of the progress of the project by the Research Council (RC) and Research Advisory Committees (RAC) of CSR&TI, Pampore.

Article – VIII

Any other details required under this MOU which are not specifically provided shall be mutually decided by the parties for necessary incorporation in this MOU.

IN WITNESS whereof both the parties hereto put their respective signatures with office seal on the date herein above provided


8.5.2017

Dr.M.K.Ghosh

Director


Central Sericultural Research & Training Institute

Central Silk Board, Ministry of Textiles, Govt. of India

Gallandar, Pampore -192 121

Jammu & Kashmir, INDIA

निदेशक/DIRECTOR
के.रे.अ.व.प्र.सं., पाम्पोर-192121(ज.व.क.)
CSR&TI, PAMPORE-192121 (J&K)


Registrar
University of Kashmir
Hazratbal, Srinagar
Jammu & Kashmir, INDIA

