

NORMS FOR SUPPLY OF MULBERRY AND SILKWORM GERMPLASM

The Central Sericultural Germplasm Resources Centre (CSGRC) at Hosur, Tamil Nadu established in 1990 by the Central Silk Board (CSB) under the World Bank aided National Sericulture Project is the premier exclusive centre for conservation and utilization of Seri-biodiversity in the country. The centre is recognized as a National Active Germplasm Site (NAGS) for mulberry by National Bureau of Plant Genetic Resources (NBPGR), New Delhi and for silkworm by National Bureau of Agricultural Insect Resources (NBAIR), Bengaluru. The mandates of the centre include collection, conservation, evaluation and utilization of sericultural germplasm resources. The conserved genetic resources are precious and hence there is a need to review the requirement for these genetic resources submitted by various institutes under the purview of the Germplasm Supply Committee constituted by Central Silk Board at CSGRC Hosur. In this context norms are formulated for supply of mulberry and silkworm genetic resources as enumerated below:

Germplasm Supply Committee

The constitution of the Germplasm Supply Committee is as follows:

- | | | |
|--|---|-----------------|
| 1. Director (Technical), Central Silk Board, Bengaluru | - | Chairman |
| 2. Head, Mulberry Division, CSGRC Hosur | - | Member |
| 3. Head, Silkworm Division, CSGRC Hosur | - | Member |
| 4. Head, Biotechnology Division, CSGRC Hosur | - | Member |
| 5. Head, PMCE Division, CSGRC Hosur | - | Member |
| 6. Director, CSGRC Hosur | - | Member-Convenor |

Terms Of Reference of the Germplasm Supply Committee:

- To review the overall merit of indents and make recommendations regarding the suitability of germplasm for supply
- To act as a forum for exchange of information relevant to the development / utilization of the candidate germplasm
- Atleast three members should be present for the quorum
- The Committee will convene meeting as per requirement.

Submission and processing of application

- The application will be submitted to the Member-Convenor (Director, CSGRC Hosur) through the head of the concerned institute / University who will forward the application after required verification to the following address:

The Director,
Central Sericultural Germplasm Resources Centre
Central Silk Board, Govt. of India, Ministry of Textiles
P.B.No.44, Thally Road,
HOSUR – 635 100, TAMIL NADU
Ph. No. 04344 22013

E-mail: csgrchosur@gmail.com; csgrchos.csb.gov.in; **Website:** csgrc.res.in

- The indenter must enter into an agreement i.e. **Material Transfer Agreement (MTA)** undertaking not to utilize the material supplied for commercial purposes.
- The Committee will examine the proposal with respect to information supplied particularly the eligibility criteria. Incomplete indents will be sent back to the concerned applicant and only indents which qualify will be placed before the Committee for consideration.
- A minimum of 2 disease free laying for silkworm and 5 cuttings / accessions [1.0 m length] without any obvious physical change with potential viability must be supplied on cost basis which will be informed to the indenter.

Criteria for supply

- CSGRC Hosur would be the nodal agency for supply of germplasm.
- The material will comprise genetic stock / germplasm conserved at CSGRC Hosur.
- The supply of germplasm material should be based on requirement submitted by indenters in the prescribed form **[Annexure 1]**.
- The indenter should enter into a Material Transfer Agreement (MTA) with CSGRC Hosur for supply of genetic resources as per the prescribed form **[Annexure 2]**.
- Supply of germplasm material will be effected only after review of the Committee except in case of collaborative research projects among CSB institutions.
- Supply of germplasm material for collaborative projects will be effected as per requirement of the experiments and details of supply will be placed before the Committee as and when next meeting is convened for ratification.
- The indenter shall submit feedback on utilization of the indented genetic resources as per the prescribed form **[Annexure 3]**.

Documentation of details on germplasm supplied

- CSGRC Hosur will maintain a permanent register in which the details of approved germplasm supplied would be listed.
- The details about all materials approved for supply will be recorded in the register to be maintained by the respective Divisional Heads / Member-Convenor (Director CSGRC Hosur)
- Further details required may be obtained by the concerned institute / agency by contacting the Director CSGRC, Hosur, Krishnagiri dt., Tamil Nadu.

Terms & Conditions for supply of Mulberry / Silkworm Germplasm

- a. The ownership of the designated germplasm shall solely rest on Central Silk Board [CSB] / Central Sericultural Germplasm Resources Centre [CSGRC].
- b. The receiving Institute / University / Agency shall not exploit the products / processes commercially outside its Project area and also not to attempt for re-distribution.
- c. In case of CSB R&D institutes, supply of germplasm material will be only through collaborative projects.
- d. The receiving Institute / University / Agency shall not seek any intellectual property rights over designated germplasm or related information.

- e. The receiving Institute / University / Agency shall share all the information regarding the protocol for in vitro multiplication of the designated germplasm with Central Silk Board / Central Sericultural Germplasm Resources Centre.
- f. The receiving Institute / University / Agency shall provide Central Silk Board access to their Premises to monitor adherence to the specified standards / norms for the use of designated germplasm.
- g. The receiving Institute / University/ Agency shall make the designated germplasm and the related information available without restriction to Central Silk Board / Central Sericultural Germplasm Resources Centre.
- h. The Genetic Resources may be exchanged between CSB Institutes and outside agencies for the purpose of research under MoU for the specific project in case of unreleased varieties / breeds, but for extension activities only through Dept. of Sericulture or on their recommendation in case of released varieties / races.
- i. In all Publications arising out of the designated germplasm proper acknowledgement of Central Silk Board / Central Sericultural Germplasm Resources Centre should be made.

PROFORMA FOR PLACING INDENT FOR MULBERRY / SILKWORM GENETIC RESOURCES

To

The Director

Central Sericultural Germplasm Resources Centre (CSGRC)

Central Silk Board, P.B.No.44, Thally Road

Hosur – 635 109, Krishnagiri District, Tamil Nadu

Ph.04344-222013, 220698

Official mobile no.:

e-mail: csgrchos.csb@nic.in, csgrchosur@gmail.com



Requisition for supply of seed / planting material for research from / through CSGRC Hosur

1. Details of seed / planting material required for research

SN	Variety name	Scientific name	Accession Number (IC)	Required quantity	Purpose - Screening/breeding/ evaluation/augmentation/ multiplication/others [Mention details]

2. Thesis / Project title for which request is made (name of funding agency)

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3. Objectives / Activity for utilization of indented material: (Please attach sheet if required)

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4. Material Transfer Agreement (enclosed): Yes / No

5. Feedback report submitted on germplasm received earlier (if applicable): Yes / No

6. Have you or your Institute developed any variety based on germplasm supplied by CSGRC: Yes / No (If Yes, please let us know the details)

7. If required by CSGRC, will you be able to supply multiplied material of the above mulberry / silkworm accessions in sufficient quantity for conservation: Yes / No

8. Signature of the indenter:

Name:.....

Designation:

Address of the Institute:

Phone (with STD code) :..... Mob: Fax:

e-mail:.....

**9. Signature of the Competent Authority with seal:
 (PI/Head of the Department/Director of the Institute)**

Material Transfer Agreement

**Central Sericultural Germplasm Resources Centre
Central Silk Board, Thally Road, Hosur – 635 109**

Agreed between

Central Sericultural Germplasm Resources Centre, Central Silk Board, Hosur – 635109, Tamil Nadu under Ministry of Textiles, Govt. of India being the first party (Provider of the Material)

And¹

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Being the Second Party (Recipient of the Material)

For the Supply/Exchange/Transfer of Genetic resources for Sericulture / Germplasmn / Genetic Material / Genetic Components for Research²

- Within India, not covering persons as described in Section 3(2) of the Biological Diversity Act, 2002 (18 of 2003) (BDA)
- Within India wholly or partly covering persons as described in Section 3(2) of BDA
- Outside India, with members of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), and wholly or partly covering persons as described in Sec. 3(2) of BDA
- Outside India, with Non-Members of ITPGRFA, and wholly or partly covering persons as described in Sec. 3(2) of BDA

As follows:

Recipient Name	
Recipient Institution / Organization / Agency / Centre	
Recipient full address with pincode	
Phone number	
Fax	
E-mail	
Nature of activities	
Germplasm material (specify)³	
Supply made through	CSGRC Hosur
For official use of supplier	
1. Germplasm Identity (Species name, common name etc.) 2. Accession Number 3. Short description of the material 4. Passport data	

¹ Mention Name and address of the Second Party

² Tick mark the appropriate box

³ Specify the type of material involved for supply / transfer eg. Cuttings, saplings, leaf samples, tissue culture, DNA etc.

I/We agree to abide by the following terms of the MTA and certify that:

- i. The germplasm MATERIAL(S) transferred herein as above shall be used only for the purpose of research under my/our direct/close supervision and will not be used for commercial purposes or profit making whatever, without prior written approval of the NBA⁴/MoEF⁵/DARE⁶/ICAR⁷, Government of India as the case may be. The importer / recipient (Second party) agrees to provide a concept note of research project in which the MATERIAL(S) will be used, including the manner in which to be used. The importer / recipient (Second party) agrees to cease any use of the material in case of suspension of research project at the instance of either party or due to factors beyond the control of either party. Upon such suspension of further research, both parties will mutually agree for adopting a suitable provision for their preservation. In case of failure of the parties to arrive at an agreement, the materials including derivatives will be destroyed upon 90 days notice from CSGRC Hosur.
- ii. All information and material supplied by CSGRC Hosur shall be deemed to have been disclosed or provided to the recipient in confidence. The recipient agrees to preserve the confidential status of the material and information.
- iii. The germplasm MATERIAL(S) or its (their) part(s), components or derivatives (including live or dead tissue / DNA) that can be used to retrieve whole DNA / fragment or sequence or any other genetic information shall not be distributed or transferred to any third country / party, except those directly engaged in research under direct supervision of the recipient (second party), without prior written approval of the CSGRC/CSB/NBA/MoEF/ ICAR/DARE/NBPGR/NBAIR, Government of India as the case may be.
- iv. Any development of commercial product based on research on gene manipulation/selective breeding programme for genetic improvement shall not be undertaken without written consent of CSGRC/CSB/NBA/MoEF/ ICAR/DARE/NBPGR/NBAIR, Government of India as the case may be. Modalities of undertaking any such work will be worked out before its conduct.
- v. If any third country/party is to be associated with any commercial development arising out of the germplasm accessed, permission from NBA will be sought.
- vi. The recipient agrees to acknowledge explicitly the name, original identity and source of the material, if used directly or indirectly, in all research publication(s) or other publications, such as monographs, bulletins, books etc. and shall send a copy of each of the publications to CSGRC CSB Hosur
- vii. The recipient agrees to supply the feedback information on the performance/utilization/ research outcome of the material(s) to CSGRC Hosur
- viii. The recipient agrees not to claim any intellectual property right over the MATERIAL(S) received including its related information and knowledge without prior written approval of CSGRC/CSB/NBA/MoEF/ICAR/DARE, Government of India as the case may be.
- ix. The intellectual property protection or benefit sharing in respect of derivatives of the material(s) received/accessed, where applicable, shall be as per the India IPR/Biodiversity laws.

⁴ National Biodiversity Authority

⁵ Ministry of Environment and Forests

⁶ Department of Agriculture Research and Education

⁷ Indian Council of Agricultural Research

- x. The recipient agrees to hold the entire responsibility for the quarantine/SPS clearance of the material accessed as specified herein above. The recipient shall abide by the bio-safety guidelines of
(Name of the importing country/organization) and shall not hold CSGRC,CSB/ICAR/DARE, Government of India responsible for any identity/quality/viability/purity/quarantine/bio-safety related or any other related matter/hazard that may be attributable to the release of genetic material / resource accessed as specified in this Agreement. The recipient agrees to hold entire responsibility for the importer/indenting country's bio-safety and any other related hazards due to release of genetic material. The recipient agrees to waive all claims against CSGRC,CSB/ICAR/DARE, Government of India and to defend and indemnify them from all claims and damages/recoveries arising from the use, storage or handling of the material.
- xi. The recipient also agrees that the material is for experimental use and is being supplied without any warranties, what so ever.
- xii. The MTA is non-assignable. The recipient agrees to abide by any other conditions that may be set in and conveyed to them from CSGRC, CSB in respect of this germplasm access/exchange or any Law, Rules, Regulations etc. enacted by Government of India from time to time.
- xiii. In case of any dispute between the parties to this MTA, the dispute shall be referred to the Sole Contributor to be appointed by the Secretary, DARE, Government of India. The decision of the Sole Contributor shall be final and binding on the Parties. The Arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996. The Arbitration proceedings shall be in New Delhi

AGREED RECIPIENT	PROVIDER
<p><u>Authorized Officer's</u></p> <p>Name:</p> <p>Designation:</p> <p>Organization/Institute/University Address:</p> <p>Date: _____ Signature</p>	<p><u>Authorized Officer's</u></p> <p>Name:</p> <p>Designation:</p> <p>Organization/Institute/University Address:</p> <p>Date: _____ Signature</p>
<p><u>Recipient Scientist/Person's</u></p> <p>Name:</p> <p>Designation:</p> <p>Organization/Institute/University Address:</p> <p>Date: _____ Signature:</p>	<p><u>Provider Scientist/Person's</u></p> <p>Name:</p> <p>Designation:</p> <p>Organization/Institute/University Address:</p> <p>Date: _____ Signature:</p>

DEFINITIONS

Extract from Section 3(2) of BDA-2002:

- a) a person who is not a citizen of India;
- b) a citizen of India, who is a non-resident as defined in clause (30) of Section 2 of the Income Tax Act, 1961 (43 of 1961);
- c) a body corporate, association or organization:
 - i. not incorporated or registered in India; or
 - ii. Incorporated or registered in India under any law for the time being in force which has any non-Indian participation in its share capital or management.

**PROFORMA FOR COLLECTION OF FEED BACK INFORMATION ON THE UTILISATION
OF SERI-GENETIC RESOURCES RECIEVED FROM CSGRC, HOSUR**

1. BASIC INFORMATION:

Name	
Institution	
Address e-mail-Id Phone No.	

2. Names of the germplasm accessions received

Date of receipt	Details of germplasm (Mulberry/Silkworm)

3. Major objectives for which germplasm indented/received

SI No	Objective	Mark the objective
1	Conservation programme	
2	Breeding	
3	Research	
4	Horticulture purpose	
5	Education/demonstration	
6	Others (please specify)	

4. Do you conserve the germplasm received Yes/No

(If answer is yes, please specify purpose of conservation viz., propagation / multiplication / breeding material / genetic stock and others)

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5. General information:

a) Whether germplasm received to be/ was characterized and or evaluated at your institute (Please specify the characterization or evaluation with results)

Traits Characterized	
Specific characters If any observed	
Results	

Traits evaluated	
Specific characters If any observed	
Results	

b) **Breeding (Mulberry/Silkworm)**

Name of accessions	Details of breeding (Including development of elite breeds showing the parental material of germplasm)

Please specify the germplasm received used for breeding purpose: **Yes/ No**

c) **Research (Mulberry/Silkworm)**

Type of study/Title	Names of germplasm accessions used	Results in brief and related publications

(Please furnish Photostat copies of the publication / documentation, if any for having utilized germplasm)

d) Horticulture purposes (Mulberry Germplasm)

Name of germplasm accessions used	Purpose of utilization (Please indicate details)

e) Others (please specify) (Mulberry/Silkworm)

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6. Major approaches you use to acquire information about seri-genetic resources

- a) Annual report
- b) Catalogues published by CSGRC, Hosur
- c) Scientific journals
- d) Web site etc.,
- e) Personal contact

7. Rating of the germplasm received by your institute

A. Mulberry

#	Supply as per your Indent	Yes/No
a.	Quality of germplasm received	Very good/Good/Poor
b.	Spouting/Rooting	Very good/Good/Poor
c.	Any other Information (Please Specify)	

B. Silkworm

#	Supply as per your indent	Yes/No
a.	Quality of germplasm received	Very good/Good/Poor
b.	Hatching	Very good/Good/Poor
c.	Performance	Very good/Good/Poor
d.	Any other information (Please specify)	

Date:

Signature and Seal