

Application for Recognition of Hardening Center under NCS-TCP (NCS-TCP Form-3)

(A separate form to be filled for hardening facility at each location)

Section 1

1. Applicant Entity (Institute/Organization)			
Name of Recognized Tissue Culture Production Facility:			
Address of Recognized Tissue Culture Production Facility:			
2. Recognition Detail of the main facility recognized under NCS-TCP			
Registration No.:			
Certification No.:			
Date of Issue:			
Valid up to:			
3. Details of Hardening Center to be Recognized			
Address:	Hardening facility	Numbers	Area (sq. ft.)
	Greenhouse/ Ployhouse		
	Nursery/ Shade net		
4. In-charge of Hardening Center(s)			
Name:			
Designation:			
Tel/Mob/Fax/ E-mail:			
5. Capacity of Hardening Center (Plants in lakhs at a time)			
6. Commencement of hardening operation			
7. Plant species being hardened			

8. Layout of hardening center(s) of recognized tissue culture production facility.

Note: The layout should clearly indicate availability of transfer area, provision of area double door in hardening areas. A separate sheet needs to be enclosed.

9. Staff Details (please provide details about qualification and relevant experience of technical and non-technical staff)

- **Technical**
- **Non-Technical staff**

10. Reporting system for technical supervision and monitoring of hardening process

(Please attach a note on how the coordination is done between hardening center(s) and main tissue culture production facility.)

11. Mechanism in place for quality control and quality assurance

Declaration/Undertaking

I/we hereby declare that all the information/ particulars provided in the application are true and correct to the best of my knowledge. I/we further declare that I am/ we are making this application after meeting the eligibility criteria & requirements of mandatory enclosures and going through instructions/guidelines contained in Section-2 to this application.

I am/we are making this application after having understood the guidelines of National Certification System for Tissue Culture Raised Plants (NCS-TCP) framed by the Department of Biotechnology (DBT), Govt. of India, New Delhi developed on October 2006 and subsequent its amendments from time to time. The guidelines (available on the website www.dbtncstcp.nic.in) will be fully binding on the applicant

I/We also undertake that any dispute not resolved under NCS-TCP will be subject to jurisdiction of Delhi Courts

Date: _____

Place _____

In-charge of Hardening Centre

Authorized Signatory of Recognized TCPF

Section-2: General Information:

1. Eligibility Criteria:

- ❖ Facility should have capacity of hardening for of 0.5 million (5 Lakhs) plants per annum.
- ❖ Hardening facility should be operational at the time of application and site visit.

2. Fee Structure:

Fee structure for Recognition of Hardening Center(s) of Recognized Tissue Culture Production Facility

(Figures in Rs.)

Registration fee for recognition	500
Registration fee for renewal	250
Inspection and report preparation	1500
Processing and Certification	2000
All the fee payment should be made through online transfer:	
Beneficiary Name:	BCIL Ac NCSTCP
Account No.:	0158201031402
Type of account:	Current Account
Bank:	Canara Bank
Branch:	Deendayal Marg New Delhi
IFSC code:	CNRB0000158
Email:	ncstcp@biotech.co.in

Validity of Recognition of Hardening Center(s) of Recognized Tissue Culture Production Facility is Two Years subject to the Recognition of main tissue culture production facility.

* Registration renewal fee will be charged @ 50% of the registration fee.

Only registration fee need to be submitted at the time of application and other fees such as inspection fee and processing and certification fee would be charged on the later stage of application.

3. Mandatory Enclosures to the application:

- (i) Acknowledgement receipt of online transfer towards fee payment.
- (ii) Labeled and numbered photographs showing Grading area; Double door entrance in Primary and Secondary Hardening Area Hardening Areas depicting plants
- (iii) Layout/ Drawing of hardening facility depicting double door entrance, raised bed etc

4. Instructions & Guidelines:

- (i) Applicants should use apply for recognition/ renewal of recognition strictly in the prescribed format.
- (ii) Applicant should submit 5 copies of application to **“NCS-TCP Management Cell, Biotech Consortium India Limited, 5th Floor, Anuvrat Bhawan, 210 Deendayal Upadhyaya Marg, New Delhi-110002.**
- (iii) Applicants are required further to go through the NCS-TCP guidelines & Standard Operating Procedures (SOPs) for Tissue Culture Production Facility available at www.dbtncstcp.nic.in and ensure they meet all the requirements.

Section III. ASSESSMENT REPORT FOR RECOGNITION OF HARDENING CENTER(S) UNDER NCS-TCP

(*marked parameters are mandatory requirements. Site visit would be organized on compliance with mandatory requirements during self assessment.
Shaded column to be filled by applicant as self assessment)

Section II: PartA-Infrastructre

. No.	Particulars	Self Assessment By the Applicant			Comments of the experts committee during on-site visit
		YES	NO	Descriptive information (Please enclose sheet if required)	
1.	<p>Do you have the following areas clearly demarcated*</p> <ul style="list-style-type: none"> ▪ Transfer/ Grading Area (s) Specify area ▪ Acclimatization ▪ Green house/ poly house (s) Specify area ▪ Nursery/ Shade house Area (s) Specify area: ▪ Do you have a separate misting facility (ies) If so, its area 				

S. No.	Particulars	Self Assessment By the Applicant			Comments of the experts committee during on-site visit
		YES	NO	Descriptive information (Please enclose sheet if required)	
2.	<p>Power backup*</p> <p>Do you have power backup arrangement?</p> <p><i>If so indicate capacity of generator & percentage of power covered by backup generator)</i></p>				
3.	<p>Do you have transfer area with the following facilities?</p> <p>(i) Do you have arrangement of washing of plantlets to remove culture medium</p> <p>(ii) Are plants graded?</p> <p>If so do you have organized grading system such as working table with pictorial map of the handled plant species</p>				

S. No.	Particulars	Self Assessment By the Applicant			Comments of the experts committee during on-site visit
		YES	NO	Descriptive information (Please enclose sheet if required)	
4.	<p><u>Primary Hardening Area:</u></p> <p>Mist chamber/Green house/Polyhouse</p> <p>(i) Do you have insect-proof greenhouse/ polyhouse with double door entry*</p> <p>(ii) Do you have facilities for monitoring*: - Temperature - Humidity</p> <p>(iii) Do you have yellow sticky traps for insect pest monitoring</p> <p>(iv) Do you have raised bed/ to avoid contact of roots with ground soil</p>				

5.	<p><u>Secondary hardening Area (Nursery Area)</u></p> <p>(i) Double door entry to check insect entry*</p> <p>(ii) Availability of net house* (to provide partial shade and prevent insect entry) If so, its mesh size.</p> <p>(iii) Do you have yellow sticky traps for insect pest monitoring</p> <p>(iv) Do you have raised bed/ to avoid contact of roots with ground soil</p>				
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Section-III: Part B - Operational Requirements

S. No.	Particulars	Self Assessment By the Applicant			Comments of the experts committee during on-site visit
		YES	NO	Descriptive information (Please enclose sheet if required)	
6.	<p><u>Primary hardening</u>(Mist chamber/Green house/Poly house)</p> <p>(i) Do you monitor plants for their growth & any other feature?</p> <p>(ii) Do you monitor insect vector species through yellow stick cards?</p> <p>(iii) Do you monitor the temp/humidity/light intensity?</p> <p>(iv) Do you label individual hardening trays conveying the details of number of plants, date of transfer, batch number etc.</p> <p>(v) Do you use potable water/ good quality water for watering of plant lets. Please specify the TDS level.</p> <p>(vi) Do you avoid excessive watering and water-logging with drainage system</p>				

S. No.	Particulars	Self Assessment By the Applicant			Comments of the experts committee during on-site visit
		YES	NO	Descriptive information (Please enclose sheet if required)	
7.	<p><u>Secondary Hardening (Nursery) Area</u></p> <p>(i) Has the production of tissue culture raised plants reached to secondary hardening stage?</p> <p>(ii) Do you use potable water/ good quality water for watering of plants ? Please specify the TDS level.</p> <p>(iii) Do you monitor plants for their growth or any other feature?</p> <p>(iv) Do you monitor the insect vectors by yellow stick traps?</p> <p>(v) Do you label individual batch conveying the details of number of plants, date of transfer, batch number and batch size etc.</p> <p>(vi) Do you avoid excessive watering and water-logging with drainage system</p> <p>(vii) Do you undertake regular weeding and remove dead plants</p>				

Section-III: Part C - Human Resource and Manpower

S. No.	Particulars	Self Assessment By the Applicant			Comments of the experts committee during on-site visit
		YES	NO	Descriptive information (Please enclose sheet if required)	
8	<p>Competent technical supervision and effective monitoring of entire production process:</p> <p><i>Indicate management/operational structure & their qualification. Please also specify their role & responsibilities</i></p> <p>(i) Do you have accountable in-charge/supervisor for hardening facilities</p> <p>(ii) Do you provide training to the supervisor/operators</p> <p><i>If so, internal training or external training</i></p>				

Section-III: Part D - Overall Quality Management and Certification

S. No.	Particulars	Self Assessment By the Applicant			Comments of the experts committee during on-site visit
		YES	NO	Descriptive information (Please enclose sheet if required)	
9	<p><u>Plant Certification</u> (advisable during first application and Mandatory of Renewal)</p> <p>(i) Are you getting virus indexing of tissue culture raised plants done batch-wise? <i>If yes, give details of the laboratory where this testing is done.</i></p> <p>(ii) Are you getting the genetic fidelity testing done through molecular markers? (If yes Give details of testing viz., name of laboratory/test results</p>				

Section-III: Part E - Reporting System, documentation

S. No.	Particulars	Self Assessment By the Applicant			Comments of the experts committee during on-site visit
		YES	NO	Descriptive information (Please enclose sheet if required)	
10.	<p><u>Primary Hardening Area (Mist chamber, Green house/Poly house):</u></p> <p>(i) Do you keep record of number of plant lets transferred/dead plants maintained batch-wise</p> <p>(ii) Do you maintain record of any treatments given to the plants (fertilizer applications/ insecticide/fungicidal; sprays etc)?</p> <p>(iii) Do you maintain record of incidence of insect pests/diseases/vectors?</p>				
11.	<p><u>Secondary hardening Area (Nursery):</u></p> <p>(i) Do you keep record of number of plants transferred/dead plants maintained batch-wise</p> <p>(ii) Do you maintain record of any treatments given to the plants (fertilizer applications; insecticidal/fungicidal sprays etc)?</p> <p>(iii) Do you maintain record of incidence of insect pests/diseases/vectors?</p>				

S. No.	Particulars	Self Assessment By the Applicant			Comments of the experts committee during on-site visit
		YES	NO	Descriptive information (Please enclose sheet if required)	
12.	<p><u>Overall Quality of Plants</u></p> <p>(i) Do you provide printed leaf lets regarding package of practices for cultivation of tissue culture raised plants</p> <p>(ii) Do you maintain record of farmers' feedback/data regarding field performance of tissue culture raised plants (if any)</p>				