

Proforma for submitting application to IBSC/RCGM to carry out research for development of transgenic plants



1. Name of the Applicant
Designation
(a) Address (Registered Office)

Telephone No.
Telex No.
Fax No.
E-mail

(b) Address (Research Station)

Telephone No.
Telex No.
Fax No.
E-mail
2. Application for:
 - 2.1 Purpose
 - 2.2 New Yes No
 - 2.3 Ongoing Project Yes No
If yes, No. & Date of Permit issued :
 - 2.4 If yes, briefly state the purpose for which permission was granted.
 - 2.5 Category of experiments as per the Guidelines of DBT
3. Objectives of the proposal
4. Description of the transgenic plants employed in the research proposal (in scientific terms) (for new application only):
 - 4.1 Description of transgenic plants
 - 4.2 Anticipated new characters in transgenic plants/ Expected difference in the transgenic plants compared to non-transgenic counterparts.
 - 4.3 Description of the target gene and mode of action.
5. Details on (Nucleic acid(s) & Vectors):
 - 5.1 Source of nucleic acid(s):
 - 5.2 Copy number of gene(s).
 - 5.3 Nucleic acid sequence (Please enclose the nucleic acid sequence map of the target gene):
 - 5.4 Vector(s) description (Please enclose the Plasmid map):
6. Summary of the proposed work plan utilizing plant parts/ transgenic plants (please check it from the following areas and provide the detailed work plan).
 - 6.1 Basic transformation work and tissue culture procedure at laboratory level and standardize the procedure to assess the expression of the target gene in the transformed material.
 - 6.2 Transfer of target gene imported/ indigenously isolated in Indian germplasm and to assess the expression of the target gene in the transformed material.
 - 6.3 Transfer of target gene from imported seed materials to indigenous species and to assess the expression of the target gene in the transformed material.
 - 6.4 Green house experiments on transgenic plants for testing/ assessing the efficacy of their new characters.
 - 6.5 Assessment of toxicity and allergenicity of transgenic seeds, plants and plant parts (if yes, please provide information on the following whichever is applicable)
 - i) Description of the material (leaf, seeds, fruits etc.) used for testing.
 - ii) Biochemical characterization of the material in terms of near equivalence to its non-transgenic counterpart.
 - iii) Information on quantity of target gene product in different parts of the plant at different stages of

development.

- iv) Toxicity and Allergenicity protocols and the address of the lab where these studies are proposed to be conducted.
- v) Institutional Animal Ethics Committee's Approval.
- vi) Effect of target gene on soil micro-flora and nematodes.

6.6 Contained open field trials (if yes, please provide information on the following)

- i) Experimental field design along with plot plan.
- ii) Location map indicating the experimental plot.
- iii) Ownership of the experimental plot (Applicants own plot/ leased plot/ Agricultural University plot/ ICAR owned plot/ others)
- iv) Agreement signed for using experimental plot (wherever applicable).
- v) Containment description in the region of the experimental plot.
- vi) Experimental area under transgenic plants at each location and the total area.
- vii) Normal cropping season of the plant variety.
- viii) Crop season in which experiments are proposed.

7. Site/ Location of the research work/ experimental field

8. Decontamination and disposal mechanisms

9. Risk management (Emergency plan)

10. Any other relevant points(s)

12. Declaration:

I declare that the information provided in the above format is correct and accurate to the best of my knowledge. The "Recombinant DNA Safety Guidelines 1990 and Revised Guidelines for research in transgenic plants & Guidelines for Toxicity and Allergenicity Evaluation of transgenic seeds, plants and plant parts" 1998 brought out by the Department of Biotechnology, Ministry of Science & Technology, Govt. of India will be and is being strictly followed. The imported material will be and is being utilized for the said purpose only. In case any untoward incident occurs, the Chairman of the IBSC and the Member-Secretary of the RCGM will be immediately informed.

Date:

Signature of the Applicant

Forwarded:

The proposal set out above has been considered by the "Institutional Biosafety Committee" on _____ and is forwarded to RCGM for further necessary action.

Date:

Signature of the Chairman, IBSC

(Note: Please submits 20 copies of the application to the Department of Biotechnology for placing the same in the meeting of RCGM)