

Risk Assessment of Cotton-Bt

Risk assessment details

1. Country Taking Decision: Indonesia
 2. Title: Transgenic cotton Bt resistant to the cotton stem borer
 3. Contact details: <Standard contact address details: name, function (job title/designation), organization, address, phone, fax, email, website>
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LMO information

4. Name and identity of the living modified organism: Transgenic cotton Bt resistant to the cotton stem borer
 5. Unique identification of the living modified organism:
 - Cotton resistant to the stem borer
 - Transgenic cotton Bt containing the *Bacillus thuringiensis* cry1Ac
 6. Transformation event: DP 90 B and PM 1560 B
 7. Introduced or Modified Traits: <Controlled vocabulary with thesaurus - radio button options - Abiotic environmental tolerance, Altered growth, development and product quality, Altered photoperiod sensitivity, Altered ripening or flowering, Animal vaccines, Bacterial resistance, Chemical tolerance, Cold or heat tolerance, Coloration, Development of transplant organs, Drought or water tolerance, Fertility restoration, Fungus resistance, Growth rate or yield, Herbicide tolerance, insect resistance, Male sterility, Medical products, Nematode resistance, Nutritional composition (inc. allergenicity), Other abiotic environmental tolerance, Other chemical tolerance, Other growth, development and product quality, Other pest resistance, Pest resistance, Production of pharmaceuticals, Selectable marker genes and reporter genes, Uptake or degradation of environmental pollutants, Virus resistance > and <text entry for other, not on the list>
 8. Techniques used for modification: The DNA transformations were carried out by using *Agrobacterium tumefaciens*.
 9. Description of gene modification: Cry1Ac gene from *Agrobacterium tumefaciens*.
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Characteristics of modification

10. Vector characteristics (Annex III.9(c)): The DNA transformations were carried out by using *Agrobacterium tumefaciens*. The used plasmid was pV-GHBKO4.
 11. Insert or inserts (Annex III.9(d)): <Text entry - Genetic characteristics of the inserted nucleic acid and the function it specifies, and/or characteristics of the modification introduced>
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Recipient organism or parental organisms (Annex III.9(a)):

12. Taxonomic name/status of recipient organism or parental organisms:	<i>Gossypium hirsutum</i> L. Varieties DP 90 B and PM 1560 B.
13. Common name of recipient organism or parental organisms:	Cotton
14. Point of collection or acquisition of recipient or parental organisms:	<Text entry >
15. Characteristics of recipient organism or parental organisms related to biosafety:	<Text entry >
16. Centre(s) of origin of recipient organism or parental organisms:	India
17. Centres of genetic diversity, if known, of recipient organism or parental organisms:	India
18. Habitats where the recipient organism or parental organisms may persist or proliferate:	Subtropic and tropic

Donor organism or organisms (Annex III.9(b)):

19. Taxonomic name/status of donor organism(s)	The <i>cry1Ac</i> gene from <i>Bacillus thuringiensis</i>
20. Common name of donor organism(s):	<i>Bacillus</i> (Bacteria)
21. Point of collection or acquisition of donor organism(s):	<Text entry - the exact location and geographical coordinates>
22. Characteristics of donor organism(s) related to biosafety:	Soil bacteria that are non-pathogenic to humans or plants. However, they may be pathogenic to certain insects that have certain receptors.

Intended use and receiving environment

23. Intended use of the LMO (Annex III 9(g)):	Agriculture/commercial
24. Receiving environment (Annex III.9(h)):	Land of commercial agriculture

Risk assessment summary

25. Summary of risk assessment or environmental review:	<Text entry>
26. Detection/Identification method of the LMO (Annex III.9(f)):	PCR, Southern blot, immuno assays, serologi assays, fuctional assay using herbicide.
27. Evaluation of the likelihood of adverse effects (Annex III.8(b)):	<ul style="list-style-type: none">• Plant abnormalities• Potency of <i>weedines</i>• Impacts on useful insect
28. Evaluation of the consequences (Annex III.8(c)):	<ul style="list-style-type: none">• Transgenic cooton Bt does not exhibit any growth or phenotypic abnormalities• Transgenic cotton Bt does not exhibit <i>wedines</i> characteristics that has the potential to become weeds and does not have negative impacts to its habitat• Transgenic cotton Bt does not have negative impacts on useful insects.
29. Overall risk (Annex III.8(d)):	Transgenic cottons (DP 90 B and PM 1560 B) are safe for environment and biodiversity; and exhibit the same characteristics as nontransgenic cotton.
30. Recommendation (Annex III.8(e)):	Transgenic cottons (DP 90 B and PM 1560 B) are safe for agriculture. The use of these transgenic plants for agriculture is regulated by applicable regulations.
31. Actions to address uncertainty regarding the level of risk (Annex III.8(f)):	Not yet released

Additional information

32. Availability of detailed risk assessment information:	<Text entry - Please indicate whether more details on the risk assessment are available and how they can be accessed>
33. Any other relevant information:	< Text entry - any other information that is relevant to the risk assessment >

34. Attach document: <Specific types of entry: option to choose a file from the local source and 'upload' a copy to the BCH server>

35. Notes: <Text entry>

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