

Risk Assessment of Cotton-RR

Risk assessment details

1. Country Taking Decision: Indonesia
 2. Title: Transgenic cotton RR tolerant to herbicide containing glyphosate (event 1445)
 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 RR tolerant to herbicide containing glyphosate (event 1445)
 5. Unique identification of the living modified organism:
 - Tolerant to herbicide containing glyphosate
 - The 5-enolpyruvyl-3-phosphoshikimate synthase (CP4 EPSPS) gene from *Agrobacterium* strain CP4.
 6. Transformation event: Event 1445
 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: The 5-enolpyruvyl-3-phosphoshikimate synthase (CP4 EPSPS) gene from *Agrobacterium* strain CP4.
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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 plasmids was PV-GHGT07.
 11. Insert or inserts (Annex III.9(d)): The inserted DNA elements were CmoVb promoter, CP4 EPSPS, nptII, aad, and sequence ori-V.
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Recipient organism or parental organisms (Annex III.9(a)):

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| 12. Taxonomic name/status of recipient organism or parental organisms: | <i>Gossypium hirsutum</i> L. Varieties DP 5690 RR and DP 90 RR. |
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| 13. Common name of recipient organism or parental organisms: | Cotton |
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| 14. Point of collection or acquisition of recipient or parental organisms: | <Text entry > |
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| 15. Characteristics of recipient organism or parental organisms related to biosafety: | <Text entry > |
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| 16. Centre(s) of origin of recipient organism or parental organisms: | The United States of America |
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| 17. Centres of genetic diversity, if known, of recipient organism or parental organisms: | The United States of America |
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| 18. Habitats where the recipient organism or parental organisms may persist or proliferate: | Subtropic and tropic |
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Donor organism or organisms (Annex III.9(b)):

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| 19. Taxonomic name/status of donor organism(s) | <i>Agrobacterium</i> strain CP4 |
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| 20. Common name of donor organism(s): | <i>Agrobacterium</i> (soil bacteria) |
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| 21. Point of collection or acquisition of donor organism(s): | <Text entry - the exact location and geographical coordinates> |
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| 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 plants. |
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Intended use and receiving environment

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| 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

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| 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• <i>Weedines</i> characteristics• Impacts on useful insects• skin irritation |
| 28. Evaluation of the consequences (Annex III.8(c)): | <ul style="list-style-type: none">• Transgenic cotton RR does not exhibit any growth or phenotypic abnormalities• Transgenic cotton RR does not exhibit <i>weedines</i> characteristics that has the potential t become weeds and does not show negative impacts on its habitat• Transgenic cotton RR does not show negative impacts on useful insects• Transgenic cotton RR does not cause skin irritation |
| 29. Overall risk (Annex III.8(d)): | Transgenic cotton (DP 5690 RR and DP 90 RR) are safe for the environment and biodiversity; and exhibit the same characteristics as the nontransgenic cotton. |
| 30. Recommendation (Annex III.8(e)): | Transgenic cotton (DP 5690 RR and DP 90 RR) are safe. The use of these transgenic plants is regulated by the applicable regulations. |
| 31. Actions to address uncertainty regarding the level of risk (Annex III.8(f)): | Not yet released |

Additional information

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| 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> |
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| 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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