



SWAZILAND ENVIRONMENT AUTHORITY

APPROVAL TO INTENTIONALLY INTRODUCE AN LMO INTO THE ENVIRONMENT

APPROVAL NUMBER:	ER01SEA2018	DATE OF ISSUE:	25 APRIL 2018
		VALID UPTO:	30 JUNE 2019
In accordance with the Biosafety Act, 2012 and its Draft Regulations, Approval is granted to the Swaziland Cotton Board to intentionally introduce genetically modified cotton with the <i>Bacillus thuringiensis</i> gene to be grown in Swaziland.			
Name of the Applicant		Swaziland Cotton Board Mancishane Street Crop Promotion Unit P O Box 230 Manzini Tel: +268 25052775	
Specification of the genetically modified Organism		This modified cotton contains the insecticidal Cry1Ac gene which imparts resistance against Lepidoptera. The LMO also contains the selectable markers Npt II to isolate transformed seedlings and a GUD gene cassette as a reporter gene. Bt cotton was generated by using the biolistic method of transformation system. The transformed cotton	

	shoots containing the Npt II gene were selected on medium supplemented with kanamycin. A procedure of biolistic method of transformation of cotton is novel and performed using shoot meristem. Plants were regenerated and ultimately plantlets were grown in soil and assayed for insect resistance. The Cry1Ac gene in the Indian inbred line behaves as a single dominant Mendelian factor and is stably integrated in the plant genome.
Quantity approved	5000 kg
Specification of the genetic modification	<i>Bt</i> Cotton
Risk category	NA
Purpose of the use	Introduction into the Environment / Commercial Release
This approval is granted subject to the following conditions- 1. The permit is specific to the cotton varieties JKCH 1050 and JKCH 1947; 2. The renewal of the permit after a single year will be dependent on compliance and the progress report and will be subjected to a simplified application procedure; 3. Progress and compliance will also be reviewed yearly; 4. Conventional cotton seed should be made available for farmers that are not interested in GM seed 5. Destruction of cotton remains in the fields should be enforced and monitored 6. Maintain the recommended isolation distances between GM and Non-GM crops 7. Control the GM seed distribution 8. Keep local or non-GM seed at the gene bank 9. This permit is specific to Insect Resistant (<i>Bt</i>) Cotton, not Herbicide Tolerant Cotton	

10. Ensure refuge cropping
11. The refuge should be the non-GM isoline of the GM seed
12. Ensure continuous farmer training on Management Practices (Provide Extension Services)
13. The Swaziland Cotton Board should only give the GM seed to trained and certified farmers
14. The Swaziland Cotton Board should frequently monitor compliance to the permit requirements
15. The Swaziland Cotton Board should always be available for inspections by the SEA, and should also expect un-announced inspection visits
16. The SEA should be informed if there are any changes to the information that was submitted on the application documents
17. The Swaziland Cotton Board should submit a progress report at the end of the season, for the purpose of reviewing by the National Biosafety Advisory Committee before renewal or issuance of a permit for the following season
18. The SEA will also provide Inspection/Compliance Reports which will be referred to during the renewal of the permit

This approval is not transferrable and is valid for: **One Season (2018/2019)**

Place: **Mbabane**

Name: **Ishmael G. Ndwandwe**

Date: **25 April 2018**

Signature: _____
*The Acting Executive Director
 Swaziland Environment Authority*