

APPENDIX 3
TO DGM/SAS DECISION No. IM 11-005

REPORT OF THE ACTIVITIES PERFORMED

1. GENERAL INFORMATION

- 1.1 Number of the License:** IM 11-005
1.2 Year under report: 2012

2. DESCRIPTION OF THE ACTIVITIES

2.1 Describe the experimental design used

All trials were organized in a randomized block design with two replications of each variety. Trials were conducted in Dinteloord.

2.2 Describe the aim of the trials

Objective of the field trials is to compile data on agronomic and resistance performance, as well as to collect plant material for further analyses.

2.3 Specify the name of the genetically modified plant and describe briefly the nature of the genetic modification in the various plants included in the trials, e. g. by naming the construct.

The genetically modified potato line in the trials was a potato event derived from construct VCPMA16. The T-DNA in the plasmid contains an acetohydroxyacid synthase (*ahas*) gene for selection of transformed plant tissue and genes for improving resistance to *Phytophthora infestans*.

2.4 Specify the number of plants included in the trials.

Approximately 5000 plants were included in the trials, including non-GM comparator varieties.

2.5 Specify the size of the test plot in square metres.

The size of the planted net area was approx. 1300 square metres. This did not include paths between individual plots and spacing within plots. The total test plots covered an area of approx. 2300 square meters in Dinteloord.

3. RESULTS

Describe the results of the activities performed:

3.1 Describe the phenotype of the genetically modified plants.

The genetically modified potato lines differ from the other conventional varieties in resistance to infection by *Phytophthora infestans*. Beyond that the phenotypes of the genetically modified plants are substantially equivalent to that of the respective parental varieties within the range of natural variability.

3.2 Describe further noticeable differences in the genetically modified plant from the genetically unmodified starting plant, grown under the same conditions.

No further noticeable differences were observed.

3.3 Describe any unexpected side effects observed during the performance of the specific tests.

There were no unexpected adverse effects observed.

3.4 Describe the effects of diseases, infestations, pests and other nuisances, together with the behaviour of pollinating and visiting insects in the case of the genetically modified plant in comparison with the genetically unmodified starting plant grown under the same conditions.

The genetically modified potato line released in the field trials exhibited a high level of resistance towards late blight (*Phytophthora infestans*) as intended by introduction of the respective resistance genes.

3.5 Describe how the flowering time of the genetically modified plants mentioned in the Description of Activities Performed differs from that of the genetically unmodified starting plants grown under the same conditions.

No differences regarding the flowering time of the genetically modified potato line compared to their parental varieties could be observed within the range of natural variability.

3.6 Describe the results obtained when monitoring all the aspects involved in the Monitoring Plan attached to the Application.

The genetically modified potatoes were observed regarding general agronomic characteristics, differences in disease and pest susceptibility, and competitive behaviour. No differences between the genetically modified potato line and the parental varieties was observed except for the intended resistance to *Phytophthora infestans*.

4. FIELD OBSERVATIONS AFTER THE END OF THE ACTIVITIES

4.1 Describe the difference in the number of adventitious or volunteer plants between the test plots under genetically modified plants on the one hand, and the fields with genetically unmodified starting plants grown under the same conditions, on the other hand.

Tubers were completely harvested in autumn 2012. Post-harvest monitoring will be performed during the next vegetation period and any emerging volunteer potatoes will be destroyed by herbicide treatment or hand pulling prior to flower setting.

Andreas Beise, MVF
BASF Plant Science Company GmbH