



**INTERNATIONAL SEED TESTING ASSOCIATION  
ASSOCIATION INTERNATIONALE D'ESSAIS DE SEMENCES  
INTERNATIONALE VEREINIGUNG FÜR SAATGUTPRÜFUNG**

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To all participants  
ISTA GMO Proficiency Test  
PT07

Bassersdorf, September 18, 2007

Dear Madam, Dear Sir,

**Proficiency Test Results and Rating**

Please find enclosed all participants' test results and ratings for PT07.

**Experimental Design**

Samples were either negative, i.e. did not contain any transgenic events, or positive, i.e. contained one or both of the transgenic events MON863 and NK603. When preparing the positive samples, defined numbers of seeds were mixed with non-GM seeds. The genetic purity was tested prior to the sample preparation.

Each participating laboratory received a set of 12 maize seed samples each containing about 2000 seeds. Samples in each set were randomly numbered from 1 to 12.

Table 1: Spiking levels by number of seeds and the number and mass of GM and non-GM seeds

Label (ILotNo)	A-D (1-4)	E-F (5,6)	G-H (7,8)	I-K (11,12)	L-M (9,10)
# of samples	4	2	2	2	2
events	-	MON863	NK603	MON863+NK603	NK603
GM spiking level by # of seeds	0%	0.4%	0.4%	0.8% (0.4%+0.4%)	2.0%
Average GM spiking level by mass of GM seeds	-	0.33% ± 0.02%	0.39% ± 0.02%	0.73% ± 0.02% (0.39% + 0.34%)	1.71% ± 0.06%
# of non GM seeds	2000	1992	1992	1984	1960
# of GM seeds	0	8	8	16 (8+8)	40
Weight of non-GM seeds	~634 g	~631.9 g	~631.5 g	~629.3 g	~623.2 g
Weight of GM seeds	-	~2.1 g	~2.5 g	~4.7 g (2.5 g + 2.2 g)	~10.8 g

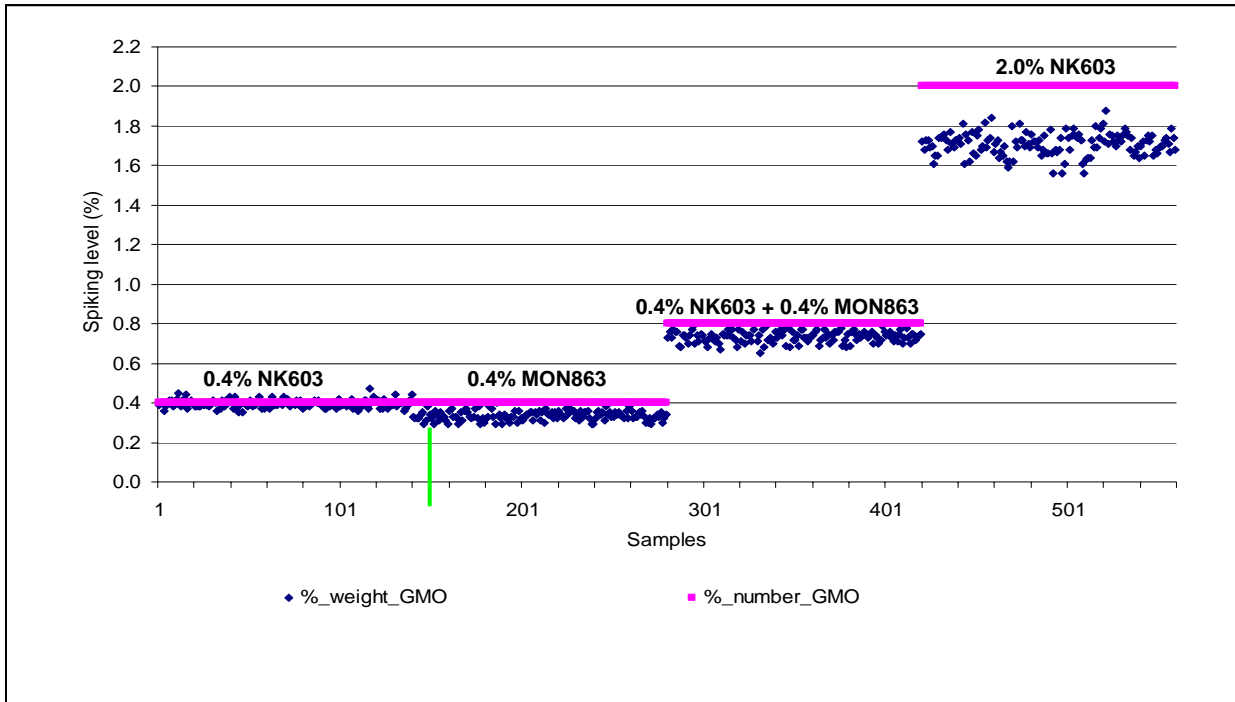


Figure 1: Spiking levels by number and by mass of seed for each sample.

### Rating

Sample sets were sent to 67 laboratories. Fifty-seven participants submitted their results, seven provided qualitative results only.

Qualitative rating:

The rating for the presence/absence (qualitative) results is based on a percentage of misclassified samples out of the total of 12 samples. Misclassification may either be a false positive or a false negative result. Missing results for individual samples are evaluated as misclassification.

rate	Misclassified samples	Misclassified samples absolute numbers	Number of laboratories
A	0% - 5%	0	47
B	>5% - 10%	1	4
C	>10% - 20%	2	2
BMP	>20%	>2	4

### Quantitative rating

The quantitative rating is based on the quantification results for the eight positive samples and the reference value for the spiked samples. The reference value is either the number of GM seeds in the overall number of seeds, the percentage mass of the GM seeds in the overall mass of the sample or the median of the sample results reported by the participants. Which of the reference values is chosen is determined by the panel of experts appointed for each round, the guiding principle being:

Sub-sampling quantification: %number

results reported in %number: %number

results reported in %mass: %mass

results reported in any other unit, such as number DNA copies: median

rate	Number of laboratories
A	14
B	3
C	23
BMP	10

If you require a more comprehensive explanation of the rating system, please refer to Seed Testing International, The ISTA News Bulletin No 130 (quantitative rating) and No 128 (qualitative rating) or contact the ISTA Secretariat.

Sincerely yours,

Gerhard Schuon  
TCOM Coordinator

Encls: mentioned