

MON89034 x NK603 for food/feed

MON89034 x NK603 (YieldGard VT PRO/RR2) is one of 8 applications for Monsanto's YieldGard VT PRO (MON89034) hybrids as food/feed or for cultivation, even though MON89034 itself has not even been approved as food/feed in the EU.

[MON89034](#) [1] produces two Bt toxins (Cry1A.105 and Cry2Ab2) against a number of lepidopteran pest, but little is known about these Bt toxins. **Cry1A.105** is not really one Bt toxin, but a protein comprised of naturally occurring Cry1Ab, Cry1F, and Cry1Ac proteins. The gene cry1A.105 is a chimeric gene comprising of 4 domains from other cry genes previously used in transgenic plants. **Cry2Ab2** belongs to the class of Cry2Ab toxins that are currently mainly used in Bt cotton plants.

[NK603](#) [2] is one of Monsanto's Roundup Ready maize events that contains two transgenic cp4-epsps genes under the control of two different promoters.

Regulatory status and information, October 2009:

This hybrid is currently (14.10.2009) not listed in the Biosafety Clearing House. [agbios](#) [3] lists approvals as food and/or feed only from four Asian countries (Japan, Korea, Philippines and Taiwan), but states that hybrids of two GMOs do not need regulatory approval in the US, so it is safe to assume that this hybrid can be cultivated and consumed in the US.

The application explicitly covers not only food and feed produced from this maize (e.g. flour or oil) but also "products containing or consisting of GM MON89034 x NK603 (e.g. maize grains)". In June 2009, Monsanto also filed a application for the cultivation of MON89034xNK603, which was accepted in October 2009 and is now (October 2009) in progress.

Comments on the opinion of the GMO Panel:

The opinion of the GMO Panel is based on the premise that the 'stacked genes' in a hybrid of two GM events can in general be assessed on the basis of the individual GMOs. In this case it meant for example that no feeding studies were conducted with MON89034xNK603:

As the composition of maize MON89034 x NK603 is comparable with that of non-GM maize varieties and the single events and also no indication for interaction between the single events was found, the GMO Panel is of the opinion that no additional safety studies on animals are required.

Related events: [Event NK603](#) [4]

[Event MON89034](#) [5]

[YieldGard VT PRO/RR2 \(Event MON89034 x NK603\)](#) [6]

Related application(s): [NK603: cultivation and food/feed application](#) [7]

[MON89034 for food/feed](#) [8]

[MON89034 x NK603 cultivation](#) [9]

Question number: EFSA-Q-2007-046

Application number: GMO-NL-2007-38

Application date: 01/02/2007

Type: new application

Application accepted: 24/08/2007

Status: opinion adopted

Deadline: 22/12/2009

[EFSA registration](#) [10]

Petitioner: Monsanto

Applicant/Requester: Netherlands

Opinion number: GMO-NL-2

Opinion adopted: 09/09/2009

[Opinion of the GMO Panel](#) [11]

[EU consultation form or comments](#) [12]

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Consultation deadline: 01/11/2009**Application status at EU level:** pending

Source URL:<https://www.testbiotech.org/en/content/mon89034-x-nk603-foodfeed>**Links**

[1] <https://www.testbiotech.org/en/node/133> [2] <https://www.testbiotech.org/en/node/59> [3] <http://www.agbios.com/dbase.php?action=Submit&evidcode=MON89034+x+NK603> [4] <https://www.testbiotech.org/en/content/event-nk603> [5] <https://www.testbiotech.org/en/content/event-mon89034> [6] <https://www.testbiotech.org/en/content/yieldgard-vt-prorr2-event-mon89034-x-nk603> [7] <https://www.testbiotech.org/en/content/nk603-cultivation-and-foodfeed-application> [8] <https://www.testbiotech.org/en/content/mon89034-foodfeed> [9] <https://www.testbiotech.org/en/content/mon89034-x-nk603-cultivation> [10] <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2007-046> [11] http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1211902910348.htm [12] http://ec.europa.eu/food/dyna/opinion/index.cfm?op_product=MON89034xNK603