AFRICAN CENTRE FOR BIOSAFETY
UPDATE ON SANBI'S RESEARCH ON THE IMPACT OF MON 810 ON SA ENVIRONMENT

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By the end of this year, the South African National Biodiversity Institute (SANBI) will conclude a three-year long R14 million research project on the impact of Monsanto's GM maize variety MON810 on the South African environment.[1] Mon810 was released in South Africa in 1997 and is now grown widely here.[2] Following the publication of scientific studies outlining the possible negative impact of Mon810 on the environment, various European countries banned this GMO maize variety last year.[3]

SANBI's research project focussing on the commercial release of a GMO variety is the first of its kind in South Africa and can potentially overturn the decision of releasing Mon810 into the South African Environment. The project, that runs from 2005-2010, forms part of an environmental cooperation programme between the South African and Norwegian governments. SANBI's GMO Monitoring and Research Unit is coordinating this research, while the Universities of the North West, Free State and Fort Hare are involved as implementing partners of the project. Genok, a Norwegian public funded biosafety research centre, forms the scientific partner on the Norwegian side.[4]

The University of North West is looking into the impact of MON810 on target and non-target organisms and the development of resistance in the target organisms, while Fort Hare University is studying the impact of the GMO variety on soil microbes. The University of the Free State (UFS) is measuring the level of toxin produced in various plant tissues during various plant stages and assessing the impact of gene flow on the development of resistance in the target organisms.[5] UFS' GMO testing facility received a grant of R3,284 million from SANBI to conduct this research.[6]

Research findings will be publically released in December 2010 when the project period ends.[7] The African Centre of Biosafety is raising initial concerns that this research project may not reflect the reality on the ground. For instance, the research conducted by Fort Hare University on the impact of MON810 on microbes has not included samples from farms that have a long history in growing BT maize; all soil samples studied are taken from newly established sites on university grounds, where BT maize is grown under carefully controlled conditions.[8] A careful review of the research findings is vital in the further development of a stringent biosafety regime within South Africa.

[1] Norad Consulting Group. 5 June 2009. **Mid-term Review of the Environmental Cooperation Programme between Norway and South Africa 2005-2010**. http://www.norad.no/en/Tools+and+publications/Publications/Publication+Page?key=146018 (Accessed 7 July 2010) P44.
[2] African Agriculture. 21 January 2008. **South Africa notes French ban on GM maize variety it approved.** http://africanagriculture.blogspot.com/2008/01/south-africa-notes-french-ban-on-gm.html (Accessed 6 October 2009).
[3] GMO compass. 15 April 2009. **German ban on MON810 maize: will the courts now decide?** http://www.gmo-compass.org/eng/news/stories/433.german_ban_mon810_maize_will_courts_now_decide.html (Accessed 25 September 2009).
[4] Chetty, Lukeshni. 6 October 2009. Personal communication.
[5] Chetty, Lukeshni. 1 July 2009. **GMO monitoring and Research Unit Applied Biodiversity Research.** Presentation to Southern African Biosafety Course 28 June -3 July. Holistic foundations for assessment snd regulation of genetic engineering and genetically modified organisms.
[6] University of the Freestate. 17 March 2009. **UFS receives R3,284 million to research biosafety of genetically modified crops.** http://www.uovs.ac.za/news/newsarticle.php?NewsID=1261 (accessed at 4 July 2010).
[7] Chetty, Lukeshni.28 June 2010. Personal communication.
[8] Personal communication with Prof. P. Muchaonyerwa, Department of Agronomy, Fort Hare University, 7 July 2010.