document n°7

[art 4.1(b)] (TRADE)

**From:** [4.1(b)] (TRADE)
**Sent:** 07 June 2012 16:42
**To:** [4.1(b)] TRADE); TRADE); (TRADE); TRADE); (TRADE); (TRADE); (TRADE); (TRADE)
**Subject:** Report of meeting with members of the New Plant Breeding Techniques Platform 31/05/2012

**Report of meeting with members of the New Plant Breeding Techniques (NPBTs) Platform, 31st May 2012**

Participants: NPBTs Platform members: Dow Agro Sciences, VIB, Keygene N.V., Syngenta, Bayer CropScience, Rothamsted Research, Rijk Zwaan, Wageningen UR, Schuttelaar & Partners.
Commission: [4.1(b)] DG SANCO [4.1(b)] DG TRADE, )

The NPBTs Platform invited COM services to attend their platform assembly in order to meet its members and exchange opinions on a number of new plant breeding techniques.
During the meeting three members of the NPBT Platform presented three different techniques focusing on the description of the technique, possible applications and benefits for the sector/society.

1) **Agroinfiltration**: Plant tissues, mostly leaves, are infiltrated with a liquid suspension of Agrobacterium containing the desired gene(s) to be expressed in the plant. The genes are locally expressed (in the infiltrated area) at high level, without being integrated into the plant genome. The technique can be used to screen for plants with valuable phenotypes that can then be used in breeding programmes.

2) **Zinc finger nucleases (ZFN)**: ZFNs are proteins custom-designed to cut at specific DNA sequences. The technology provides multiple methods to improve crops through precise genome modification: ZFN–1 "delete": gene/sequence removal, ZFN–2 "edit": targeted editing of genomic sequence, ZFN-3 "add": targeted gene addition. Benefits of this technology: e.g. removal of antinutritiens/allergens; improved nutritional value; removal of antibiotic resistance markers.

3) **Cisgenesis**: A DNA fragment from the species itself or from a closely related crossable plant species is inserted into the plant genome. With this technique a specific trait is transferred, without altering the plant's overall genetic makeup. Cisgenesis could be used to enhance the durable resistance to diseases in a large number of crops, e.g.: mildew resistance in grape varieties, scab resistant apples, blight resistant potatoes.

All of these three techniques allow developing new plant varieties with more precision and efficiency, in a much shorter time frame compared to conventional breeding technique. Besides economic advantages for plant breeders and consumer benefits, products derived from these techniques also offer environmental benefits through reduced use of pesticides as well as increased water and nitrogen use efficiency. Some of the NPBTs could be used in combination. Detection and identification of products from agro-infiltration as well as zinc finger nuclease technology 1 and 2 is not possible. Cisgenesis and ZFN-3 can be detected and identified, provided prior information is available (e.g. about DNA sequence introduced).
The platform expressed its concern about the legislative uncertainty of the GMO/ non-GMO classification of new plant breeding techniques in the EU. Companies, including SMEs, and research institutes based in the EU play a prominent role in research and development activities in NPBTs and would like to maintain the competitive advantage of the European plant breeding sector and their leading role in developing highly-innovative and sustainable solutions. Possible classification of these techniques as GMOs would jeopardize the breeding sector in the EU. In addition, the lack of detection method and traceability system would have a negative impact on trade.

COM noted that it is currently evaluating whether certain new techniques constitute techniques of genetic modification and, if so, whether the resulting organisms would fall within the scope of the EU GMO legislation. A legal analysis from stakeholders as well as an overview of third countries positions would be helpful (discussions on regulatory issues in most of the third countries have started only recently). The Commission will follow a case-by-case approach and aims at avoiding to change the legislation and to have a co-decision procedure.
A second meeting with the platform is scheduled for 22 June with presentations of the remaining NPBTs.

Best regards,
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