Public Research & Regulation Initiative
Secretariat
Julianalaan 67
2628BC Delft
The Netherlands
Phone: +31-15-278-9289
Email: info@pubresreg.org
Website: www.pubresreg.org

Commissioner John Dalli

Re: the direction of the GMO debate in Europe

14 March 2011

Dear Commissioner Dalli,

I write to you on behalf of the Public Research and Regulation Initiative (PRRI), a world-wide initiative of public sector scientists active in modern biotechnology research for the common good. I follow up on the seminar "The risk evaluation of GMOs - A contradictory debate", organised by MEPs Lepage and Lyon on 12 January last, in which you called for an active participation of all stakeholders.

PRRI welcomes public discussions on the potential benefits and risks of biotechnology, but as scientists we are concerned that **the debate in Europe has lost sight of the broader context, of sound science and of the accumulated evidence. This jeopardises Europe's 2020 strategy for green and inclusive growth and innovation, and Europe's contribution to global food security**.

1. The GMO debate has lost sight of the broader context.

Agriculture is facing unprecedented challenges. Today over 1 billion people are undernourished, often resulting in chronic diseases and premature deaths. This situation will be compounded by developments such as population growth and climate change. Mankind will only be able to feed itself without destroying the planet, if a fundamental transformation in agricultural production takes place. Farmers have to produce more while having less impact on the environment, i.e. "sustainable intensification". Farmers therefore urgently need crops that produce more, that are less dependent on water, pesticides and fertilisers, that can grow on marginal land, that have enhanced nutritional value, etc. This immense challenge cannot be solved by conventional techniques alone. The future of the agriculture is not a matter of "either this or that technology" but rather of combining the most suitable technologies. As has been recognised repeatedly on the global level since the Earth Summit in Rio de Janeiro in 1992, modern biotechnology can contribute significantly to finding solutions for these challenges. It is for this reason that many thousands of public researchers worldwide dedicate their careers to modern biotechnology. In this respect we regret that on 12 January MEP Lepage did not, as she did with the other speakers, invite Professor Newell-McGloughlin to summarise for you her views on the potential of modern technology for food security.

2. The debate on risk evaluation has lost sight of sound science.

GMO risk evaluation can only benefit mankind and the environment, if it is done in a scientifically sound manner, in accordance with internationally agreed principles, whereby identified risks are compared with the risks of using conventionally produced organisms. This comparative character of risk assessment, which is also enshrined in the GMO Directives, is of crucial importance. Yet, Europe seems to have abandoned these principles. Despite scientifically robust opinions of ESFA on specific GM crops and despite the vast amount of data available globally on the safety of those crops, claims – however poorly substantiated – suggesting hypothetical risk are often quickly embraced by politicians without verifying the scientific validity of such claims. The debate on 12 January perfectly illustrated that. The two scientists invited to comment on EFSA guidance and opinions, came with criticisms about EFSA's approach that would not stand the test of proper peer review. We give some examples in the annex to this letter and if you so wish, we will provide you with more detail.

A related and regrettable trend is that in reaction to claims about hypothetical risks, politicians often quickly ask for more testing. Particularly troubling was your suggestion on 12 January, that "when tests can be done, they should be done". This is not sensible - tests should only be asked if they are needed, and not merely because they can be done. Tests in this area cost much money and time and the current regulations have already put an incredible and unnecessary burden on biotechnology. We note with regret that the recent changes in EFSA guidance also seem to be abandoning the well founded "tiered approach" for an approach of asking more data as a standard requirement. There is no scientific reason for this, because there is nothing inherently dangerous about the technique of genetic modification itself. Requesting unnecessary information is not in the interest of safety, on the contrary. More in general, we are concerned about the proportionality of the risk assessment for GM crops. The assessment has an increasing tendency to ask data about possible effects of a GM crop, while we do not seem to worry about the same effects of conventional crops. Another disconcerting trend is the way in which the independence of scientists such as the EFSA members is questioned. MEP Lepage's statement about "the cancer of conflict of interests" in connection to EFSA was unfounded and distasteful. What is important is whether a claim about safety or risks can be independently verified, and not one's suspicion of the motive of the person making the claim.

3. The GMO debate has lost sight of the accumulated evidence to date.

Since 1996, over one billion hectares of GM crops have been grown by over 15 million farmers in 29 countries all over the world. From that period there is not a single verifiable report of adverse effects on human health or the environment caused by GM crops. On the contrary, several positive effects have been recorded: yield gains of over 150 million tons (equivalent to 60 million additional hectares of land), pesticide reductions estimated at 350 million kg of active ingredient, reductions in mycotoxin contamination and substantial reductions of fossil fuel use. In the light of these results it is difficult to understand the rationale behind the Commission proposal to allow countries to ban the cultivation of GM crops on non-scientific grounds in favour of for example organic farming, without a shred of evidence that organic farming can result in the substantial increase of production per hectare that is so urgently needed.

Summarising, public debates on this important topic need to be balanced and professional, whereby the broader context, sound science and accumulated evidence should be the cornerstones of the debate. Balanced also means that stakeholders should not only include anti biotech NGOs and the private sector, but also farmers and public sector scientists involved in biotechnology. Further, it would also be helpful if the Commission is also represented by other DGs that can give useful input, such as DG Research and DG AGRI. Needless to say that the draft agenda of your 17 March event raises concerns in this respect.

PRRI is ready to meet with you to discuss these and other topics in more detail.

If you wish further information about any of the statements in this letter, please do not hesitate to contact PRRI via: info@pubresreg.org.

Yours sincerely,

Em. Prof. Marc baron van Montagu, Chairman of the Public Research and Regulation Initiative

Cc: Members of the European Commission and MEPs.

Annex to the letter to Commissioner John Dalli - Claims made by Dr Seralini and Dr Hilbeck.

In the ALDE event of 12 January 2011, Dr. Seralini and Dr. Hilbeck, presented arguments against EFSA guidance and opinions that would not stand the test of proper peer review.

For example, Dr. Seralini suggested that because of differences in the tests performed by others on some GM crops, the EFSA opinions on those GM crops were invalid. As EFSA and other reviews explained, there is a fundamental flaw in this claim in that it ignores the crucial concept of "biological relevance" of differences found in testing. Not every difference found is significant and not every significant difference found is relevant to safety. Also the comment that GM insect resistant (Bt) crops are "designed to contain residues of a pesticide" shows a fundamental lack of understanding that every plant produces various chemicals that have "pesticidal" activity that help reduce damage by pests. These are not "residues" but simply components of the plants, which we consume every day. The situation with Bt is no different, other than that with Bt we know the protein that is being expressed, unlike many of the other chemicals produced by conventionally produced plants.

In a similar vein were Dr. Hilbeck's suggestions that there is a need for additional data and testing in the EFSA guidance, without giving substantiation for that demand. When asked whether she knew of any adverse effects that have occurred as a result of growing GM crops that would justify asking even more information, she referred to the development of resistance against the Bt toxin and to effects of overuse of herbicide. These suggestions demonstrate a fundamental lack of understanding on several fronts. Over time, many pests can develop resistance simply as a result of mutation and selection, regardless whether the pesticides in question are synthetic pesticides, microbial pesticides or pesticides produced by the plant. These are agronomic effects for which there are common agricultural practices to delay or even avoid resistance development. Second, adverse effects of overuse of the herbicides are not the result of the herbicide tolerance by the plant but of the way herbicides are used. Any technology can be used wisely and unwisely. If an organic farmer decides to cover his land with a foot of manure, then the ensuing problems are the result of unwise use of manure not of the organic approach *per sé*.

Finally, an observation about Dr. Hilbeck's statement that their claims were shared by "the wider scientific community". This is a misrepresentation. Dr. Hilbeck's claims are no doubt shared within the community of anti-biotech NGOs, but they are certainly not widely shared by the thousands of public researchers worldwide who dedicate their careers to biotechnological solutions for the public good. Those scientists, i.e. the silent majority, are in fact perplexed that despite the steady accumulation of data underpinning the safety of the GM crops in research and agriculture today, the requirements seem to get stricter without any scientific reason and even bans are installed on those GM crops. If so wished, PRRI can produce a list of academies of science and research organisations worldwide expressing support of modern biotechnology, based on an assessment of the potential benefits and potential risks.