e-letter to be posted at

http://science.sciencemag.org/content/354/6315/975.e-letters

Dear colleagues,

on behalf of a number of fellow researchers (cced), I am writing to you as corresponding authors of two recent articles on pollinators: in

Science <u>http://science.sciencemag.org/content/354/6315/975</u> and in Nature <u>www.nature.com/nature/journal/vaop/ncurrent/full/nature20588.html</u> which are also related to an upcoming Convention on Biological Diversity side event: *The Summary for Policymakers from the IPBES thematic assessment on pollinators, pollination and food production* (<u>https://www.cbd.int/side-events/2304</u>). prepared by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). We saw that you are also involved in the authorship of an IPBES document on the subject: *Summary for policymakers of the assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on pollinators, pollination, and food production*, Bonn (Germany), Secretariat of IPBES, 2016, <u>www.ipbes.net/publication/thematic-assessment-pollinators-polli</u>

We know that a statement on pollinators is an expected "decision" at the upcoming CBD meeting.

I attach hereunder the text of the e-letter we sent to be posted in the Science website. Thanks for forwarding this message to all the authors and the reviewers of the two articles and of the IPBES report, and also to the members of the management committee who provided guidance for the production of the IPBES report.

We hope that our reasoned and constructive criticism will be appreciated. We are ready to discuss any counter-remarks that you may be willing to propose.

Best regards from Lombardy! Giovanni Tagliabue Carugo (Como) Italia www.researchgate.net/profile/Giovanni Tagliabue

This interesting and valuable article on an important ecological problem, in one single point, is theoretically and factually wrong, therefore seriously misleading. The authors, as happens too often to many outstanding scientists in diverse fields, are caught in a semantic trap: "GMO(s)". (The same mistake is evident in another paper on the same subject, just published in Nature: www.nature.com/nature/journal/vaop/ncurrent/full/nature20588.html and in the Summary for policymakers of the assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on pollinators, pollination, and food production, www.ipbes.net/publication/thematic-assessment-pollinators-pollinators-pollination-and-food-production)

Let's consider this statement from the article: "Genetically modified (GM) crops pose potential risks to pollinators through poorly understood sublethal and indirect effects. For example, GM herbicide-tolerant crops lead to increased herbicide use".

There's a triple confusion here: 1. Herbicide-tolerant (HT) crops are not equal to "GMOs": HT is just one trait among MANY very different others; various traits that can be infused in several crops have nothing to do with HT and pollinators (virus-immunized papayas, bio-fortified Golden rice, insect-resistant cotton, starch-rebalanced potato, etc.). 2. Many "non-GMO" crops are herbicide-tolerant. There is no reason to single out recombinant DNA over other methods to warn about the use of herbicides. 3. Since the late 1940s, herbicides are widely used without being coupled with HT crops ("GMO" or otherwise).

Case in point, in Europe, where all HT "GMO" crops are forbidden, herbicide use is massive. Thus, if you stick to the "GMO" misunderstanding, you end up invoking the control of HT "GMOs" where they are not present and let "non-GMO" huge areas (many millions of hectares) escape the supervision of herbicides.

At the end of the day, any risk from sublethal effects of an herbicide should be part of the risk assessment done on the herbicide itself, whether the herbicide is intended for use on "GMO" or "non-GMO" crops. That would be rightly targeted and coherent.

Consequently, we suggest to change your "pollinator policies" at point 3 from "Include indirect and sublethal effects in GM crop risk assessments" into "Ensure that the risk assessment done on herbicides includes the rates that would be used on any crops."

Furthermore, in view of the upcoming meeting of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) in Cancun (<u>https://www.cbd.int/side-</u><u>events/2304</u>), we warmly invite you to make clear to your audience that, whatever role HT crops ("GM" or otherwise) may have on the ecologic dynamics involving pollinators, that has nothing to do with the use of recombinant DNA agri-food biotechnology at large. We understand that in Cancun the Conference of the Parties of the Convention is expected to adopt a decision on pollinators and pollination: we hope that, having corrected a partially wrong perspective on the concept of HT crops, you will help issuing a balanced and coherent statement.

We share scientists' and public's concern for the destiny of pollinators worldwide. While a rational discussion regarding the HT-pollinators issue is welcome, any groundless enlargement to the alleged harmfulness of a class of biotech methods in its entirety must be rejected. As fellow researchers, we hope that you will avoid being exploited by those who are cunningly pushing their biotechnophobic agenda.

Signatories (in alphabetical order)

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