WHO/FAO committee (JMPR) re-assesses glyphosate and confirms the BfR and EFSA conclusion that a carcinogenic risk is not to be expected

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After the Joint Meeting of the Food and Agriculture Organization of the United Nations (FAO) Panel of Experts on Pesticide Residues in Food and the Environment and the World Health Organization (WHO) Core Assessment Group on Pesticide Residues (JMPR) in Geneva from 9 to 13 May, the JMPR comes to the conclusion that glyphosate is unlikely to pose a carcinogenic risk to humans from exposure through the diet. In this way, the divergence between the risk assessment of the responsible FAO/WHO committee for pesticides and the hazard identification of the International Agency for Research on Cancer (IARC), which considered glyphosate as probably carcinogenic to humans along with malathion and diazinon in March 2015, becomes obvious once again.

After the IARC report was published, the WHO set up an expert taskforce to establish the reasons for the divergent evaluation of the data by the IARC and JMPR. The work of the taskforce was concluded in August 2015 with the result that the JMPR was to make a reassessment of the active substances glyphosate, malathion and diazinon.

The result of the reassessment by the FAO/WHO committee responsible for pesticide assessment supports the result of the joint assessment of glyphosate made by the EU member state authorities responsible for risk assessment and the EU itself, which was published as the EFSA Conclusion in November 2015. It is also in conformance with the latest assessments of this substance made by the US Environmental Protection Agency EPA, the Canadian assessment authority Pest Management Regulatory Agency (PMRA) and the Australian Pesticides and Veterinary Medicines Authority (APVMA).

http://www.who.int/entity/foodsafety/jmprsummary2016.pdf?ua=1

After the International Agency for Research on Cancer (IARC) assessed glyphosate as probably carcinogenic to humans in March 2015 along with malathion and diazinon, the WHO set up an expert taskforce to investigate the reasons for the divergent evaluation of the pesticides glyphosate, diazinon and malathion by the IARC and Joint Meeting on Pesticide Residues (JMPR) and mark out the consequences of overcoming these differences within the committees active under the WHO umbrella. The taskforce completed its review in August 2015 with the conclusion that the JMPR should conduct a reassessment of the active substances glyphosate, malathion and diazinon. One of the recommendations was a complete re-evaluation of the assessment of glyphosate, malathion and diazinon. It was then decided at a JMPR meeting in 2015 that this reassessment was to be made at a JMPR meeting from 09 to 13 May 2016 in order to remove the divergences on WHO level not only for glyphosate but also for malathion and diazinon.

The summary report of the Joint FAO/WHO Meeting of Pesticide Residues was published on 16 May 2016 at the end of the experts’ conference in which the BfR did not participate. Accordingly, and contrary to the IARC findings, no carcinogenic risk to humans from exposure

1 http://www.who.int/foodsafety/areas_work/chemical-risks/main_findings_and_recommendations.pdf?ua=1
2 http://www.fao.org/3/a-i5186e.pdf
3 http://www.who.int/entity/foodsafety/jmprsummary2016.pdf?ua=1
through the diet is resulting for glyphosate, malathion or diazinon. Moreover, it was again confirmed that glyphosate is unlikely to be genotoxic at anticipated dietary exposures. In comparison with the JMPR assessment of 2004, the Meeting reaffirmed the group ADI for the sum of glyphosate and its metabolites of 0–1 mg/kg body weight on the basis of effects on the salivary gland. The Meeting concluded that it was not necessary to establish an ARfD for glyphosate or its metabolites in view of its low acute toxicity.

This evaluation result reached by the FAO/WHO committee supported the findings of the European Food Safety Authority (EFSA Conclusion) on glyphosate which were published on 12 November 2015 (www.efsa.europa.eu). One of the documents that formed the basis of the EFSA Conclusion was the Renewal Assessment Report (RAR) submitted by Germany along with some revisions, which included the addendum on the estimation of the IARC monograph. The comments issued by members of the general public, science, politics, trade and industry and NGOs were made within the scope of the public and specialised consultation of the EFSA on glyphosate. The assessments made in the RAR with regard to health and environment-relevant risks were thoroughly checked, annotated and ultimately comprehensively discussed by the EFSA and experts of the responsible authorities of the member states. The EFSA Conclusion therefore constitutes a common assessment of the risk assessment authorities of the EU members states and the EU itself. This not only concurs with the latest assessments of the active substance made by the US Environmental Protection Agency EPA, the Canadian assessment authority Pest Management Regulatory Agency (PMRA) and the Australian Pesticides and Veterinary Medicines Authority (APVMA) but also with the evaluation of the WHO/FAO committee JMPR.

By doing so, the majority of European and non-European experts confirm the health assessment made by the Federal Institute for Risk Assessment (BfR) that no carcinogenic, mutagenic or reprotoxic risks are to be expected from glyphosate if it is used properly in agriculture.

The risk management authorities of the European Commission and EU member states have scrutinised the report submitted by the EFSA and are likely to reach a decision on 19 May 2016 as to whether or not glyphosate will continue to be approved as an active substance in plant protection products.

More information on the topic “Glyphosate” at the BfR website:

Frequently asked questions regarding the different assessments of the carcinogenic effect of glyphosate by BfR and IARC

Joint FAO/WHO Meeting on Pesticide Residues (JMPR) (2016)
http://www.who.int/foodsafety/areas_work/chemical-risks/jmpr/en/

Published BfR documents on glyphosate
http://www.bfr.bund.de/en/a-z_index/glyphosate-193962.html