

contain high amounts of surfactants that have surface-active properties. According to the German government[1], in addition to the 5000 t of glyphosate used in Germany in 2010, 1700 t of polyethoxylated alkylamines (POEA) had been applied. Therefore, it is of importance to not only test the toxicity of the active ingredient glyphosate but to take into account the toxicity of the various formulated products that are used.

There is ample evidence that formulated products can exhibit higher toxicity. In particular, polyethoxylated alkylamines (POEA) are known to be highly toxic to cells and organisms (Mesnage et al. 2013). The RMS considers several of the observed effects on endpoints regarding genotoxicity, mutagenicity, and development or reproduction of non-target organisms to be mediated by the surfactant included in the formulations. Thus the RMS concedes that “the toxicity of glyphosate-based products is greatly enhanced if the active substance is formulated with alkylamine ethoxylates” and “the authorization of glyphosate-based products with alkylamine ethoxylated surfactants might require the generation of further data”. But to argue, that the lead formulation MON52276 for the assessment of glyphosate does not contain this surfactant and that nowadays POEA-formulated products “are not expected to be neither notified nor registered in the future”, are not comforting statements, as such products are still on the market and data about the nature and toxicity of other surfactants that replace POEA are not provided to the public. In addition, predicted environmental concentrations for glyphosate and its metabolite AMPA are calculated only for these substances, not taking into account the highly toxic surfactants that are released into the environment together with the active ingredient. Therefore, it is important to collect data about environmental concentrations of surfactants and to consider their impact on the environment already during the authorization process.

Conclusions

Glyphosate demonstrably does great damage to wildlife and the environment. To make agriculture in Europe more environmentally benign, it is of utmost importance that pesticide use is restricted to a much greater extent than it is actually the case. As herbicides make up the largest share of pesticides and glyphosate, in particular, is the most used herbicide, and one of the most dangerous, **regulators are now obliged to refuse to renew the approval of this chemical.**

References --ref B.8.1 - B.8.9 and Ecotoxicology ref B.9

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[1] <http://dipbt.bundestag.de/dip21/btd/17/071/1707168.pdf>
