LANDTECHNIK 70(3), 2015, 44–45

DOI: 10.15150/lt.2015.2662

LANDTECHNIK
AGRICULTURAL ENGINEERING

Spotlight

More resources for plant protection: The best is the enemy of the good

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Photo: private

The application of pesticides is one of the best regulated areas of agricultural practice in order to protect operators, bystanders and the environment as good as possible against the risks concerning the use of chemical plant protection products. In order to achieve this aim the EU has the highest standards for modern plant protection worldwide. The sustainable use of pesticides is accomplished by the triad of reliable authorization of plant protection products, trained operators and safe working application techniques. Nevertheless, the use of pesticides is a topic meeting less and less acceptance within the public. Thereby, the agricultural sector is facing big challenges on which chemical plant protection products will make their contributions.

Let us take the chance to bethink ourselves of the facts: The world population is growing and the agriculture has to produce more output in order to ensure food, feed and energy supply in future. Soil resources are worldwide limited and their agricultural use is in conflict e.g. with growing settlement areas, with the production of renewable energy, which are also driven by the growing population. The question of future food supply can only very partly be answered by claiming unused soil resources so far. Referring to expert studies (e.g. CABI, University of Bonn) only 50–70% of potential field crop yield is actually harvested, whereby one third of the losses are due to pests, diseases and weeds. Taking this into account it does not need too much fantasy to see, that future challenges regarding food supply cannot be achieved without the use of pesticides. Extra yield added within the past years have already been generated partly by an increasing amount of chemical plant protection products used per hectare.

Against this background the effort to improve the application of pesticides with reference to its efficient and effective as well as its appropriate and professional appliance should be enhanced – even a good system can be made better. Having an actual look onto the German research environment the opposite seems to be true. Research at university level with the focus on plant protection methods has declined a lot compared to former decades. One reason for this situation is for sure that public subsidies concerning the research in the area of plant protection methods directly have been reduced, too. Another reason might be due to the fact, that the topic of using pesticides is a subject without having any positive connotation in society at the moment. Similar to the topic of livestock farming a greater social awareness is necessary.

Why do we not admit the facts and try to optimize the plant protection processes any further by giving more resources to this topic? Despite the initial description of the actual good situation here in Europe there is still a big potential for technical improvement which could be done by research. Just a

few examples: the side specific application of pesticides using boom sprayers is an issue having a lot of clearance between vision and reality. Within the area of orchard sprayers, there are a lot of potentials for the reduction of used pesticides if the technology would become more intelligent. From the application technique's point of view the horticulture is a domain being still in their infancy for large parts. This listing could be continued in very much more details. For this reason I like to appeal to the universities and funding organization to commonly support the field of plant protection research much more than actually. Finally in terms of protection of the operator, of consumers, of the environment and a sustainable use of resources, let's do our best!

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