



Arbeitskreis Acker- und Kartoffelbau Stader Geest

Practical experience with the SKW system

In our arable farming working group with around 80 members, several farmers have been using the SKW system on their crop protection sprayers since 2017. These are mainly trailed sprayers from the manufacturers Dammann, Horsch, Lemken and Amazone with a capacity of 3,000 to 6,000 liters and a working width of up to 36 meters. What knowledge/experience and advice recommendations can we provide in connection the application of plant protection products with the SKW system?

Water application rate:

It is possible to reduce the usual water application rate of 200 l/ha by up to 50 l/ha - while at the same time improving the effect. For potato fungicides, the usual quantity of 300-400 l/ha is no longer necessary; 250 l/ha is sufficient. The decisive advantage lies in the improved dissolution behavior of the active ingredients in the spray mixture and their optimized distribution on the target area and faster drying time. The SKW system has no influence on the drift behavior of the nozzles. All plant managers uniformly report fewer deposits in pipes and nozzles.

Liquid fertilizer application (Alzon fl; Piasan G, Piasan 25/6; AHL):

Liquid fertilizers are usually applied with FD nozzles from Lechler. The farms report the usual burns under unfavorable conditions. The known recommendations (use of FD nozzles, coarse droplet application, max. 2 - 3 bar) must be observed. The SKW system has no influence on the effect of the liquid fertilizers.

Fungicides:

The application rates of fungicides can generally reduced by 10-25%, depending on the time of spraying. The closer the treatment is to the time of infection, the greater the savings potential. Combinations of herbicides (e.g. Ariane C) and fungicides can also be significantly reduced. Contact and semi-systemic potato fungicides spread particularly well on the leaves.

Herbicides:

There is a very high savings potential (15-25 %) in the application of foliar herbicides. For soil herbicides, a maximum of 5-10 % of the amount of product can be saved.

Growth regulator:

Cereals : The effect is increased by about 10 %. **Rapeseed** : The effect is increased by about 15 %.

Foliar fertilizers/insecticides

The combination of Epso foliar fertilizers with the SKW system leads to ideal water conditioning. Insecticide applications against aphids in wheat were observed to be effective for longer. In oilseed rape, higher control successes were achieved with standard applications.

Nozzle selection:

Injector nozzles (ID, IDK) and double flat fan nozzles (IDKT) are particularly suitable for use in the SKW system. Asymmetric air injector double flat fan nozzles (IDTA) can also be combined very well with the SKW system to enable high travel speeds.

Formulations of PS funds:

In principle, solid formulations (WG;WP) dissolve better in the SKW system. Liquid formulated PSMs based on solvents or oils (SE; EC; OD,ME) are also dissolved better.

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For all plant protection recommendations, please observe the respective current application regulations and approval criteria and the *information on the packaging*

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