

CropLife Europe position paper on Seed Treatment

Seed treatment with conventional plant protection products and/or biological products is a targeted, one-time, precision application technique that has a low environmental footprint and can contribute towards the EU Green Deal and Farm to Fork objectives.

Based on the known presence of pests and pathogens in the field, seed treatment is an important component of Integrated Pest Management (IPM).

Growers have the choice to use treated seeds in their fields. Seeds are either purchased already treated or are treated on farm.

Seed is the starting point for all crop production and seed treatment is the starting point for crop establishment and protecting young plants against soil-borne pathogens and soil-dwelling pests.

Applying very small quantities of plant protection products, either as a conventional chemical substance or a biological product, directly to the seed itself prior to sowing, allows seed treatment to protect the seed during germination, and then the plant itself during its vulnerable early growth stages. The protection is guaranteed: efficacy is not weather dependent, and because seed treatment is a one-time application before sowing, it requires no additional resources in the field, such as water or fuel.

In the EU, most seeds are treated by professionals in mobile or static installations, this avoids the farmers having to handle the plant protection products themselves and significantly reduces operator exposure. The European Seed Treatment Assurance (ESTA) scheme and other national schemes, enforce strict dust limits for treated seeds which further reduces exposure during handling and dust drift during sowing. Furthermore, the use of deflectors directs dust into the soil, preventing direct exposure of beneficial insects, birds, mammals, and adjacent water bodies to the small amount of substance used. Advances in planting equipment ensure the seeds are fully incorporated into the soil which minimize exposure to non-target wildlife and the environment.

With EU Farm to Fork objectives in mind, seed treatment is a technology that should be considered in the forefront of the **integrated pest management** toolbox, offering increased environmental protection and reduction of the use of, and the risk from plant protection products compared to other application methods. Continuous pest monitoring gives local advisors and farmers information on levels of pressure throughout the growing season for a given crop, or field. Seed treatment is required because not all pests and diseases can be controlled curatively, some are more effectively controlled preventatively so the crop is not to be attacked at all. Seed treatment is often the best – or in some cases the only – option to guarantee high-quality production for that crop. Soil-dwelling pests such as wireworms, or certain damping-off pathogens, cannot be even identified by early diagnosis, which means that without seed treatment, the farmer may have to resort to plant protection applications at a later stage once the damage caused by the pests or diseases becomes visible.

Further opportunities include the use of seed treatments coupled with digital agriculture tools or smart application equipment, or with biologicals that help the resilience of young plant to abiotic stress and the uptake of nutrients, meaning that the plant can grow with fewer inputs (e.g., less fertilizer).