



Dossier Crop protection



Seeds and young plants, basis for sustainable crop protection

With their clean and robust seeds and plant material, Dutch breeding and propagation companies form the basis for successful harvests and healthy produce all over the world. This also means they play a role in preserving the environment. After all, growers with strong and healthy plant reproductive materials have less reason to intervene in the growing conditions. Resistances against diseases and pests therefore help to reduce the use of chemical plant protection products.

However, more research is needed to enable Dutch companies to continue to play this role. For example, knowledge about a plant and its growing conditions will support the rapid development of new resistances and new methods for preventing diseases and pests. Besides that, breeding and propagation companies must have sufficient possibilities to use plant protection products if necessary. Therefore, Plantum calls for simple authorisation procedures and a system approach for the entire production chain.

In addition to supplying plant reproductive materials to Dutch growers, the Netherlands also exports €2.7 billion worth of seeds and young plants each year. It is not permitted for that plant reproductive material to carry any diseases or insects, and it must also have maximum resistances against diseases and pests itself. Dutch breeding companies have proven to be very successful at developing resistances. In potato cultivation, resistant varieties are an important weapon in the fight against potato cyst nematodes, for example, and in certain vegetable varieties breeding has helped to control soil-borne diseases.

Breakthroughs like these are only possible thanks to ongoing plant research, which is why it is so unfortunate that the Dutch government has drastically cut its spending on such research in recent years. Plantum calls for greater investment in the basic research that forms the basis for resistance-oriented breeding. In addition, since new breeding methods can accelerate the development of resistances, it is important that the rules governing these methods are clear and practical.

Looking ahead to alternatives

Dutch companies have also had proven success at developing non-chemical crop protection methods. For example, strawberry propagation companies have developed an environmentally friendly method for combating strawberry spider mites in mother plants. Called the Controlled Atmosphere Temperature Treatment (CATT) method, this is a good alternative for using methyl bromide treatment.



The method is now being further developed for lots of other plant types, such as bulbs and perennials. In addition to costing money, developing sustainable methods like these is also time consuming. Therefore, until good alternatives become available, the sector also calls for an effective package of plant protection products to be available.

Specific needs

The current package of authorised plant protection products is too limited for many breeding and propagation companies, partly because regular authorisations are often

not tailored to the special circumstances involved in breeding and propagation. For example, carrots are grown outdoors, but the flowering carrot plants that produce the seeds are grown in greenhouses where they are exposed to other diseases and pests than outdoors. Therefore, they require treatment with other plant protection products.

However, because these specific applications often involve only very small volumes, the suppliers rarely bother to request approval; it is almost impossible for them to recoup their investment in the lengthy and costly authorisation process. That poses a serious problem, because the sector itself needs sufficient possibilities for controlling crop diseases and pests if it is to supply high-quality varieties, plants and seeds.

Adapting procedures

Plantum advocates the further simplification of authorisation procedures for these so-called 'minor uses'. Plantum also calls for further European harmonisation. Plantum is actively contributing to that through its work with the European Seed Association (ESA) and the EU Minor Uses Coordination Facility, among other things. Likewise, the approval procedures for so-called 'green' (natural, low-risk) plant protection products and seed treatments can also be simplified and accelerated.

Systematic approach

Last but not least, Plantum believes it is important to consider plant health, crop protection and authorisations from the perspective of a crop production system as a whole, and preferably to take the end-to-end production chain (so including seeds and young plants) into account; that is the only way to achieve truly sustainable Integrated Pest Management (IPM).

For example, propagation companies are doing everything they can to keep plants healthy in a sustainable manner, e.g. by:

- implementing cultivation measures (such as climate control) and hygiene measures;
- opting for non-chemical crop protection methods;
- using 'green' plant protection products.

Nevertheless, 'classic' chemical plant protection products can sometimes still be necessary as a corrective measure. In such cases, the authorities should consider the bigger picture and permit the use of the products that are required for IPM.

The opportunities for a 'System Approach to Sustainable Crop Protection' are currently being investigated by the Dutch government and the industry, and Plantum is also involved in this initiative.