

Challenges GI ENOUGH for breeders

Whether it concerns resistance, shelf life or temperature tolerance, it is said in all kinds of problems: This is a task for breeding. Isn't too much expected of breeders? Yet breeders see opportunities to meet the growers' wishes.

59 breeders
PARTICIPATE IN
Flower Trials in 2024

The Flower Trials are back on the doorstep, the event where breeders of pot and bedding plants show their novelties. A breeding process takes years, while growers, sales channels and consumers increasingly have wishes in the short term. Breeders are trying to respond to this, which the smaller market players are still able to do.

The wish list of growers, sales channels and consumers towards breeders is increasing rather than decreasing. Breeding gets all the problems from the chain on its plate. Breeding is always a long-term activity. By testing existing varieties in a different way, breeders can often respond quickly to trends.

Ornamental breeders are therefore capable of a lot, but cannot deliver on everything, partly due to the necessity to set priorities. Breeders have therefore enough challenges to distinguish themselves and which leaves room for smaller market players.

Reinforced from corona crisis

The ornamental sector appears to have been more strongly affected by the coronavirus pandemic. Weaker firms disappeared, while other firms sought each other out for production cooperation. This has led to new forms of cooperation. In addition, thanks partly to Zoom and Teams, there has been an acceleration in communication between various parties, such as breeders, product managers, distant markets and customers.

When asked about the challenges that floriculture breeders face, the usual answer concerns sustainability. Every breeder looks for faster flowering with less energy consumption and less dependency on correction and constraints. Less permitted crop protection means extra focus on disease tolerance and resistance. Less or no use of peat in the potting soil means a different way of growing and the plants must also be adapted to this. Of course, this also applies to growing under LED lighting. As a result, breeding trials have to be done in other ways.

'The demand for new products with quality, resistance, durability and more energy efficient properties is growing faster than can be expected', says Nico Grootendorst, owner of Evanthia.

Other climate, other sales: Other challenges are the effects of climate change on the existing product range. And the consumer's bargaining power, which seems to be an issue outside the Netherlands in particular.

Breeding and selection on so-called heat resistance or dry tolerance is not new. After all, most breeding companies operate on all international production sites.

'Demand for new varieties is faster than they can be bred'



Early week 24 an interview about 20 years of Flowerials will be published on PlatformBloem.

and areas. Due to climate change, the focus has been intensified. Furthermore, demand is growing from the sales channels.

The markets in Europe and the United States are no longer growing in numbers. In these regions, businesses stop every year, leaving fewer customers. Genetics and reliability are still important to them, but growth can still be seen in East Asia (excluding Russia) and Australia, the so-called PAC countries.

Breeding also more expensive

Breeding has become more expensive due to rising energy, transport and raw material costs, which has led to a lot of efforts to make the process more efficient. More is put after pressure on crops that need less input. In the selection, more will be transferred to products that are suitable for outdoor cultivation or require less energy consumption. Production will also be housed more abroad. The impact of this is that many of the floriculture products are no longer grown there, where a lot of energy has to be put into them. More 'local for local' will be grown.

As for the breeding process itself,

Mare Driessen, director of ornamentals at Beeken camp notes: 'Processing levels appear to be less directly affected by high energy, transport and raw material costs. During the recent energy crisis, we discovered that we could work with less energy, but this led to a delay in obtaining information from trials.' To which Gerard Werink, Sales Manager Wholesale & Business Support at Syngenta Flowers, adds: 'Everyone in the chain cannot escape passing on the costs. Efforts have been made for years to control costs through increased efficiency and other cultivation methods, but there is a limit to this.'

Retailers are becoming more careful with capturing products to prevent them from getting too tired to throw away. The higher interest rates also change their policy. The trend is to keep less inventory and more short order's to keep borrowing costs as low as possible.

From retail there is also demand for items that can be placed on the shelf for vase sale prices. This bet has other genetics or mix compositions in the pot. 'This gives some pressure in the chain on the cost price and that the thumbscrews

are turned even further on all fronts. Price increases towards retail are extremely difficult for growers and so as much as possible other solutions are sought. Ultimately, it can also lead to changes in the demand for a type of product", predicts Ruud Brinkkemper, director of Breeding Pan-American Seed.

Wishes of growers

What a grower wants in terms of starting material strongly depends on the type of grower. The big growers continue to go for efficiency and a slightly more limited assortment. Wide (many species) but less deep (less colors), while the smaller growers and home sellers still go for more diversity.

Large companies are also looking for temporary exclusivities for some products and longer term agreements with the genetic livestock farmers. 'Seeds and cuttings are a natural product, so liver security is never 100%, but together with us they try to build in more cherries,' says Werink.

In terms of genetics, the fast growing plants which are less expensive is a focus. The shorter the time the plant is in the greenhouse, the less energy) labor and crop protection is needed. Genetically compact products and disease tolerant plants also help, of course. However, not everything needs to be more compact; Plants are allowed to make more volume in larger pots.

In addition, more and more combinations of plants are grown in one pot, for which the breeders have to provide the right recipes. What goes well together, both for the grower and for the consumer.

Good cultivation information

Growers are mainly concerned about whether their product can ultimately yield the money with which an acceptable business operations. Good cultivation guidance is important. 'New varieties must be well tested by the breeder and good detailed



This year, breeding companies will show their new range of pot and bedding plants for the twentieth time in the Flower trials, which will be held in week 24, from 4 June.

cultivation advice must be available, they must be suitable for new crops and types. Representatives are becoming more and more crop advisors and are more often supported by specialists", says Werink.

In addition, there is a need for a good chain connection to make the right choices in supply and demand and to respond to the needs of the consumer. Growers would like to have more time to adapt to new environmental requirements.

Desires of consumers

Breeders continue to look for new crops that can be adapted to the wishes of consumers. Werink thinks begonia is a good example: Previously, the focus was on the compact Begonia semperflorens, but for several years now the much larger types have become increasingly popular.

Breeding is always a combination of long and short term. Breeding takes time, especially if you want to 'adapt' botanical species to more through crossbreeding. In the short term, existing varieties can be put on the market by means of cultivation measures, other ways of positioning or bringing them back to the attention. 'In the past, all of the plants were sold in jars. Nowadays, for example, certain varieties are tested to see if

they work well in the wall hangers, such as mini violets and small-flowered petunias.

Convenience does not change

There is a tendency for consumers to spend more time in their garden and replace tiles with greenery. Sustainability plays a bigger role. However, convenience still serves man, observe the breeders. The consumer wants to keep little under control, in addition to a lot of color and a long shelf life. 'It seems that consumers are sometimes in conflict with themselves. They want to buy natural products, but without the worries that sometimes come with it. For example, they want bumblebees and butterflies in the garden, but no lice or caterpillars", Driessen reports.

Most purchases are still impulse purchases. Consumer product knowledge is declining. The product must therefore look good at the sales location. In recent years there has been more demand for larger pots and pots with combinations of plants. The sets are becoming less popular, especially in garden centers.

Decreased assortment

The assortment is constantly changing, but now, according to Brinkkemper, the changes sometimes happen too fast. So quickly that it is more difficult for the

breeding sector to respond to it. Grootendorst does not think that the large cut flower and plant species will disappear; there are consumers too traditional for that. However, the trend towards 'back to nature' will change the demand for the full range of cut flowers, potted plants and bedding plants.

In the short term, within five years, Driessen expects a reduction in the range.

In terms of basic material, the large growers go for efficiency and a slightly more limited range; wide (many species) but less deep (less colors). Smaller growers and home sellers still go for more diversity.



By consolidating growers, future companies will be able to cope with less diversity. At the same time, he sees that due to climate change, crops that were grown further south will also come back into the picture; especially with a different flowering period, not always more seasonal.

Environmental requirements, climate change, energy costs and all other factors continue to have a major influence on the direction of development. We look at products that are not yet known, but which do have the potential to become a large product. That search has always been there, Werink points out with examples. 20 years ago, a product like gaultheria or helleborus absolut was unknown to the grower and consumer. Now these are very large products on the market. The same applies to the mandevilla. Up to 15 years ago this was an expensive specialty product. Now it is a mass-produced product that is even sold through retailers such as Lidl and Aldi.

Small businesses remain

Nature still has a lot of potential and there are many possibilities to come up with new and improved products. According to Werink, this is not only reserved for

large companies. 'History shows that there are always new breeders who start small and specialize in a small number of crops. It's also successful. These companies often grow and become bigger and bigger. Some are then taken over, but others remain independent and successful. This will always be the case.'

Whether that history will continue to repeat itself, Driessen has doubts about that. 'There is an ever increasing regulatory burden. The question is whether smaller breeders can focus enough on this. Such as keeping abreast of all patents registered within a crop group and respecting them. If small breeders manage to keep their heads above water, then with niche products. However, they will have to get their hands on more parts of the supply chain.' And on that last point, Driessen Grootendorst finds on his side: 'The future prospects for a small breeder do not depend solely on the development of genetics. The most beautiful species, in any crop, are not necessarily the best economic successes. The momentum of introduction, marketing and

availability plays at least an equally important role.'

Latest techniques

What is less accessible for small breeders are new breeding techniques. A number of floricultural breeders are affiliated with collectives, where new breeding techniques make it possible to work together. Small breeders are lagging behind. In addition, special techniques will also be protected to recover the investment. Smaller companies can only benefit from this through licenses or partnerships.

However, new techniques will become cheaper in the long term, with the chance that small breeders will use them. In addition, there are companies that focus on the development of techniques and make them available to all breeders, both large and small. For many breeding crops, one can finally finish with traditional breeding techniques. Through interspecific crossbreeding, it is possible to create completely new types, without the need for genetic manipulation.

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Breeding companies, small and large

Problems are still being tackled together

The Rotterdam School of Management concluded in 2020 after extensive research that 75 years of Dutch floriculture breeding has developed into a global ecosystem with room for large and small breeding companies, who together solve any frictions and strive for the fairest possible distribution of value.

Difficult to measure

Whether the conclusion from 4 years ago is still the same or remains the same, Nico Grootendorst, director Evanthia, finds it difficult to measure. 'The floricultural sector in the Netherlands is well known worldwide. This concerns very large companies and also some small breeders. Japan and the USA, and to a lesser extent some European floricultural companies play a role in specific ornamental cultivation markets. Because of the Dutch trading position, the breeding companies also play an important role. If the need becomes high, economically, in terms of sustainability, or other political considerations, breeding companies will seek each other out. Many of the ornamental cultivation companies are, through promotion or other advocacy, members of Fleuroselect and / or Plantum. That binds the various breeders to go towards the future together.'

In a similar reflection as Grootendorst, Gerard Werink, Sales Manager Wholesale & Business Support at Syngenta Flowers, sees the confirmation that the conclusion of the Rotterdam School of Management still holds true. 'We can see that there is a great deal of cooperation in the industry, including between competing weathered boots. An organization like Fleuroselect ensures that we do not only focus on individual interests, but that we put the interests of the sector first. Smaller companies have contacts with the larger companies about limited cooperation, as we see during the Flower Trials where several companies show their products at the same location.'



Crossing the border

With regard to the supply chain in ornamental cultivation products, of which the breeding sector is a chain link, Mare Driessen, director of ornamentals Beekenkamp, still sees the Netherlands as a leader. 'The Netherlands remains an important player in the floriculture sector, but stricter European regulations mean that more and more companies are moving their breeding activities outside Europe. Large breeding companies are already active here and the smaller ones are likely to follow in the long run.' Now that floriculture, both under

glasshouse and in the open ground, is under attack, joint action is experienced even more emphatically. Hugo Noordhoek Hegt, former CEO of Dümme Orange and now a member of the Supervisory Board, does have a suggestion: 'Within our industry, let us also look at options where we can build up partnerships. We do not have to want to invent the wheel ourselves in everything, but I have a joint responsibility to manage our CO2 footprint to keep it under the limits.'

A number of floricultural breeders are affiliated with collectives, making new breeding techniques possible by working together. Small breeders are at a disadvantage in that respect.

