



Moederplanten in de productielocatie in Kenia.
Mother plants at the production site in Kenya.

“Flower trials and patience: that’s what propagation is all about.”

We continue the story where we left off in our MUM magazine #01: Wim Declercq, head breeder at Gediflora, has created a new breed. What is the next step? “When the breeding processes are finalised, propagation starts. Our plant literally goes on a journey, which will eventually result, after several intermediate steps and many flower trials, in cuttings.” His colleague Lore Vael adds: “Top quality cuttings!”

After the development of a new variety, it leaves for a laboratory in the Netherlands, where it is tested for viruses and bacteria. Of course, we only want to launch 100% pure varieties onto the market. If everything is ok, the certified variety is kept in the laboratory. We then have a number of these plants sent on to our production sites in Brazil and Kenya. Both Wim and Lore regularly visit these two production sites. “The plants are planted there *ex vitro*. They are placed in a greenhouse and grow into a first clone. This clone plant will be propagated until there are enough plants to produce cuttings. These are called the *mother plants*.” The central thread in the entire propagation story are the recurring flower trials. “In doing so, we monitor the actual plants and keep them as close as possible to the original,” explains Lore.

Every year, we also send new cuttings to our production sites in order to stay as pure and true to the variety as possible.”

It takes time

“We start with a very small number of mother plants. Building up the volume takes time. We are now in the process of selecting varieties which must produce cuttings within three years. Flower trials, growing mother plants and possibly improving through selection along the way is time consuming. Don’t forget that with our Belgian Mums you only have one chance per year to pick the really good ones! You cannot try again next week. Having good quality mother plants and picking the correct cuttings is extremely important. We must therefore closely monitor on our premises and, if necessary, make adjustments. At some

Wist je dat ...

... chrysanten **korte-dagplanten** zijn, die door het korter worden van de dagen geprikkeld worden om te bloeien? Het gaat niet zozeer om de onafgebroken blootstelling aan licht, wel om het aandeel licht per periode. Tien minuten per half uur is voldoende om de chrysant ‘te overtuigen’ nog even te wachten met bloeien.

Did you know that ... ?

... Chrysanthemums are **short-day plants**. They are stimulated to flower when the amount of day light decreases. The key is not continuous exposure to light but of the proportion of light per period. Ten minutes per half hour is enough to ‘convince’ the chrysanthemum to wait a while before flowering.

point the greenhouses in Kenya and Brazil are almost full. How many *cuttings* a mother plant produces, depends on the vigour of the variety. The number of mother plants we have to supply depends on the amount of cuttings our customers have requested. It is a very difficult task to plan this perfectly months in advance! That is why we ask to order in time. We do our utmost to provide our customers with what they have ordered within the agreed time frame.”

Uniform cuttings

When the cuttings arrive in Oostnieuwkerke (Belgium) for sale, Lore takes over. “I look after the quality, transport and rooting of the cuttings. The cuttings arriving here undergo random checks. They must be exactly 3 centimetres long and are sorted according to weight. They must be uniform!”

This is a logical consequence of the automation in the sector. The cuttings are planted mechanically at several of our customers’ premises which require the cuttings to be identical. Our cuttings must grow first and then flower afterwards. Therefore, no flower buds may be present. All these aspects are examined visually.” The inspected cuttings (possibly after rooting) go to the customers, although a number of them also flower in Oostnieuwkerke.” This allows us to maintain to our cultivation experience and ensure the continuity of our professional activities throughout the year. At the end of the season, all the flower beds in the R&D department are cleaned and then it is time to grow new mother plants. The greenhouses are systematically filled and the whole process of propagation is repeated.”