

# Straight from the breeder

A guaranteed better result!



## Newsletter



Spring is already coming. Of course we hope to have a good soil structure despite the soft winter conditions in Western Europe. Which is necessary to create a good seed and planting beds. Here at Broer B.V. we are now busy cleaning and sorting our products, and the first onion sets are already planted.

In this newsletter we will take a look at what's going on at Broer B.V. We will also share the latest developments in the field of breeding with you, and the expanding market in Germany. We hope you will enjoy reading this edition of our newsletter!



### Breeding for the onion sets market

The cultivation of second-year onion sets is becoming ever more specialised. [Read more on page 2.](#)



### Onion sets of excellent quality

The delivery season has started at Broer B.V. All machines are running at top speed. [Read more on page 3.](#)



### Onion sets in Germany

The cultivation of second year onion sets in Germany is not new. [Read all about it on page 4.](#)



#### Hercules

- Highly productive and very uniform
- Very suitable for long term storage
- Round bulb
- Good bolting tolerance
- Very uniform erect leaves
- Suitable for the processing industry



#### Sherman

*heat treated*

- Most productive yellow set onion
- Strong root system with intermediate resistance against Pinkroot
- Blocky shape
- Mid early maturity
- Short term storability

#### Unique genetics

The best varieties for you

[www.qualityinside.nl](http://www.qualityinside.nl)



## Breeding for a continuously specialising onion set market

The cultivation of second-year onion sets is becoming ever more specialised. Growers are focusing more and more on specific final destinations of their products. Varietal selection and the use of effective genetics are essential in this respect. This development has resulted in a range of varieties for different market segments, such as overwintering cultivation, planting in early spring and varieties intended for storage with a good hardness and dry matter content for, for example, industrial processing. The demand for red onion set varieties is also growing.



Bejo/De Groot en Slot's breeders devote a lot of time and attention to the development of new hybrid onion set varieties. Apart from the well-known positive effects of hybridisation on yields and uniformity, crossbreeding specific parental lines is also the ideal way of making plants resistant to pests and diseases. In these resistance-breeding programmes, Bejo/De Groot en Slot's breeders work closely together with the researchers of Bejo's own research centre.



The primary aim of our breeding programmes is to find varieties with (some degree of) resistance to specific fungi such as Fusarium and downy mildew, but attention is also given to the physiological characteristics of varieties and parental lines. A strong root system, healthy, erect leaves and a thin neck at the time of ripening are all important factors with respect to a plant's general resistance. During the growing season, Bejo/De Groot en Slot's breeders can very often be found in their trial fields, assessing these qualities in the genetic material that we use in our breeding programmes.

New hybrids are tested to find out whether they have the required qualities to make them suitable for many applications. These hybrids are planted every year at various locations in Europe with different conditions, varying from the very long day conditions in Finland to the more continental summers of Hungary. At these locations the hybrids are evaluated at various growth stages. After the evaluations in the field the onions are harvested, dried and prepared for storage. The new hybrids are again evaluated during

the autumn and winter months to assess their potential yields, bulb shape, hardness, skin capacity, sprout dormancy and their keeping qualities in general. When all this information and assessments have been collected the scores are evaluated, after which conclusions are drawn, new crossbreeding combinations are proposed and a plan of action is formulated for the next test year. Once every few years all these activities result in a new variety with qualities that are better than those of the existing range of onion sets.





# Onion sets of excellent quality

The delivery season has started at Broer B.V. All our machines are running at top speed. The onion sets are of excellent quality this year, too. Conditions during harvest were ideal, and our new storage regime has had a positive effect on the onions' quality.

At the time of writing, things are pretty hectic at Broer B.V. in Andijk and Creil. All the onion sets for the spring are delivered between January and the end of April, depending on their destination. But before that time is reached, the onions follow a long, high-tech route of drying, refrigerated storage, cleaning, sorting and packaging.

### Refrigeration to save energy

The onions that are harvested in August and September are dried and then refrigerated to about 4°C. This is done to ensure that the onions retain their energy so that they will start to grow well once they have been planted.

### Due to refrigerating the onion retains its energy

When the onions come out of the cold store they have to be heated first, to facilitate the cleaning process. The next step is sorting the onions into the sizes the customers want. The onions are then visually inspected to ensure that the end product we supply is as clean and pure as possible. The inspectors of the independent Dutch inspection organisation Naktuinbouw visit Broer B.V. every day to inspect the quality of our onions. Before being packed, the onions are once



again refrigerated to the right temperature to prevent the formation of condensation.

### Ventilation in the case of postponed planting

The processing and cleaning is to 'wake up' the onions, so they are then eager to start growing. If a customer is forced to postpone the time of planting due to poor weather conditions, the onions must be stored dry and cool and must be ventilated until the time when they can be planted. This prevents the risk of them sprouting too early. This is something we always discuss with our customers. Sometimes we have to postpone the time of delivery due to poor weather. We can optionally supply our onions in boxes to growers in the Netherlands who have facilities for keeping the onions dry until the time of planting.



### Onion sets must meet the strict Quality inside requirements

#### Quality

Whether our onions meet our strict Quality inside requirements is determined in so-called 'grow outs'. That involves testing a representative number of onion sets from each lot under the same growing conditions in Bejo's greenhouses and under Bejo's researchers' guidance in Warmenhuizen. The excellent quality of the onion sets is the key to a successful crop. Broer B.V. of course hopes that good cultivation conditions will contribute towards an end product that meets all expectations.





## Germany

### Growing interest in onion sets

**The cultivation of second year onion sets in Germany is not new. As the acreage used to be much larger than it is today. The introduction of new varieties and, above all, the availability of planting stock that is free of diseases (Quality inside) has led to a markedly greater interest in onion sets the past five years. And the acreage is expected to grow even more in the future.**

Sales of onion sets by Bejo Samen GmbH are increasing, especially those of the varieties Forum, Troy, Hercules and Stur BC 20. This intensifying interest in onion sets is most apparent among growers who want to be able to supply their onions early, grow seed onions during the winter or supply onions for drying and peeling.

#### Early delivery

In Germany, ever more onion sets are being grown for early delivery. This partly bridges the gap in the market between the last stored onions and the very first seed onions fresh from the field. Of course onions are also imported in this period, for example from New Zealand.



#### Winter cultivation

In the southwest of Germany in particular, winter onions are grown on a small scale. The acreage of sown winter onions decreases slightly every year because of the many problems due to damage caused by frost and bolting. The risk of those problems is a lot smaller when onion sets are used as starting material. Meanwhile a few growers have successfully grown Troy (planted in spring) and Forum. The high yields and uniformity of these two varieties are great advantages.

#### Drying and peeling

It is commonly known that onion sets have a higher dry matter content at the time of harvest than comparable seed onions. And every extra percent of dry matter is favourable with respect to the cost price of drying. This explains the increasing popularity of onion sets for drying and peeling. The varieties Hercules and Stur BC 20 offer the perfect combination of high yields and a high dry matter content.



For more information please visit our website:

[www.qualityinside.nl](http://www.qualityinside.nl)

Or contact:

Broer B.V. T: +31(0)228 591 394  
P.O. Box 61, 1619 ZH Andijk F: +31(0)228 591 725  
Kleiakker 1, 1619 PD Andijk onion@broerbv.nl  
The Netherlands www.broerbv.nl



PARTNERS IN ALLIUM