

# Cucumber

## Rijk Zwaan Cropinfo

July 2004



The time has come again to take a look at the varieties we are growing. It is important to consider the benefits of choosing the right variety - how they can help us through the daily challenges.

The spring of 2004 was a season with very changeable weather. Sometimes there were long periods of dark days, interspersed with a few high-insolation days. More often than not, these days did more harm than good to the plants. When the condition of a plant is not at its best, the high volume of light takes too much energy from the plant. When these weather conditions occur, it is important to have a variety with a strong and healthy root system. This will help the plant to transpire and still have energy to produce fruits of good quality. If the variety does not have energy left to 'feed' the fruits under these changes in light and temperature, it will take moisture from the fruits with crooked and badly-shaped fruits as a result.

Varieties like Niagara RZ (24-116 RZ), Ladner RZ and Bodega RZ all have the necessary vigour to create strong re-growth as well as having a root system strong enough to support all the fruits. Even in crops with a high stem fruit load these varieties handle any weather situation well and give high yields of excellent-quality fruits. Niagara RZ has the added advantage of having the highest mildew resistancy level. The quality and production of Niagara RZ have been high so far and on some nurseries it has even broken all previous yield records.

Many growers are looking to plant their next crop in July or August. There are many different factors to consider for that time of the year before making your final choice of the variety you will grow.

Weather conditions will probably be hot when we replace the old crop with the new one.

The pressure from insects and diseases will be at its highest at that time.

One of the biggest insect threats in a summer planting comes from aphids. It is not so much the damage aphids cause to the plants but more the secondary diseases and viruses of which they are carriers.

Cucumber Mosaic Virus (CMV) is one of them. This is undoubtedly the most common virus infecting cucumbers worldwide. This virus is particularly active in summer and autumn.

CMV is transmitted by aphids in a non-persistent manner. The vector is able to pick up the virus from infected plants and transmit it to healthy plants, during the course of extremely short puncture bites lasting 5 - 10 seconds only. As a general rule, the aphids can transmit the disease in this way over a period of 1 - 2 hours. Many varieties of aphid are vectors; among them are the melon aphid and the green aphid.

This highly-efficient method of transmission means that the disease can spread through a crop without large numbers of aphids being visible on the plants.