

# “When prices are high, every tomato seems perfect.”

In the Portuguese municipality of Mira, in the Coimbra region, tomato grower Nuno Duarte is working towards sustainable production of flavourful tomatoes. In his greenhouses, he grows both traditional and new varieties. His approach combines careful cultivation with digital technology, years of experience and a trusted partnership with suppliers, like PlantoSys. “I know the products inside and out by now,” says Nuno. “Advisor Alfredo hardly needs to visit anymore - and when he does, we usually have lunch together.”

It's not just about nutrition, the plants are stronger

Fewer losses, higher yield security

## Smart greenhouse management

Nuno Duarte's greenhouses are located in a region with an abundance of sunshine and access to underground water resources. Still, growing tomatoes here isn't without its challenges. Reusing water, for example, requires smart techniques: water contaminated with pathogens such as *Fusarium* or *Phytophthora* can affect an entire greenhouse. Nuno explains: “I sterilise the drainage water with ozone and re-mix it with fresh irrigation water and fertilisers, which saves about 30%. Every drop counts.”

Nuno adds the fertilisers with care. Too much nutrition stimulates overly rapid growth, which comes at the expense of the tomatoes' quality. The right balance of nutrients ensures that the plants remain vigorous and the fruits develop the best taste and texture. The harvest runs from June through to December/January. To be able to pick tomatoes every day, the plants need to stay in top condition – no small feat in a climate of hot days, drought and cold nights.

“On hot days, I can easily spend two and a half hours irrigating,” says Nuno. “And if temperatures suddenly fall, we have to remove the smaller tomatoes so the plants can use their energy to keep producing strong fruit throughout the season.”

## Stronger plants through a preventive approach

Nuno started with traditional varieties, such as Coração de boi, a tasty beef tomato that ripens quickly but is prone to disease. According to Nuno, the flavour is fantastic, but “you really have to monitor it constantly.” That's why he's increasingly switching over to new, more resilient varieties. One example is the Lacio variety, a meaty roma tomato with few seeds and a longer shelf life. “There are fewer losses, more value and it's less susceptible to the *Rugosis* virus.”



Nuno reflects on his cultivation strategy: “In the first two years, I had problems with fungal diseases, like *Cladosporium* and *Tuta absoluta* was also a major threat. This year, I started a preventive approach, because we want to minimise chemical use. So far, it's going well.”

One of the most impactful changes in terms of cultivation came with the use of the CE biostimulant SilicaPower (500 ml/ha/week). Since starting to use it, the leaves are darker green and the plants are much stronger, says Nuno. He now also uses less fertiliser than before.

## Quality over quantity

The price Nuno receives for his tomatoes can vary significantly throughout the season, peaking mid-summer. But Nuno remains level-headed: “Of course, it's nice when every tomato has value, but I want my product to always be good, even when the market is tough. That's why I focus on quality, not quantity.”



## >> Nuno Jesus Duarte, Soc. Unip. Lda

Nuno's farm is located in the Coimbra region, where he cultivates several hectares of tomatoes in polytunnels every year. His tomato varieties and Coração de boi (target yield: 220-240 tonnes per hectare) are sold through a growers' organisation that distributes them across Portugal and Spain. For crop strength and vitality, Nuno uses a range of PlantoSys products, including SilicaPower, SalicylPure, ArgicinPlus and Soil Bac-1.

“We try to do more with less, but do it better. SilicaPower has helped me find that balance.”

Nuno Duarte



The tomato plants grow in coconut substrate. In addition to irrigation, humidity levels in the greenhouses are closely monitored.