

The fruit sector is under a huge amount of pressure due to the limitation of most plant protection products and climate change creating more stress for the trees. A theme that is commonly put forward in light of this, is plant resilience and how to increase it. Silicon and other micronutrients are increasingly recognised as stress-reducing compounds, and Roam Technology's silicon based biostimulant Sili-Fert P fits perfect in this story.

# THE CHALLENGE

Plants experience stress at almost every moment, either caused by pathogens or by abiotic factors. Reducing it, is very important to optimize fruit yield and quality. Our foliar biostimulant **Sili-Fert P** can help achieve this and was therefore tested in this case at an apple grower in the Netherlands.

#### **OUR SOLUTION**

The trial was performed on 6 years old apple trees from the variety Junami and **Sili-Fert P** was tested on 1 ha, next to 1 ha control area where no **Sili-Fert P** was used. Following spray application scheme was applied. Only when other products were sprayed, **Sili-Fert P** was included in the scheme hence the grower did not have to implement separate applications thereby saving time.

Date	Dosage
3/7/2020	350 ml/ha
20/7/2020	350 ml/ha
29/7/2020	350 ml/ha
5/8/2020	350 ml/ha
11/8/2020	350 ml/ha
25/8/2020	350 ml/ha
10/9/2020	350 ml/ha

First, these spray applications resulted in an increased hardness of the apples (Fig. 1). Moreover, the yield at harvest 1 was higher after **Sili-Fert P** treatment resulting in only 2 harvest moments compared to 3 in the untreated area (Fig. 2). This is a huge advancement for the growers' time management. Additionally, the brix value of the apples and the fruit weight increased significantly, and the general appearance improved. Trees looked greener and more healthy and they suffered less from sunburn.

## THE BENEFITS

- » Increased hardness of apples
- » Increased brix value
- » Increased resistance against heat stress
- » Higher yield at the first harvest

### **RECOMMENDED PRODUCT**







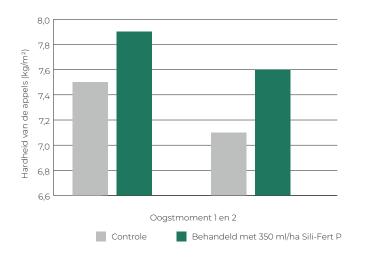
100% bioavailable silicon







Enriched with micronutrients: B, Cu, Zn, Mn & Mo Biostimulant



#### Fig. 1: Hardheid van de appels van het controleveld en het behandeld veld.

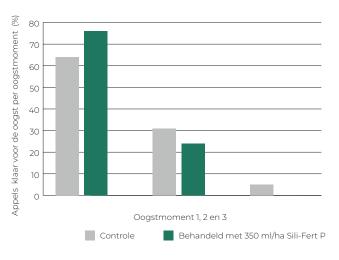


Fig.2: Appels die klaar waren voor de oogst per oogstmoment voor het controleveld en het behandelde veld (som van de verschillende oogstmomenten = 100%).

## CONCLUSION

**Sili-Fert P** proved to be an outstanding foliar biostimulant for optimizing apple quality and yield. Multiple parameters including fruit hardness, brix value and fruit weight were improved after treatment, and time was saved by the grower due to an increased yield at the first harvest reducing the number of harvests.







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