# **Lima Europe NV Blueberry trials**

The GROGREEN FIVE product range has been developed for use in drip irrigation with multiple goals: supply of 5 major nutrients (N-P-K-Ca-Mg), solving water quality problems (hard water), reducing bicarbonate levels, acidifying the soil and desalination. All while having the convenience of only using a single product.

In cooperation with the department of Pomology and Horticulture Economics of Warsaw University in Poland, we have set up a field trial to evaluate a fertilizer program with GROGREEN FIVE compared to the general practice during the 2021 season.

### **Crop variety**

Highbush blueberry.

'Bluecrop' variety.

Plant age: 30 years.

Pruned annually in the spring for rejuvenation.

Managed according to IPO principles.



### Location

Blueberry Cultivation Experimental Field: located in Blonie, Prazmow, Central Poland. Sandy soil, 150m above sea level with a humus content of 2.8%. Field area: approximately 0,25ha, drip-irrigated.



### Trial information

Experiment with 2 different combinations each represented with a row of plants (100 pcs). Randomised block design in 4 replicates. Fertigation applied using Dosatron dispenser using 1m3/plant row (100 plants).



## STANDARD FERTILISATION PROGRAM

Months	<b>Products used</b>	Dosage (kg/ha)	
	Super Fos Dar 40	20	
April	Ammonium sulfate	120	
	NPK 5-12-24	100	
	Magnesium sulfate	50	
	NPK 12-36-12	30	
May	Ammonium sulfate	100	
	NPK 12-36-12	60	
	NPK 6-12-36 + 3	60	
	Calcium sulfate	100	
June	NPK 20-20-20	120	
July	NPK 20-20-20	60	
August	NPK 6-12-36 + 3	60	
September	September NPK 6-21-36		

LIMA EUROPE	LIMA EUROPE FIVE PROGRAM			
Products used	Dosage (kg/ha)			
FIVE TERRA (Start mid April)	60			
FIVE MULTI (May & June)	540			
FIVE FRUCTUS (July & August)	180			
FIVE TERRA (September)	40			



# **Results & Conclusion**

Program	Fruit size Mean (mm/fruit)	Fruit weight Mean (g/fruit)	Firmness Mean (N)	Soluble solids (°brix)
Standard	17.70 a	2.17 a	3.34 a	10.83 a
Lima Europe Five	17.64 a	2.15 a	3.32 a	10.72 a

# Marketable Yield Mt/ha Standard program Five program 20 000 15 000 11,75 Mt/ha 10 000 0







Extra fertiliser cost: 900 EUR
Increased yield by 34%
Extra income: 11,160 EUR/ha
ROI 1340%
Simplified fertilisation program
Similar fruit quality (size, firmness, weight, brix)



While providing the same amount of elemental nutrients (Nitrogen, Phosphorous, Potassium, Calcium and Magnesium), the program of Grogreen FIVE resulted in a yield increase of 34% compared to the standard fertilizer practice in Poland.

GROGREEN FIVE is the perfect fertilizer for your blueberry crop. It will supply all needed nutrients in a water soluble form, directly to the plant.

With the very low pH of 2 - 2,5, this product range is the ideal partner for blueberry crops cultivated in alkaline/saline soils. The product will dissolve bicarbonates and reduce the pH, as well as replacing sodium ions in the soil by the addition of plant-available calcium.

You only need 3 products throughout your entire growth cycle to cover the growth season of the crop.

