Agromaster®

Trial results

Onion
(Allium cepa)

Conclusions

Higher yields - up by 9%
Steered by soil temperature, nitrogen is released according to plant needs and improves yield - plus 8 mt/ha

Higher NUE - up by 41%
Compared to conventional fertilizers, Agromaster increases nitrogen use efficiency (NUE). In this trial NUE increase is 41% - i.e. extra 72 kg of onion per each kg of N applied

Positive ROI - extra 1965 €/ha
Yield increase brings additional profit to growers and makes Agromaster a reliable solution to fertilize open field soil grown crops

N	12%
P	11% P_2O_5
K	18% K_2O
Mg	6% MgO
S	27% SO_3

ICL

E MAX Release Technology 2-3 N COATED

When

Seeding:
April 2022
Harvest:
September 2022

Where

Wiewiórczyn, Poland

Crop

Onion, Barbaro F1
(*Allium cepa*)

Soil type

Sandy loam
pH = 6.2
P, mg/kg* = 75 (low)
K, mg/kg* = 128 (medium)

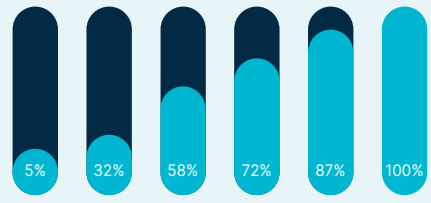
Measurements

Total yield and quality parameters, NUE

** Egner-Riehm*

Cumulative monthly release of N during crop cycle

Controlled release of nitrogen reduces losses by leaching, volatilization and denitrification thereby increasing its effectiveness to plants.



ICL's app – CRF Timer simulates the release of nitrogen, based on local weather conditions.

Try it yourself!

http://icl-growingsolutions.com

Objective

To evaluate the impact of NPK-based CRFs, like Agromaster, on yield and quality parameters of onion, compared to frequently used NPK-based conventional fertilizers (grower's practice).

Trial station and set-up

Experimental trial station – Faculty of Agriculture and Biotechnology, Bydgoszcz. Randomized block design with 4 repetitions

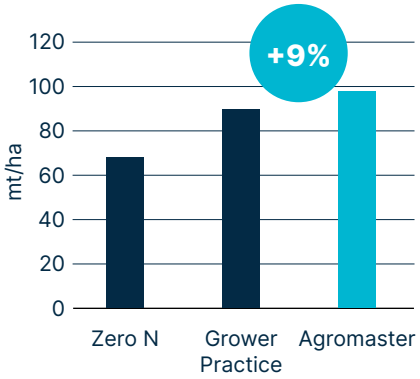
Treatments

Treatment	Products	N rate, kg/ha	Timing
Zero N			
Grower Practice	12-11-18+2.7MgO+20SO_3	72	Before seeding
Agromaster	Agromaster, 12-11-18+6MgO+27SO_3 63% coated N, 2-3M longevity	72	Before seeding

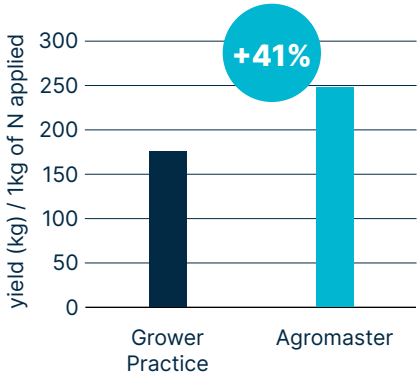
Three weeks after seeding, 150 kg/ha of ammonium nitrate was applied in both treatment zones Agromaster and Grower Practice.

Results

Yield



NUE - Agronomic Efficiency



Economical evaluation

Differences	Gross income €/ha	Extra cost of fertilization €/ha	Gross profit €/ha
Agromaster vs Grower Practice	2025	60	1965

Gross profit was calculated based on onion local market price of 250 euro/mt and deducting extra fertilization cost/ha.
NUE, Nitrogen Use Efficiency, calculated as Agronomic Efficiency, AE = (YF-Y0)/F.

Master crop nutrition in any condition

No matter how challenging your growing conditions, you can count on Agromaster for top performance. It combines our advanced coating technology with specially selected conventional granules to give you optimum ease of use and outstanding results.