



AGROMASTER®

Trial results

Onion (*Allium cepa*)

Key conclusions

Total yields increased by 9,8%

Influenced by soil temperature, nitrogen is released according to plant needs, which increased yield by 6,9 mt/ha.

Higher NUE

Agromaster improves nitrogen use efficiency, increasing the onion yield by 43 kg for each kg N applied, compared to conventional nitrogen fertilizer.

Excellent ROI

Agromaster increased profit by up to €2.164/ha. The higher yield delivers a consistent profit to farmers, making Agromaster a reliable solution for open-field crop fertilization.

N	27%
P	0% P ₂ O ₅
K	13.5% K ₂ O





When

May 2023 -
September 2023



Where

Lelystad,
The Netherlands



Crop

Onion (*Allium cepa*
for consumption or
processing)



Soil type

Clay
pH 7.4
CEC 102
Clay 18%
Org.matter 1.7%

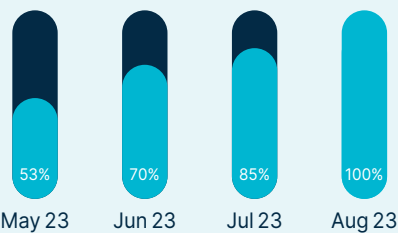


Measurements

Yield

Cumulative monthly release of N during the crop cycle

The controlled release reduces nitrogen leaching, volatilization, and denitrification, increasing the nitrogen availability to plants.



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Objective

To evaluate the performance of Agromaster® 27-0-13.5, 2-3M, 50% coated N with eqo.x® release technology vs CAN 27 N in irrigated onion crop.

Trial set-up

Randomized block design with 4 repetitions.

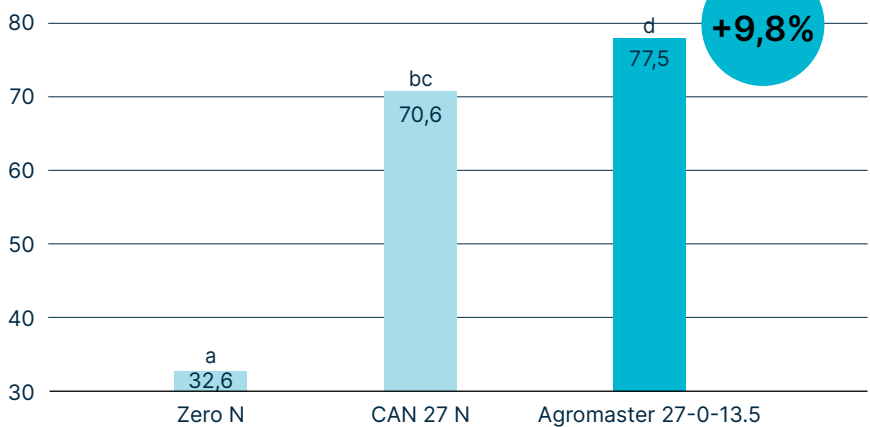
Treatments

Treatment	Products N applied	Total NPK kg/ha		
Control	-	-	10 P ₂ O ₅	191 K ₂ O
CAN + irrigation	CAN 27 N	160N		
CRF + irrigation	Agromaster 50% coated N	160N		

Results

Compared to conventional CAN 27 N fertilizer, Agromaster increased the yield by 9,8% or 6,9 mt.

Total yield (mt)



Identical letter's indicate no significant difference according to the Duncan test

Yield (mt)

Products	Yield (mt)	Increase (mt)	Increase (%)
CAN 27 N	70,6	-	-
Agromaster 27-0-13.5	77,5	6,9	9,8

Economic evaluation

Treatment	Fertilizer cost €/ha	Gross income €/ha	Income minus fertilizer costs €/ha	ROI €
Control (no nitrogen)	0	10.758	10.758	-12.412
CAN 27 N	128	23.298	23.170	0
Agromaster 27-0-13.5	241	25.575	25.334	+2.164