



Agromaster[®]

Trial results

Rice (*Oryza sativa*)

Higher yield – up by 17%

Controlled release of nitrogen in the tailor made Agromaster formula for rice increased the yield by up to 17% comparing to the standard NPK fertilizers.

Excellent performance with reduced application rate

Agromaster with 35% lower dose rate provides similar yields as the full-dose conventional fertilizers, saving production costs.

Higher NUE – up by 57%

Comparing with conventional fertilizers, Agromaster reduces N losses, and improves nitrogen use efficiency by up to 57% (extra 20 kg of rice per each kg of N applied.)

Positive ROI – extra 380 €/ha

Yield increase brings extra profit to growers and makes Controlled Release Fertilizers (CRF) a reliable solution for rice fertilization.

N	30%
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P	8% P ₂ O ₅
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K	12% K ₂ O
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When

Spring - Autumn 2023



Where

Valtochori, Greece



Crop

Oryza sativa



Soil type

Clay
Total N – 0.5 mg/kg
P – 14 mg/kg
K – 134 mg/kg
pH – 8.4
OM – 2.2%

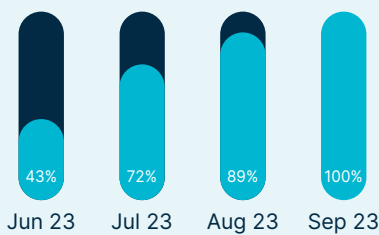


Measurements

- Total yield
- NUE

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!



www.icl-growingsolutions.com

Objective

To evaluate the impact of Agromaster 30-8-12, 71% coated N, 3-4 M on rice yield and NUE in comparison to standard NPK.

Trial station and trial set-up

AgriScience GEO

Randomized block design with 4 repetitions

Treatments

Treatment	Product	Dose rate, kg/ha	Timing and method
Control (280 NFU)	NPK 30-10-10	600	Pre-seeding / Broadcast with incorporation
	40-0-0+S	250	End of tillering / Top-dressing
Control (280 NFU)	NPK 30-10-10	600	Pre-seeding / Broadcast with incorporation
	40-0-0+S	250	Panicle initiation / Top-dressing
NPK, reduced N (220 NFU)	NPK 30-10-10	400	Pre-seeding / Broadcast with incorporation
	40-0-0+S	250	Panicle initiation / Top-dressing
Agromaster (280 NFU)	Agromaster 30-8-12, 3-4M, 71% N coated	600	Pre-seeding / Broadcast with incorporation
	40-0-0+S	250	Panicle initiation / Top-dressing
Agromaster, reduced N (220 NFU)	Agromaster 30-8-12, 3-4M, 71% N coated	400	Pre-seeding / Broadcast with incorporation
	40-0-0+S	250	Panicle initiation / Top-dressing

Results

■ Yield, kg/ha — NUE, kg of yield/kg of N applied

