Agromaster®

Trial results

Sugar beet
(Beta vulgaris)

Conclusions

Better crop development
After 3 months from seeding, plants fertilized with Agromaster developed faster and vigorously

Higher sugar yield - 28 mt/ha
Net yield reached almost 140 mt ha supplying approx. 28 mt sugar ha – with 5 mt more than grower practice

Higher NUE - up by 16%
Agromaster provides higher nitrogen use efficiency (NUE) – increase of yield by 16% for every kg of N applied

Positive ROI - extra 625 €/ha
Yield increase brings extra profit to growers and makes Agromaster a reliable solution to fertilize open field soil grown crops

N	36%
P	0% P_2O_5
K	0% K_2O
S	21% SO_3

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E MAX Release Technology · 1-2 · N COATED

When

Seeding:
end of March 2021
Harvest:
end of October 2021

Where

Juvigny, France

Crop

Sugar beet
(*Var. Libellule*)

Soil type

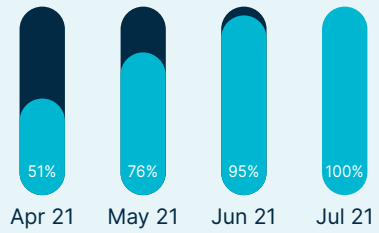
Calcareous
pH = 8.2
OM, % = 3.84

Measurements

Crop development, net yield, and sugar level

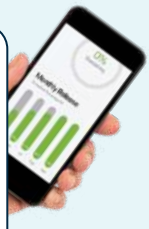
Cumulative monthly release over crop cycle

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!



Objective

To compare the efficiency of Agromaster, as controlled release nitrogen-based fertilizer, compared to conventional nitrogen one, in respect of crop development, yield and sugar level.

Trial station and set-up

Antedis, randomized block design with 4 repetitions

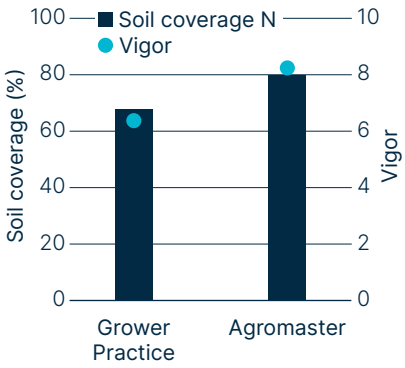
Treatments

Treatment	Products	Dosage, kg/ha	Total-N mineral, kg/ha
Grower Practice	Ammonium nitrate, 27-0-0	350	90
Agromaster	Agromaster, 36-0-0+21SO_3 1-2M, 80%N	250	90

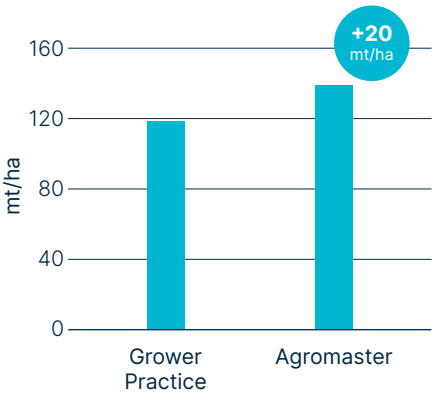
Both fertilizers were spread few days after sowing
All treatments received same level of P and K.

Results

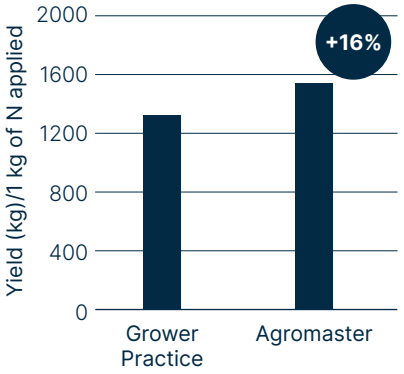
Crop development, 3 months after seeding



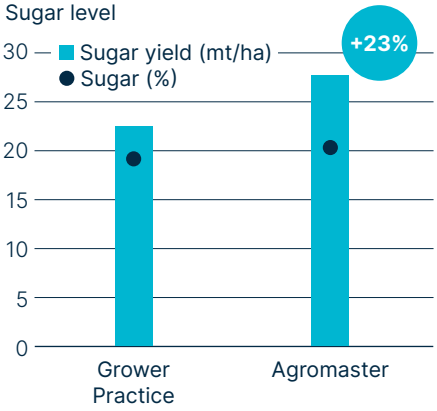
Sugar beet, net yield



Nitrogen Use Efficiency, PFP*



Sugar level



** PFP = Partial Factor Productivity = Total yield (kg) / Total N applied (kg)*

Economical evaluation

Differences	Gross income** €/ha	Extra cost of fertilization, €/ha	Extra gross profit, €/ha
Agromaster / Grower Practice	651	26	625

*** Gross income calculated based on market price of sugar beet of 40 euro/mt*

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