More grain on the same nitrogen

Arginex Wheat is a non-microbial seed treatment for winter wheat. Applied on-seed before drilling, it gets the crop established faster, adds grain on top of the grower's existing fertiliser programme, and holds yield steadier through the weather and soil a grower cannot control.

Arginex combines arginine with phosphate, forming a stable non-living formula. Its molecule is identical in every batch.

Plants absorb nitrogen from arginine more efficiently than from other nitrogen sources.

Arginine is taken up intact by the plant, without the need for prior mineralisation.

Phosphate binds with arginine to form a stable, slow-release complex.

Arginine supports soil biology by attracting mycorrhizal fungi and strengthening root systems.

Why seed partners choose Arginex Wheat

Faster establishment, more grain
Higher yield at all seven sites. +0.26 t/ha (+4.3%) on average across seven sites in France, Germany, Italy and Poland ($p = 0.009$).

Hold yield despite reduction in mineral fertiliser
With N and P cut by 20%, the treated crop was not significantly different from the uncoated full rate ($p = 0.36$).

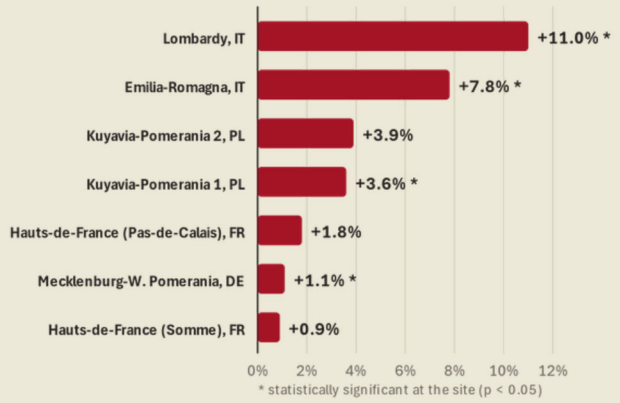
Yield stability maintained across plots
When weather and soil vary across a field, plots sown with Arginex-treated seed varied about 20% less in yield than plots sown with untreated seed, at all seven sites ($p = 0.01$).

Grain quality protected
No penalty on grain protein (−0.3 to +0.4 points, the only significant change a rise) or thousand-kernel weight. The extra yield came from more grains, not heavier ones.

Arginex = bound nitrogen + root activation + soil regeneration

Higher yield at all seven sites

Coating effect on grain yield, averaged over five fertiliser rates. Seven independent trials, 340 plots.

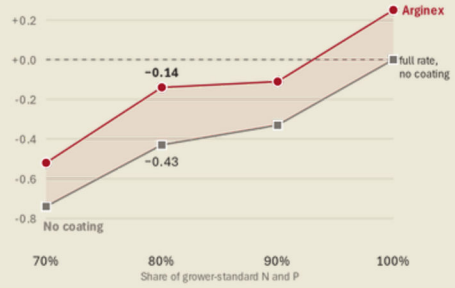


Grain yield with Arginex + full standard N vs full standard N alone. Data based on 7 sites and 340 plots.

Wheat grain from untreated seeds (top) vs wheat grain from Arginex treated seeds (bottom)

The coating holds yield as nitrogen comes down

Yield difference in t/ha from the uncoated grower standard, seven-site mean.



Cutting N and P by 20% cost 0.43 t/ha of grain yield from untreated seeds. The same cut cost 0.14 t/ha from seeds treated with Arginex.

What drives the gain

Faster emergence leads to yield gain
+14 to +18% at the first count at both Italian sites ($p \leq 0.001$); +15 to +25% at one French site

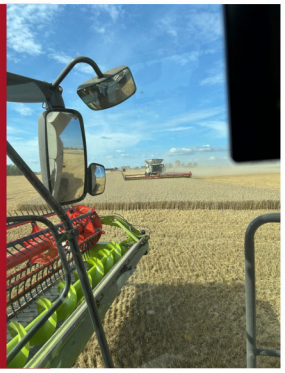
Greener early canopy
NDVI 15 to 29% higher in Italy; 12 to 18% more ground cover in Poland ($p < 0.001$)

Grain quality protected
Protein content maintained (otherwise increased); kernel weight unchanged at six of seven sites

Steadier through what growers can't control
About 20% less yield variation between treated plots than between untreated plots, at every site

"We could see a visible physical difference when it was harvested - in stem and straw quality."

Danish grower, 2026 wheat trial



Fertiliser rate (N and P	Arginex	No coating
100% farmer standard	**+0.25**	0.00
90% farmer standard	**-0.11**	-0.33
80% farmer standard	**-0.14**	-0.43
70% farmer standard	**-0.52**	-0.74

Yield difference from the uncoated full rate, t/ha. Gains were largest where establishment was hardest: wheat after wheat, sown late and slow to emerge, on dry sandy soils or into a hot May and June.

One season (2025/26). Seven independent trial sites in France, Germany, Italy and Poland: randomised complete block, 10 treatments (70, 80, 90 and 100% of grower-standard N and P, each with and without coating, plus untreated), 5 replicates (4 at DE01), 340 plots. Coating effect: +0.26 ± 0.06 t/ha, p = 0.009 across sites. Full dataset available on request.

Start with the roots. Finish with more grain.

Arginex Wheat combines arginine with phosphate in a stable, slow-release complex that plants take up intact, without prior mineralisation. Unlike biostimulants built on living microbes or variable blends, it is a non-microbial formulation with a long shelf life, stable on-seed and compatible with standard seed treatment programmes. The arginine also supports soil biology, attracting mycorrhizal fungi and strengthening root systems for stronger early growth.

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