AgroSpectrum ASIA
Envisaging Future | Updating Present

Corteva turns to biological seed technologies for next wave of innovation

06 July 2026 | News

Its partnership with Arevo aims to strengthen soybean performance through enhanced root development, nutrient uptake and biological nitrogen fixation

As agriculture shifts towards more resource-efficient crop production, Corteva Agriscience has partnered with Swedish crop nutrition company Arevo to integrate an innovative seed-applied nutrition technology into its European soybean portfolio.

The collaboration centres on Arginex Soy, an arginine-based seed treatment developed by Arevo that is designed to enhance early root development, stimulate nodulation and improve nutrient uptake during the critical establishment phase of soybean growth.

The agreement highlights the increasing convergence of seed technology and crop nutrition as companies seek to improve productivity while reducing agriculture's environmental footprint.

Seed Becomes the First Nutrient Delivery Platform

Rather than relying solely on in-season fertilizer applications, the partnership reflects a growing industry trend towards delivering targeted nutrition directly through treated seeds.

Arginex Soy uses arginine—an amino acid that serves as an organic nitrogen source—to encourage the development of root hairs, the structures responsible for forming nodules where nitrogen-fixing bacteria colonise soybean roots.

Improved nodulation enables soybean plants to fix atmospheric nitrogen more efficiently, strengthening root systems and enhancing nutrient use during the earliest stages of crop establishment.

The approach aims to improve plant vigour before crops encounter environmental or nutritional stress, potentially laying the foundation for higher productivity throughout the growing season.

From Evaluation to Commercial Integration

Before entering Corteva's commercial portfolio, the technology underwent an extensive technical assessment covering agronomic performance, formulation stability and compatibility with the company's existing seed treatment systems.

According to the companies, the evaluation demonstrated that the product could be integrated into existing commercial seed treatment operations without requiring changes to manufacturing or application processes.

The compatibility is expected to simplify adoption for growers while enabling the technology to reach the market through Corteva's established soybean seed distribution network across Europe.

Improving Nutrient Efficiency

The partnership comes as European agriculture faces mounting pressure to improve nutrient-use efficiency amid rising fertilizer costs, tightening environmental regulations and increasing scrutiny over agricultural emissions.

Soybean cultivation has become an important component of sustainable crop rotations because of the crop's natural ability to fix atmospheric nitrogen. Technologies that strengthen this biological process are increasingly viewed as valuable tools for improving productivity while reducing dependence on external nitrogen inputs.

Seed-applied nutritional technologies are also attracting growing interest because they provide targeted support during early crop development, when strong root establishment often determines later-season performance.

Biological Innovation Gains Momentum

The agreement underscores the broader transformation underway in crop input innovation.

Rather than focusing exclusively on traditional fertilizers or crop protection products, agricultural companies are increasingly investing in biological and physiological solutions that improve nutrient efficiency, plant resilience and overall crop performance.

By combining advances in seed treatment, plant nutrition and biological processes, these technologies are becoming central to strategies aimed at producing more with fewer inputs.

For Arevo, the collaboration provides access to one of Europe's largest commercial seed platforms, significantly expanding the reach of its proprietary technology. For Corteva, it strengthens a seed treatment portfolio increasingly focused on helping growers maximise crop performance while advancing more sustainable production systems.

As the seed industry continues to evolve beyond genetics into integrated crop performance solutions, partnerships like this illustrate how innovation is increasingly beginning not in the field—but on the seed itself.