



Redox expands Nitrogen technology with new foliar RDX-flex formulation

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Redox Bio-Nutrients has expanded its nitrogen technology portfolio with RDX-Flex, a 10 per cent urea nitrogen foliar formulation designed to support nitrogen utilisation during the crop cycle



Redox Bio-Nutrients is expanding its nitrogen technology portfolio with RDX-Flex, a new foliar formulation designed to give growers greater flexibility in how they manage nitrogen during the growing season. The product is based on a 10 per cent urea nitrogen formulation and uses the same patented botanical-extract technology incorporated in Redox's RDX-N product. The company says the technology works within the plant to support natural processes involved in nitrogen assimilation and its conversion into amino acids and other compounds associated with plant growth, yield and crop quality.

The launch extends Redox's nitrogen technology from the soil into the crop canopy, creating an additional application window after planting. Rather than positioning the product simply as another nitrogen source, Redox is focusing on nitrogen utilisation—an increasingly important consideration as growers seek to improve nutrient-use efficiency while managing input costs and crop performance.

From nitrogen application to nitrogen utilisation

Nitrogen is essential to crop growth, but the amount applied to a field does not necessarily translate directly into nitrogen incorporated into plant biomass. Nitrogen can be lost through several pathways, while crop uptake and utilisation vary according to crop stage, weather, soil conditions and fertility management. That creates an opportunity for technologies designed to support the plant's ability to assimilate available nitrogen.

RDX-Flex is designed around that proposition. Redox says its botanical-extract technology supports the natural processes through which plants assimilate nitrogen and convert it into amino acids and other compounds needed for growth and development. The company describes the product as a way of helping crops metabolize nitrogen more efficiently inside the plant, although the extent of the agronomic and economic benefit will depend on crop, application timing, nitrogen availability and field conditions.

A second application window

The principal difference between RDX-Flex and Redox's existing RDX-N is the point in the crop cycle at which the products are applied. RDX-N is soil-applied at planting, while RDX-Flex is designed for later foliar applications. That gives growers the option of incorporating Redox's nitrogen technology at different stages of crop development, depending on their fertility programme and crop requirements.

"RDX-Flex represents the next step in more than a decade of advancement in our nitrogen technology," said Darin Moon, founder, owner and CEO of Redox Bio-Nutrients. "It gives growers more flexibility in how and when they put this technology to work, creating additional opportunities to support nitrogen utilisation, yield and crop quality throughout the season," he added.

The two products can be used independently or together, allowing growers to integrate them into existing nitrogen strategies rather than requiring a complete restructuring of their fertility programmes.

Flexibility becomes the product proposition

The launch reflects a broader change in the nutrient-management market, where product development is increasingly focused on getting more value from nutrients already applied rather than relying solely on higher application rates. For growers, flexibility can be as important as formulation. Nitrogen requirements change throughout the crop cycle, and conditions at planting may differ substantially from those encountered later in the season.

A foliar formulation provides an additional opportunity to apply the technology after the crop has emerged and established its canopy. Redox says RDX-Flex is shelf stable, effective at a low use rate and compatible with a broad range of commonly applied crop inputs. These characteristics are intended to make the product easier to integrate into existing spray programmes.

The product can be used independently or alongside RDX-N, depending on the crop, nitrogen strategy and existing fertility programme.

Building a broader nitrogen-efficiency platform

RDX-Flex represents the latest expansion of a technology platform that Redox says has been under development for more than a decade. The company's approach combines nitrogen with botanical extracts intended to influence the plant's internal nitrogen-assimilation processes.

That places the technology within a growing segment of agriculture focused on nutrient-use efficiency, where biological products, enhanced-efficiency fertilisers and plant-based technologies are being developed to improve the conversion of applied nutrients into crop growth. The commercial opportunity will ultimately depend on whether these technologies can deliver consistent benefits across crops and production systems while fitting within growers' existing agronomic and economic frameworks. RDX-Flex is now available through Redox Bio-Nutrients, giving growers an additional foliar option within the company's nitrogen technology portfolio.