DPH Biologicals® Study Announces Clear Modes of Action for TerraTrove® AmplAphex™

Findings show AmplAphex Foliar Impact on Abiotic Stress Reduction

Proven Performance with On-Farm Results Validated Across the U.S.

Princeton, IL – April 23, 2025 – DPH Biologicals® announced groundbreaking mode of action findings in addition to results from a comprehensive multi-year field trial program for its next generation biofertilizer TerraTrove® AmplAphex™, demonstrating its transformative impact on crop yields and soil health.

AmplAphex represents the next generation of innovative products powered by the RegenAphex™ Technology Platform, building on the trusted foundation of SP-1 Classic®. DPH Biologicals has implemented a new manufacturing process that has enhanced the formulation to create a lower use rate higher performing product.

AmplAphex Mode of Action Identified
Following multi-year field trials, DPH Biologicals conducted testing with Eurofins Bio Diagnostics to identify precise modes of action for AmplAphex as a foliar application. The study demonstrates that AmplAphex supports the plants' natural ability to better withstand abiotic stressors, such as high salinity and extreme temperature environments.

"When I first started working with biological technologies, many of the products were simply positioned for plant health or yield benefits without knowing why. One of the common questions we get is how does this work and why does the plant respond. The results of these studies answer these questions and help support our partners in positioning this product with confidence," said Alex Cochran PhD, chief technology officer at DPH Bio. "We had a good understanding of what AmplAphex does in the soil to improve crop performance but the results we have seen with foliar applications haven't been as easy to explain. This new MOA work -- in addition to the 5.8 bushel increase we have seen in our multi-year trials -- gives us strong confidence in recommending foliar applications of AmplAphex to growers."

Multi-year corn trial results include:

- A **5.8-bushel yield increase** when paired with foliar herbicide applications.
- Equivalent or better yields when replacing up to 50% of standard starter fertilizer inputs,
- A **6-bushel yield increase** with a 90% WIN rate when used alongside standard starter fertilizer programs.

AmplAphex is appropriate for conventional and organic practices. In addition, an early post application gives growers the benefit of the product reaching both the soil and the plant. AmplAphex boosts plant vigor, improves soil structure, optimizes nutrient and water use efficiency, and helps minimize stress caused by environmental conditions allowing the plant to maximize its yield potential.

Why Growers Choose AmplAphex:

- **Convenient** low use-rate liquid formulation compatible with broad-acre applications
- Proven **Performance** with real-world results validated across geographies.
- Ideal **Tank-mix partner** compatible with herbicides and fertilizers for seamless integration into existing practices.

Growers can contact DPH Biologicals for more information about incorporating AmplAphex into their crop management practices.

About DPH Biologicals

Management-owned since 2024, DPH Biologicals® is focused on advancing agriculture's shift toward a more balanced biological approach. DPH Bio emphasizes scientific research, product development, field testing and partnerships to offer proven, profitable biological products. With a legacy that spans over three decades, DPH Bio's development capabilities and commercial reach allow novel biologicals to get to market, ultimately providing more sustainable solutions that seamlessly integrate into modern farming practices. DPH Biologicals' portfolio is anchored by two branded platforms—**BellaTrove®** for biocontrols and **TerraTrove®** for biofertilizers—together representing a complete portfolio of biological solutions.

For more information, visit www.dphbio.com.