“2016/2017 has been a year full of new opportunities and accomplishments. We released new patents, created new products, expanded existing platforms including Precision Ag integration activities, and continued our strategic partnerships with both clients and research organizations. You have my personal invitation to contact me direct via e-mail at mriess@unibestinc.com. Thank you for your continued support and interest in UNIBEST International.”

-  Mark Riess, CEO

UNIBEST Develops Precision Ag Platform – “SOIL ANALYTICS”

UNIBEST International has developed Soil Analytics to auto-generate customer data reports with syncing capabilities for integration with 3rd party soils labs and GIS Software Platforms. Our global partners can access this database; a one-of-a-kind, proprietary in-house program that tracks customer samples and provides access to customized crop reports and transfer files.

This platform resides on the Amazon Web Services (AWS) Environment ensuring security, stability, and availability. Soil Analytics protects UNIBEST’s unique modeling logic and algorithms utilized for data modeling.

Reports are driven by nutrient data quantified by our patented Ion-Exchange Resin Platform. This platform provides key measurements of an individual soils ability to release/provide plant-available nutrient forms in a fashion that matches crop acquisition/uptake requirements (lbs/Ac/Day) at key growth stages. This measurement (lbs/Ac/Day) is only achievable through Ion-Exchange Resin Analysis and is changing the way the industry manages soils nutrients to maximize yields and quality.

For more information on Soil Analytics, UNIBEST has developed a short video on how the system works. Watch the video here: https://www.youtube.com/watch?v=9EboLcevBso
Expansion of UNIBEST Ag Capabilities

UNIBEST has expanded its offerings for 2017 with the introduction of our newly patented Nutrient Product Testing Platforms. UNIBEST Nutrient Product Testing Platforms offer agribusiness companies, growers, agronomists, and soil amendment developers the ability to quantify the value of products after they are applied and have interacted with agricultural soils. Studies are performed in a controlled laboratory environment with replications. Products tested include biostimulants, organic acids, biologicals, organic and synthetic fertilizers. This platform is changing the way industry evaluates product performance (Read Below). An additional offering specific to growers and agronomists called Try-Before-You-Apply will also be available soon (Read Below). Future offerings will also include Sustainability Reporting (Read Below).

Nutrient Product Testing

Offers fertilizer product development companies and agribusinesses the ability to easily quantify, evaluate and market the availability of nutrient products once they have interacted with agricultural soils. The effects of biological and biostimulants on nutrient availability can also be quantified. Years of field trials and data collection can be accomplished in just weeks with this platform. Understanding and quantifying product efficacy on agricultural soils can lead to substantial increases in ROI and the next yield bump.

Try-Before-You-Apply

Try-Before-You-Apply is a hybrid of the Nutrient Product Testing Platform that offers agronomists, distributors and growers the opportunity to quantify and evaluate the efficacy of a particular fertilizer application program to their soil prior to actually purchasing and applying to their field. The customer simply sends their soil(s) to the UNIBEST Lab, the lab uploads the proposed fertilizers and application rates, applies them to the grower’s soils and quantifies the efficacy of the fertilization program. Decisions are made based on particular soils application response that is specific to each field or zone to maximize ROI and crop quality.
Sustainability Reports

UNIBEST Sustainability Reports will provide growers with critical nutrient tracking information of their fertilizer use and sustainability practices over a growing season. UNIBEST Ag Manager™ data will quantify the amount and movement of available forms of applied nutrient in the rooting profile over the course of the season. Sustainability Reports give the grower a visual model of fertilizer applications and inputs within the soil profile, providing quantifiable data associated with sustainability and 4R nutrient stewardship practices.

SOIL SAVVY™

In October 2016, UNIBEST released the home soil test kit, Soil Savvy™. The release includes new packaging, upgraded testing platforms, and improved reports for garden, lawn, or ornamental applications. Soil Savvy™ helps the home gardener “Garden like a pro” in 3 easy steps. Soil Savvy is currently offered on Amazon.com and has the highest rating for professional soil test kits with a 4.7/5.0 rating (04/03/17).

Along with the release of our soil test kit, there is an instructional video to help guide the customer on how to use Soil Savvy™: https://www.youtube.com/watch?v=p4crDqkbK-k&t=3s. We have partnered with numerous YouTube creators supporting sustainable gardening and lawn care practices. One such video featuring Soil Savvy™ can be seen here: https://www.youtube.com/user/LawnCareMidwest

Since the national release of Soil Savvy™, UNIBEST has been actively working with Independent Garden Centers and Professional Landscape Companies to bring this professional test kit to home owners for turf, ornamental and gardening applications.
LABORATORY ADVANCEMENTS

UNIBEST has developed three new patent-pending systems to aid in commercial laboratory analyses. The systems developed include a Field-Moist Soil Compositing System, Automated Cleaning System and Automated Leaching System. Each system was designed to improve laboratory efficiency and increased throughput for the soil composition system which composites field-moist soil samples, cleaning process which removes soil residue, and the leaching process which extracts nutrients from the resin capsules prior to analysis.

UNIBEST is working with agricultural laboratory partnerships and is actively working to license five new laboratory partners prior to the end of 2017.

NATIONAL RELEASE OF ECO-TRACKER™

This past year, UNIBEST attended the National Water Quality Conference in Tampa, Florida to network and market the release of our Eco-Tracker™ water quality monitoring system. During the conference, UNIBEST met with individuals from the EPA, USGS, universities, and regional conservation districts interested in collaborating on grants and Natural Resource Conservation Service (NRCS) programs. Some of the projects discussed at the conference included heavy metal detection, estuary monitoring and nitrogen/phosphorus reduction studies within large watersheds such as Chesapeake Bay.
ECO-TRACKER™ APPROVED FOR PASSIVE GROUNDWATER SAMPLING

Eco-Tracker™ water quality systems have been approved for groundwater sampling per ASTM Guide-D7929-14. The systems passively monitor contaminant movement and measure cumulative loads for targeted contaminates. ASTM approved the use of ion-exchange resins as a passive screening tool in 2016.

NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

UNIBEST sponsored a booth and participated in the 2017 National Association of Conservation Districts annual meeting in Denver, Colorado. The event was an opportunity to showcase the benefits of our AG Manager™ and Eco-Tracker™ samplers to bridge the sustainability gap between soil health, crop productivity, and water quality. In combination, these samplers provide a comprehensive and cost effective approach to measure levels of bio-available nutrients and off-target nutrient movement to adjoining watersheds. The cumulative data provides information to assess Best Management Practices including 4R nutrient stewardship activities while quantitatively measuring the success of conservation efforts influencing environmental recovery.

COLLABORATION WITH VIRGINIA TECH

Over the past year, UNIBEST has collaborated with Virginia Tech’s Biological Systems Engineering Department Water Resources Research Center on multiple grant opportunities. Most recently, UNIBEST was invited by Virginia Tech to support their on-going CIG grant paired with a National Fish and Wildlife Foundation grant to examine nutrient credit trading and landowner nutrient practices. UNIBEST’s AG Manager™ and Eco-Tracker™ samplers will be used to help evaluate the effectiveness of agriculturally productive riparian buffer zones to improve the water quality of adjoining waterways. The project will quantify off-target movement of nutrients from adjacent cropland and nutrient loading to bordering waterways in the Chesapeake Bay watershed. In addition, UNIBEST’s samplers will be evaluated as a potential low-cost solution to support landowner long-term monitoring and assessment of best management practices and nutrient application strategies.

FUN FACTS – UNIBEST International, LLC

- Our products have been sold in over 50 countries since 2013
- > 150 university studies over the past few years
- 2016 saw the launch of our EcoTrackServices Division, Soil Savvy and the newly introduced, Nutrient Product Testing Platforms for Agricultural Clients
- We are a HUBZone certified Small Business
- We offer robust Agronomic and Environmental Training Programs
- Patent pending – Field-Moist Soil Compositing System for commercial laboratory partnerships