

SMARTBIOME™

Spoiler Investigation

Spot Spoilers. Act Confidently.
Prevent Contamination.



Your Trusted Partner in Augmented Diagnostics

A New Paradigm for Spoiler Risk Management

Meet SMARTBIOME™ — an innovative platform designed to make advanced spoilage investigation and prevention accessible to food manufacturers. From raw materials to in-process to finished products, SMARTBIOME™ leverages powerful sequencing capabilities, bioinformatics, exclusive spoilers knowledge base, and data science to transform complex data into actionable insights, allowing you to:



Identify the root cause of spoilage problems



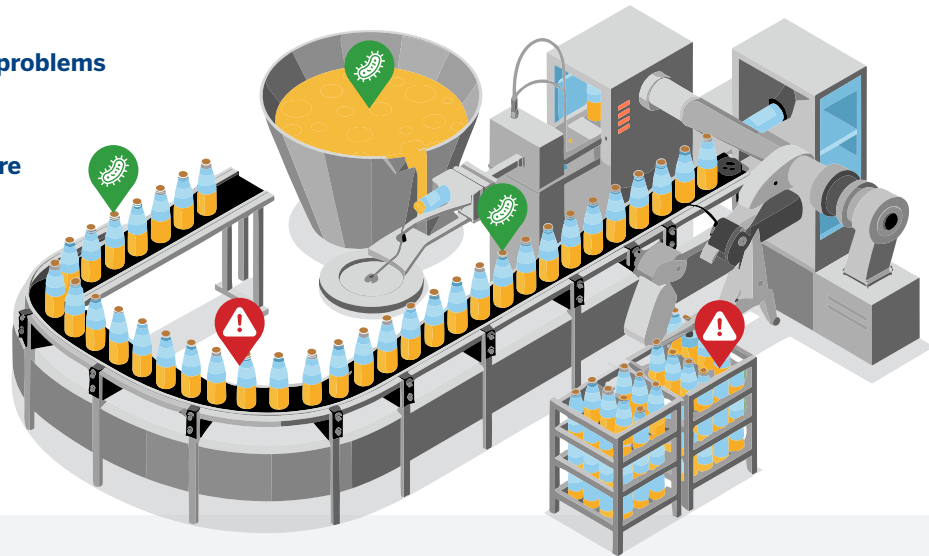
Optimize workflows and verify failure points



Genetically map your entire production process



Perform preventive inspection for new risks



These tangible benefits in your operations can translate directly into:



Reduction in scraps and non-quality costs



Strengthened product quality to help protect brand reputation



Optimized cost efficiency



Improved consumer safety and satisfaction

Understand Your Spoilage Profile and Make Informed Decisions

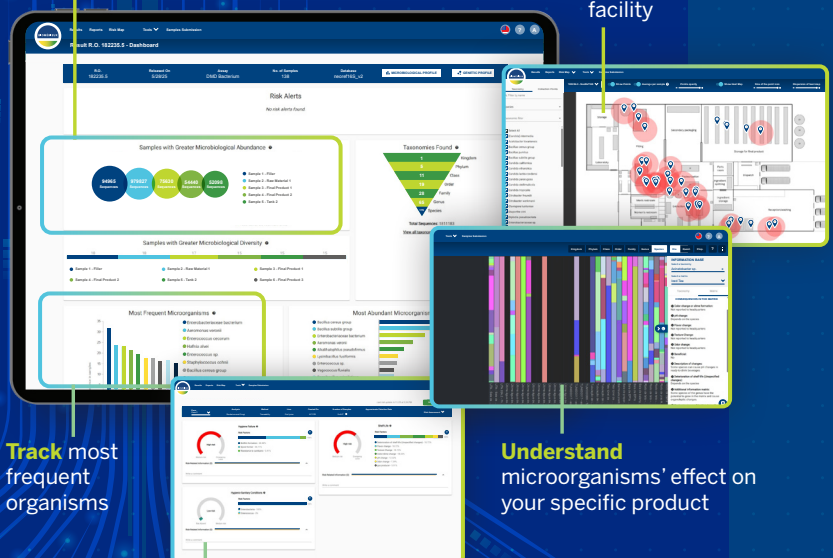
Results from your samples are populated in the SMARTBIOME™ platform, where your complex data is transformed into intelligent and intuitive visualizations to help you better understand your unique microbiota.

The unique SMARTBIOME™ knowledge base contains extensive information on more than 3,000 microorganisms, detailing optimal growth conditions (pH, temperature), resistance mechanisms (including sanitizers), and their specific impacts on food products, for example, changes in odor or shortened shelf life.

With SMARTBIOME™, you can translate prevention into quality, safety, and lower costs.

Determine microbiological diversity and abundance

Identify microbiological hotspots in your facility



Track most frequent organisms

Understand microorganisms' effect on your specific product

Assess and **anticipate** risk factors over time, including shelf-life, hygienic sanitary conditions, and cleaning failure impacts

Unique Levels of Support to Address Your Spoilage Challenges

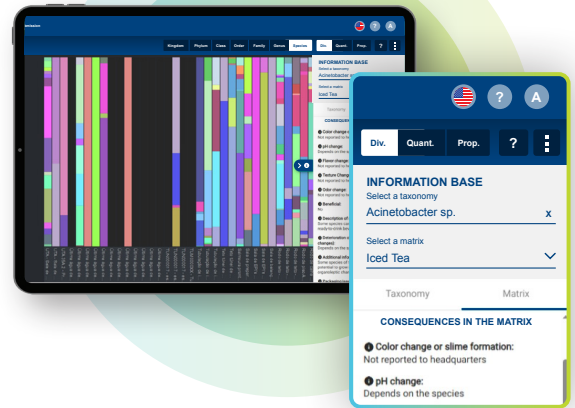
Each food processor faces their own obstacles when it comes to spoilage — no two operations are the same. Therefore, SMARTBIOME™ offers three differentiated, but complementary levels of service, to be utilized based on your needs, from Spoilage Identification to Root Cause Analysis to advanced Risk Management.



Gain New Insight into Your Products' Spoilage

What spoiler(s) contaminated my finished product?

- Determine microbiome abundance and diversity per sample type
- Identify the most abundant and frequent microorganisms
- Access detailed information on each spoiler organism—including growth conditions, resistance, and impact on product quality, shelf life, and odor



Determine the Root Cause of Contamination and Make Decisions Based on Risk

Where did the spoiler come from and how can I best control it?

- Map process vulnerabilities and contamination paths
- Determine the transmission route from raw materials to finished products
- Implement action plans based on your data with the support of the bioMérieux team of experts



Stay Ahead of Contamination with Complete Understanding of Your Facility

How do I prevent future contamination and keep my process under control?

- Analyze risks in your process through regular sampling and testing
- Use risk scores to identify and monitor problem areas
- Proactively adapt continuous monitoring, testing, and preventive measures



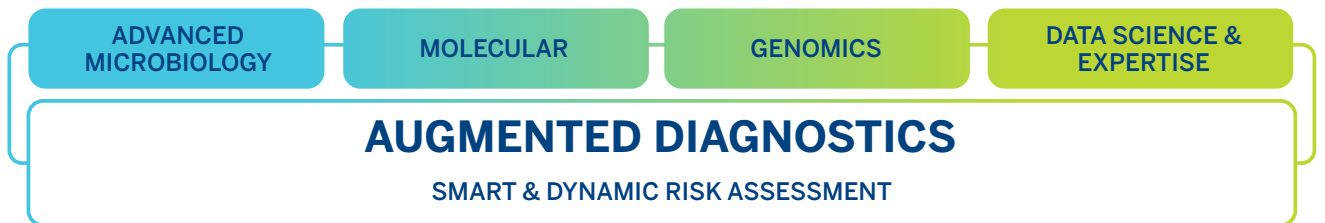
bioMérieux experts support you in keeping your operations healthy — contact us for more information.

Go Beyond with our Augmented Diagnostics Approach

bioMérieux's Augmented Diagnostics approach combines cutting-edge microbial testing technologies, such as Microbiology and Molecular Biology with the latest Genomics and Data Science methodologies.

This approach is further enhanced by an innovative mindset and the expertise of industry professionals.

This innovative approach enhances the precision and effectiveness of safety and quality control programs throughout the entire production value chain.



Discover Augmented Diagnostics

Learn more about our Augmented Diagnostics approach on our website.



Deep Dive into your Facility's Microbiome

Visit our website to see how SMARTBIOME™ can help you SPOT spoilers, ACT confidently, and PREVENT contamination.