Biostimulants

Trusted.
Independent.
Committed.

Testing biostimulants under laboratory conditions is just the first step – you must then ensure they have the desired impact in the field. Our experts will advise you every step of the way as you put new biostimulant products to the test. Conduct demonstration trials under real farming conditions on large plot sizes, whether under protected or open-field conditions.

Our network of operations spans Europe, Latin America, North America, Africa and Asia. Our on-the-ground experts will help you devise the trial, ensure it runs smoothly, and analyze the results. Apply a test-and-learn approach, analyzing new biostimulant products in real-world conditions and making any necessary adjustments before you go to market.

SGS

Sustainability in crop science

Sustainable crop production

As the global population rises, so does the demand for food. However, recent regulations – such as the EU Green Deal and the Sustainable Use of Pesticides Directive – stipulate that growers must significantly reduce their use of pesticides and fertilizers.

Therefore, we must develop and introduce new solutions to protect crop yields and feed the world's ever-growing population.

Biostimulants could be the answer. They are biological or naturally derived additives, including but not limited to bacterial and microbial inoculants; biochemical materials; amino, humic and fulvic acids; and plant extracts.

Regulation (EU) No. 2019/1009 defines them as products that stimulate plant nutrition processes independently of the product's nutrient content.

Biostimulants improve one or more of the plant's/plant rhizosphere's characteristics, such as nutrient use efficiency, tolerance to abiotic stress, quality traits or the availability of confined nutrients in the soil or the rhizosphere.

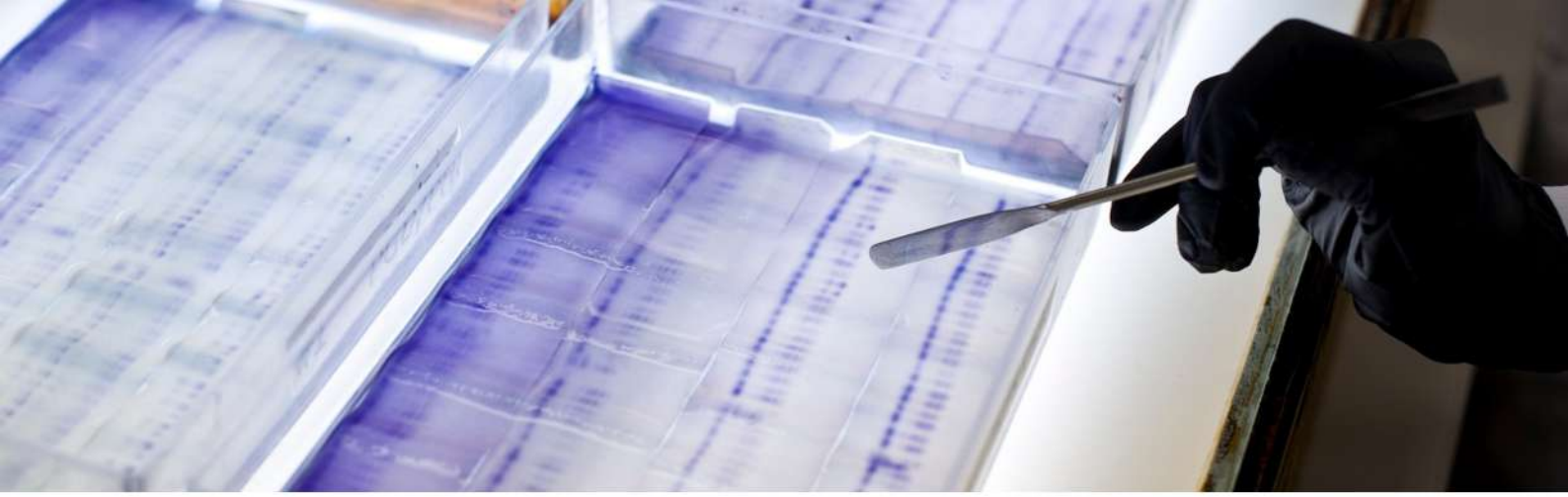
Biostimulants and sustainable agriculture

Climate change poses a huge threat to plants. They're simply not built to survive increasingly extreme conditions, such as high soil salinity, drought, higher temperatures or frost. Therefore, to cope with such intense abiotic stress, plants initiate a number of molecular, cellular and physiological changes to respond and adapt to challenging conditions.

Biostimulant products support plant resilience under abiotic stress while enhancing quality attributes such as color, fruit seeding, storage behavior and sugar content.

They even support the rooting zone, allowing for enhanced nutrient uptake, lower fertilizer rates, less leaching/fertilizer runoff and soil erosion.

Healthy soil retains more high-quality nutrients and water, producing better yields. Therefore, biostimulants make the agricultural supply chain more sustainable and resilient.



A one-stop-shop for your biostimulant testing needs

Partner with our experienced laboratory specialists, operating out of European based and GEP-certified facilities where the European and Mediterranean Plant Protection Organization (EPPO) standards apply, to protect your investment in new product research and development (R&D) and support your market entry. At SGS, we're highly experienced in conducting rigorous testing procedures in a range of conditions, including state-of-the-art residue, food and feed testing laboratories; growth chambers; R&D greenhouses and open-field testing.

Compatibility testing

Product compatibility testing reveals microbial inoculum against commercially available chemical pesticides, chemicals and dyes, and tank mixes. Work with our microbiology experts for strain characterization and identification to discover the product's purity, and to reveal the number of colony-forming units in product and treated seeds. Their analysis will also confirm the presence or absence of harmful organisms.

Meanwhile, our physical and chemical property testing provides critical content determination and impurity analyses.

We are SGS – the world's leading testing, inspection and certification company. Our local presence and global network offer the best of both worlds, blending regional expertise with the latest international best practices.

Crop quality measures

Explore key crop quality measures such as resilience against abiotic and biotic stress. Identify nutrient content and composition, storage behavior, firmness, taint and taste, and conduct studies to assess the potential impact of the product's residues on food processing methods.

Master your seed treatment development processes with dose/inoculum verification and determine your products' storage/shelf life, dust-off, flowability, germination and seed sample logistics. Moreover, our 5-batch analysis reveals active ingredients, impurities and microbial and chemical actives.

Assess your product's impact on the soil, plant rhizosphere or plant tissues with our microbiome services, or utilize our environmental DNA and InsectScan investigations to determine its potential effects on biodiversity.

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Contact us

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SGS

When you need to be sure