SICIT

Plant Biostimulants

Amino Acids & Peptides

Seaweed Extracts

Plant Extracts

Sicit Group

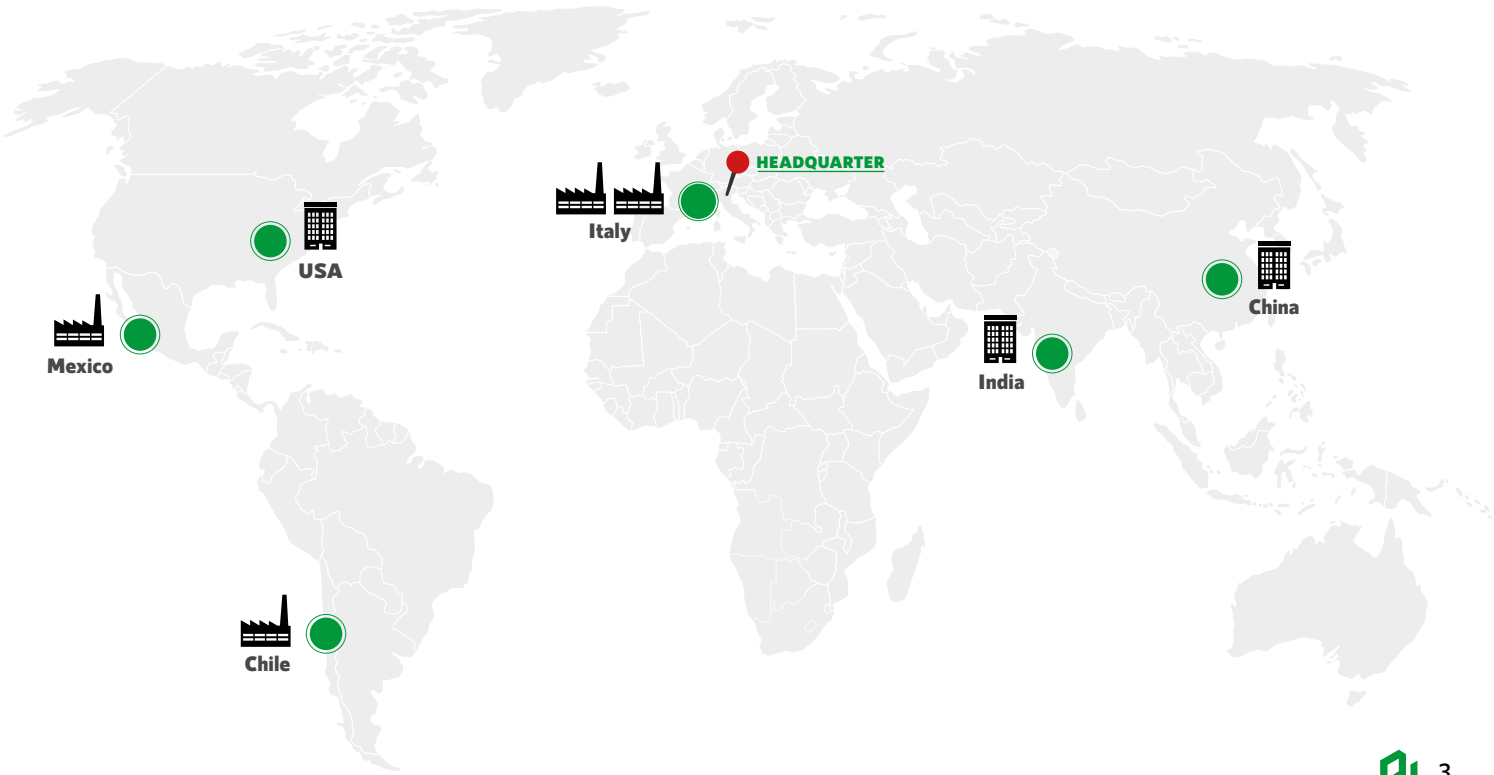
Sicit Group

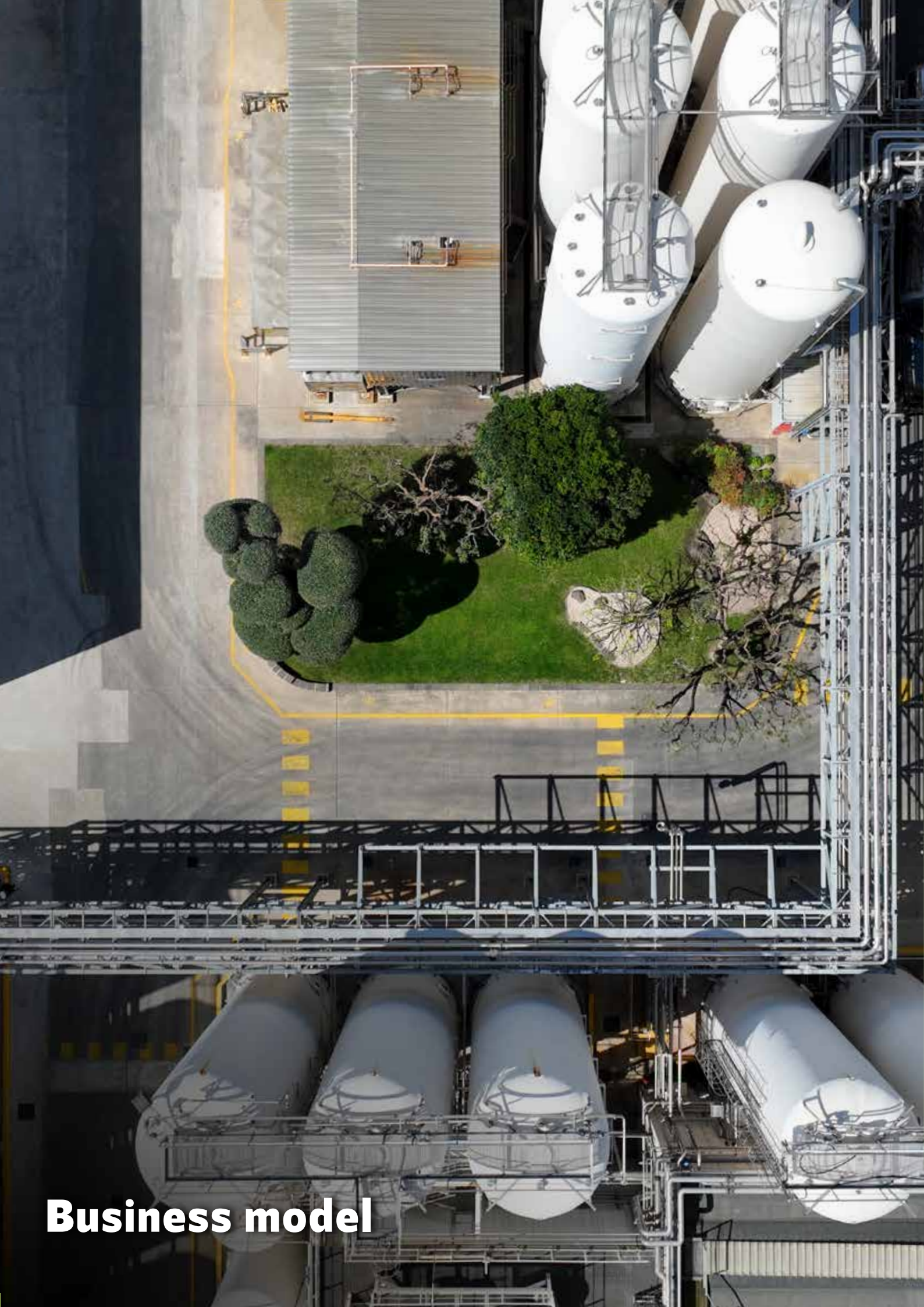
World leader in protein hydrolysates

Established in 1960, SICIT positions itself as a global leader in the manufacturing of hydrolysate proteins derived from both animal and plant sources. These serve as fundamental components for the creation of agricultural biostimulants and retardants for the gypsum industry. Additionally, the company plays a key role in refining animal-origin fat, used as a raw material for biofuel production.

Its vision, focused on the circular economy, is evident in a virtuous cycle that transforms leather by-products into valuable resources for agriculture, construction, and energy.

Sicit Group worldwide





Business model

Business model

The strategy of SICIT focuses mainly on the Business-to-Business (B2B) model, acting as a strategic partner for national and multinational companies active in the nutrition and crop protection sector. These partnerships allow SICIT to provide companies with finished products or key ingredients for their formulations.

SICIT is distinguished by the production of tailor-made solutions, adapted to the specific needs of customers. This flexibility allows SICIT to offer a wide range of different products, making it the winning choice to diversify clients and provide them with the possibility to offer to the end user a diversified range of products.

SICIT pillars

R&D and Agronomic Labs

SICIT's R&D and Agronomic Laboratories drive product innovation and development, enabling the company to deliver high-quality products tailored to customer needs.

Flexible Process with high Standardization

SICIT's operational framework integrates standardized protocols with flexible methodologies, allowing continuous adaptation to different agricultural contexts and evolving market demands, while ensuring consistent product quality and efficiency, in compliance with the EU regulation concerning fertilizing products (Reg. EU 2019/1009) and Animal By products (Reg. EU 1069/2009 and Reg. EU 142/2011).

Quality Control

SICIT Chemitech, an integral part of the SICIT Group, leads the company's quality control initiatives. Utilizing analytical methodologies and advanced skills, SICIT Chemitech ensures the integrity, safety, and effectiveness of SICIT products, maintaining constant adherence to rigorous standards.

Global Logistics

SICIT Logistc Department ensures a robust global network characterized by efficient supply chain management, strategic partnerships, and advanced traceability systems. This enables simplification of transportation, storage, and distribution of products in more than 90 countries, optimizing delivery times and minimizing logistical complexities.

Regulatory Support

SICIT provides regulatory support services, drawing on deep expertise in compliance management and regulatory affairs. By staying updated with the evolution of regulations and guidelines in the sector, SICIT ensures continuous assistance to the market for its products.

Environmental initiative

Sicit's environmental initiative

SICIT pursues an efficiency model that places resources at the forefront, aiming to reduce the use of fossil fuels and maximize the recovery of raw materials from production processes. SICIT's equipment is constantly updated to minimize waste and optimize water usage, with the goal of reducing the water and energy footprint per product.

Energy cogeneration and the use of renewable sources, such as photovoltaic energy and 100% renewable electricity supplied by Enel Energia, are examples of the company's commitment to energy efficiency.

Certifications

QUALITY

UNI EN ISO 9001:2015 CERTIFICATION

Quality assurance extended to all operations of the Italian plants since 2023.

ENVIRONMENT

UNI EN ISO 14001:2015 CERTIFICATION

Sustainable management in all Italian plants.

HEALTH AND SAFETY

UNI EN ISO 45001:2018 CERTIFICATION

International recognition of occupational health and safety management.

ISO 14067
BUREAU VERITAS
Certification

Organization with CFP Systematic Approach certified by Bureau Veritas Italia Spa in accordance with ISO 14067:2018 standard.

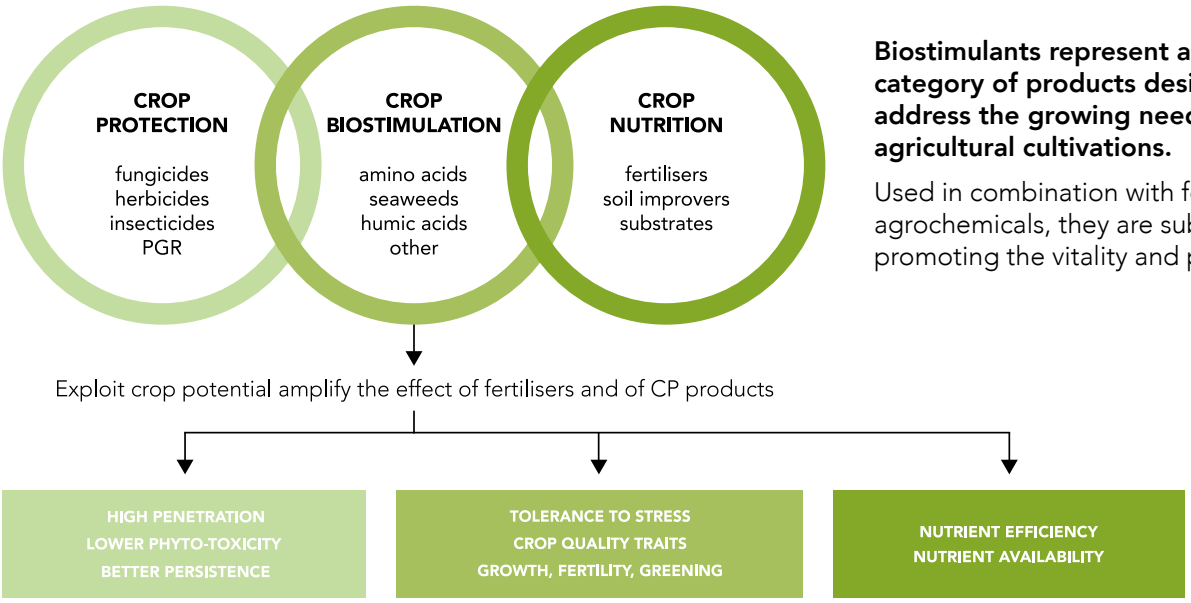
CARBON FOOTPRINT

UNI EN ISO 14067:2018 CERTIFICATION

Determination of the carbon footprint of products for more responsible production.

Biostimulants

Biostimulants



Biostimulants represent a revolutionary category of products designed to efficiently address the growing needs of modern agricultural cultivations.

Used in combination with fertilizers and agrochemicals, they are substances capable of promoting the vitality and productivity of plants.

Amino Acids & Peptides

These products are particularly rich in collagen, a high-quality protein appreciated in numerous sectors such as cosmetics and human nutrition. **The uniqueness of SICIT's biostimulants lies in the transformation of this protein: through specific processes, collagen is converted into protein hydrolysate, which serves as a basis for producing highly effective biostimulants.** Protein hydrolysate, in fact, is rich in amino acids and peptides, **fundamental elements for stimulating plant growth and health.**

Seaweed & Plant Extracts

Seaweed & Plant Extracts represent a significant step forward in enriching the range of products offered by SICIT. Created to complement animal-derived biostimulants, these products are derived from extracts obtained from both aquatic and terrestrial plants. SICIT's seaweed extracts come from brown, red, and green seaweeds cultivated in SICIT-owned seaweed farms located in Chile through a patented methodology. **The products have already been tested in various markets with outstanding agronomic results.**

Organic Farming Certifications

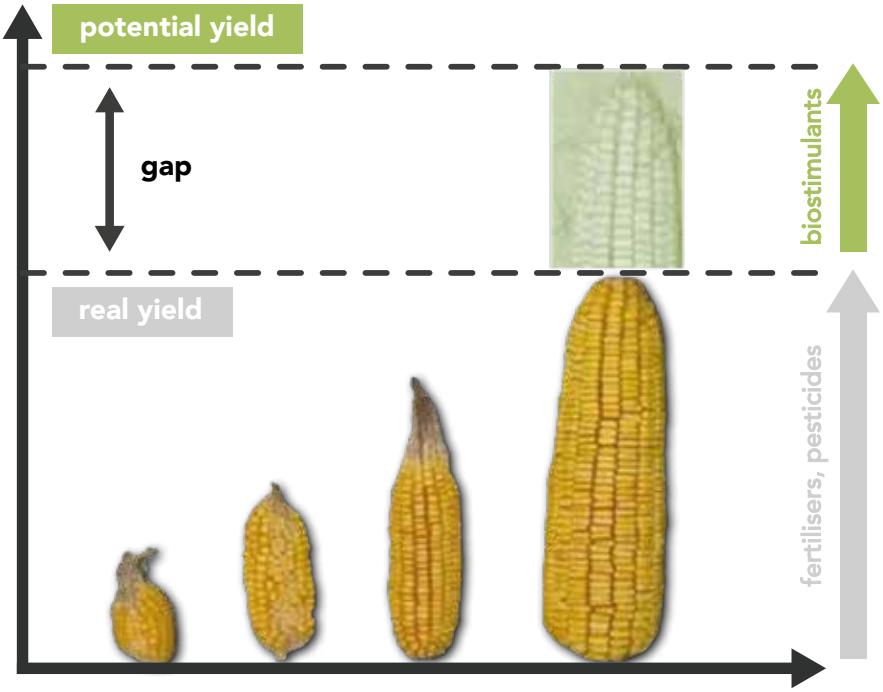
Our biostimulants can be used in organic agriculture and are approved by leading certifying bodies.

Biostimulants benefits

Biostimulants benefits

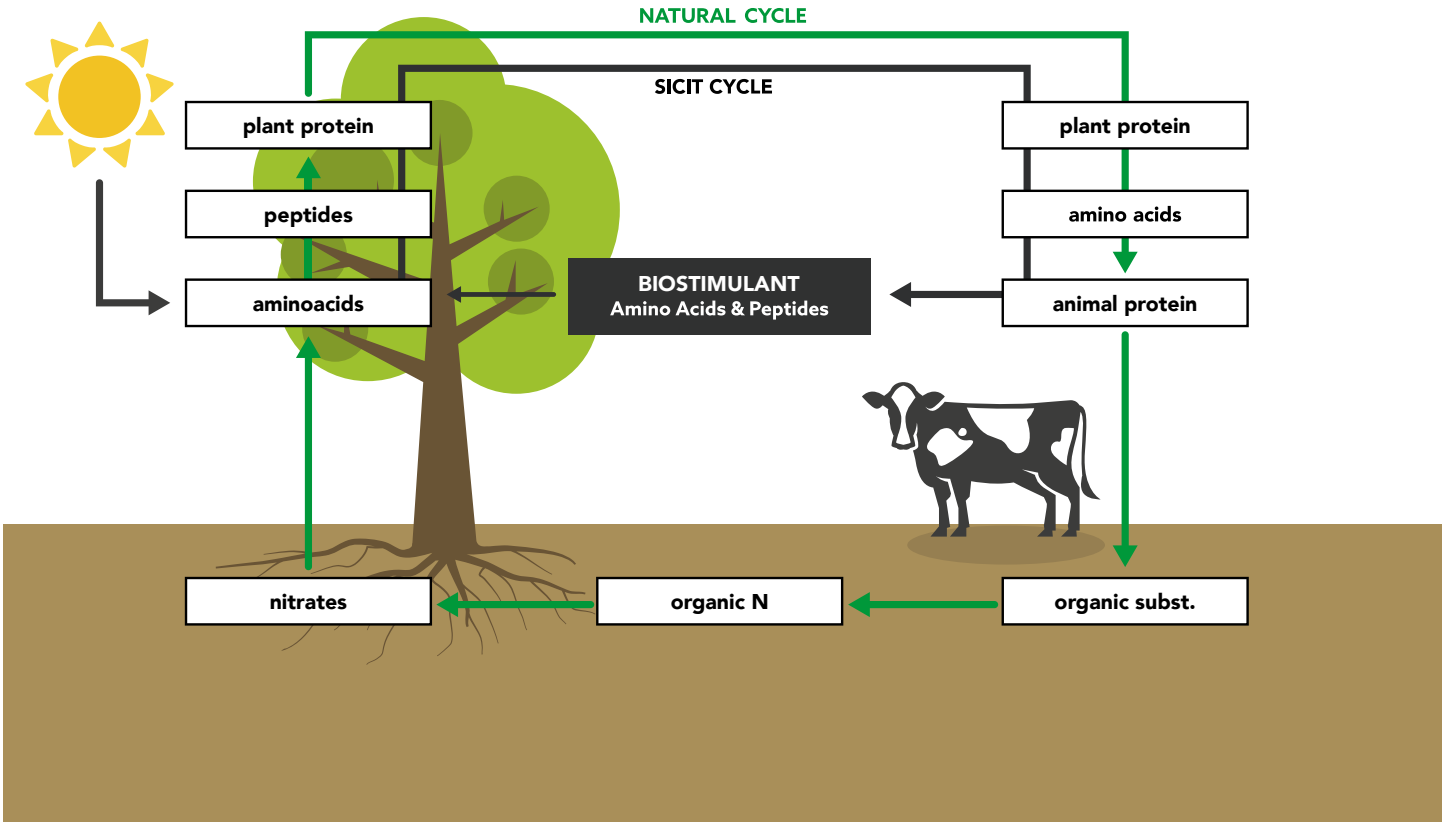
Higher efficiency

Biostimulants optimize crop yield by bridging the gap between real and maximum potential yield. **They mitigate stress factors, improve crop quality, alleviate abiotic stress, improve nutrient and crop protection efficiency.**



Sustainable efficiency

Biostimulants facilitate plant growth by supplying pre-formed Amino Acids & Peptides and other beneficial molecules, thereby bypassing the need for endogenous synthesis. This mechanism conserves the plant's energy resources, a pivotal advantage, particularly under suboptimal environmental conditions where energy availability might be constrained.

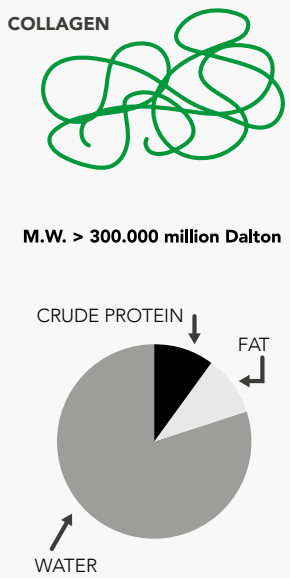


Amino Acids & Peptides

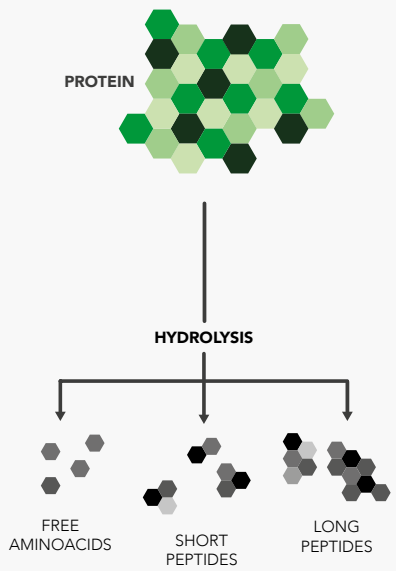
Amino Acids & Peptides

Manufacturing processs

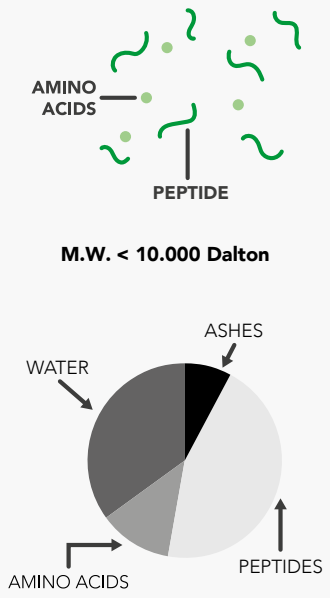
Collagen



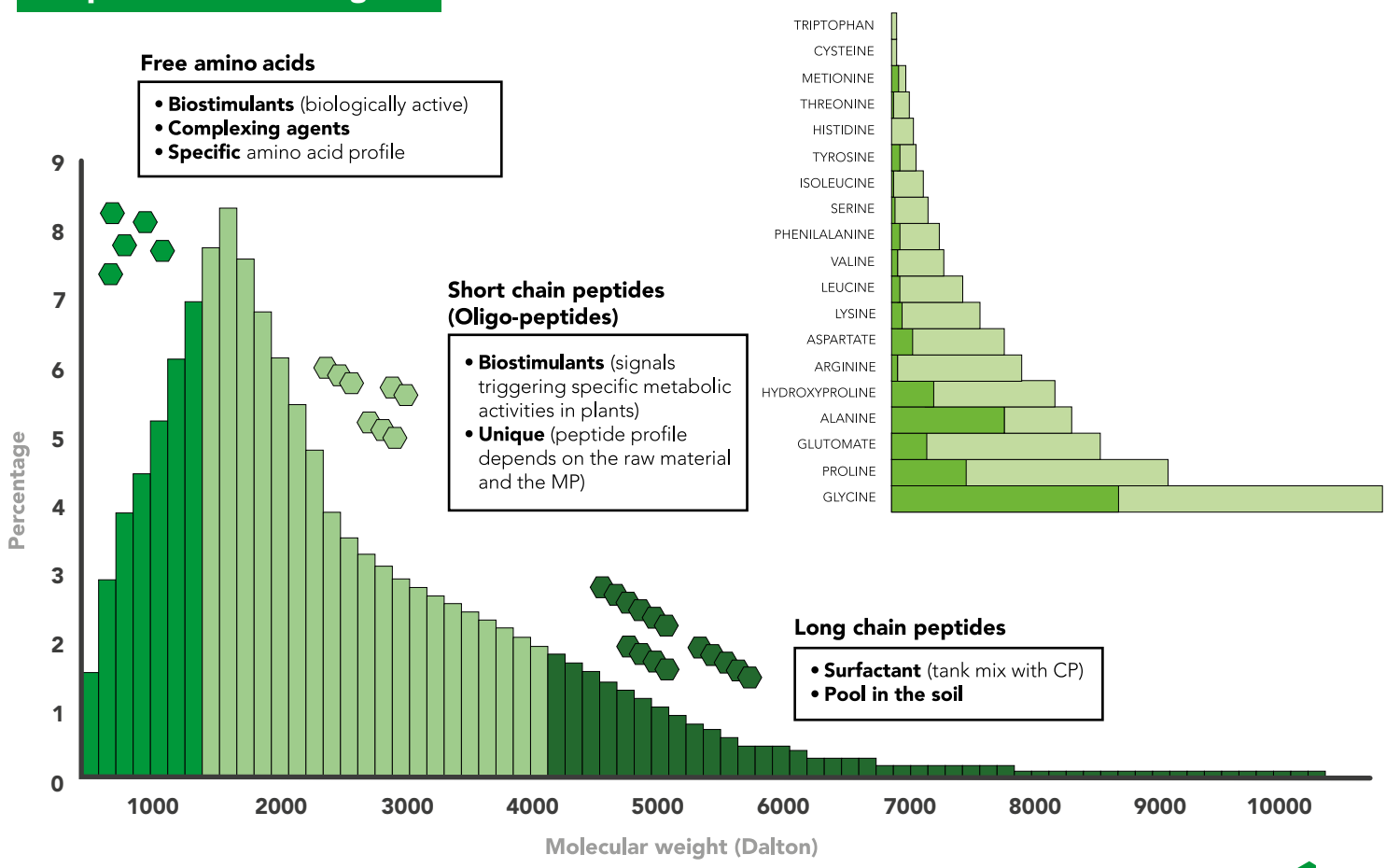
Chemical hydrolysis



Hydrolysed protein



Composition and Aminogram



Formulations

Formulations

SICIT collaborates closely with leading agrochemical companies both nationally and internationally to distribute biostimulants in calibrated formulations tailored to meet the specific needs of target markets.

Liquid

Stable high-concentration formulations, usable for foliar applications or fertigation, with a biostimulant effect on various crops and compatible with common fertilizers and plant protection products.

Powder

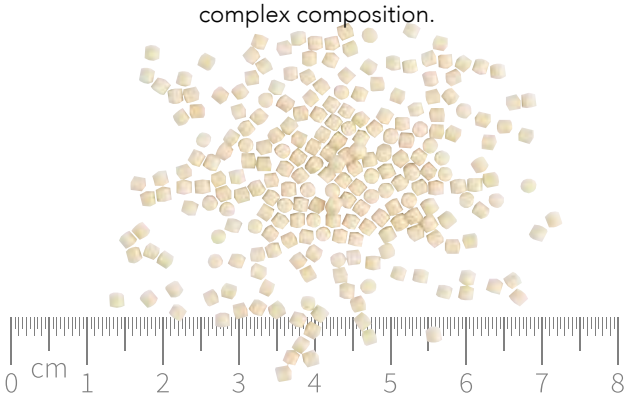
Water-soluble products with high concentrations of amino acids and peptides, ideal for fertigation.

Granules

Solid products obtained through fluid bed granulation, water-soluble and versatile for use in soil, production of complex fertilizers, or foliar applications.

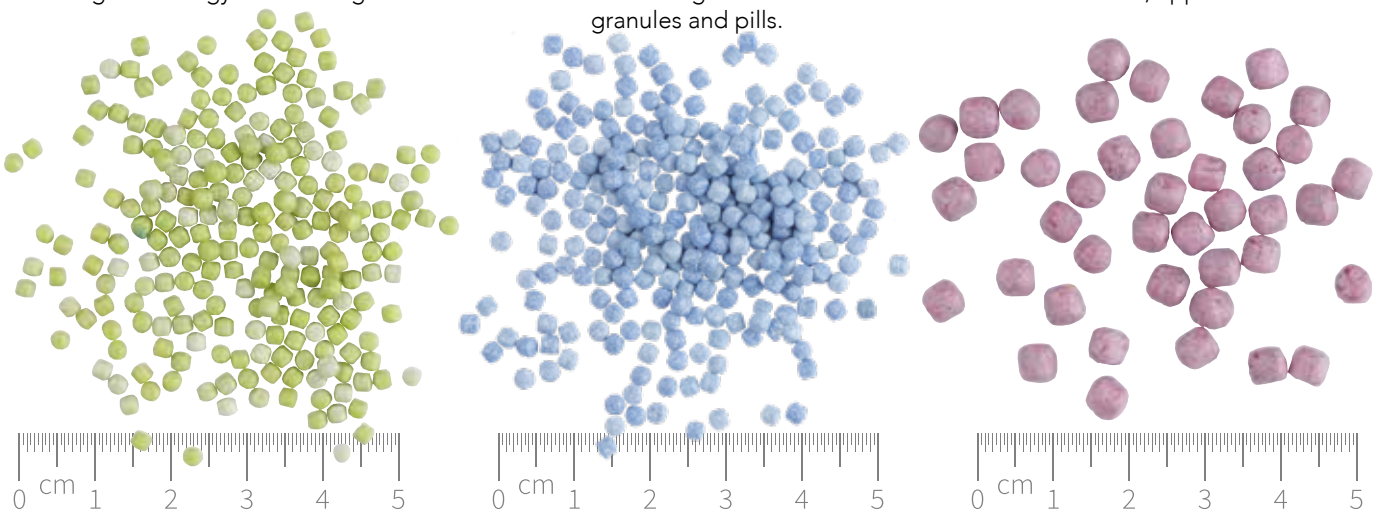
Pills

Innovative formulations in various shapes and sizes, obtained through technologies similar to pharmaceutical ones, with complex composition.



Coated granules and pills

Coating technology with biodegradable materials for controlling the release of the biostimulant in the soil, applicable to both granules and pills.



Seaweed extracts

Seaweed extracts

Our seaweed extract

After years of extensive research and testing with different types of seaweeds sourced worldwide, SICIT Group successfully took control of PatagoniaBio, located in Puerto Montt, Chile. Working closely with the skilled team at PatagoniaBio, SICIT Group found the perfect formula using seaweed extracts.

This collaboration led to a significant portfolio advancement, thoroughly endorsed by experts and producers in one of the most demanding markets of the world. At the core of SICIT Group's product range lies a unique blend of four types of seaweeds from Patagonia.
Each specie adds to the formula its exclusive active ingredients. These marine organisms exemplify the power of evolution, having adapted to the pressure of El Niño phenomenon. They thrive in the unique and challenging conditions created by the Humboldt current (cold waters, with low salinity and a high level of nutrients) that ensures a rapid growth and a very high content of bioactive molecules.

Seaweeds are grown in own-managed open sea cultivations, ensuring a careful control at every stage (from reproductive material to harvest). Harvesting occurs when the seaweeds have reached the optimal trade-off between biomass quantity and active compounds concentration. This meticulous process ensures the highest quality and effectiveness of our extracts.

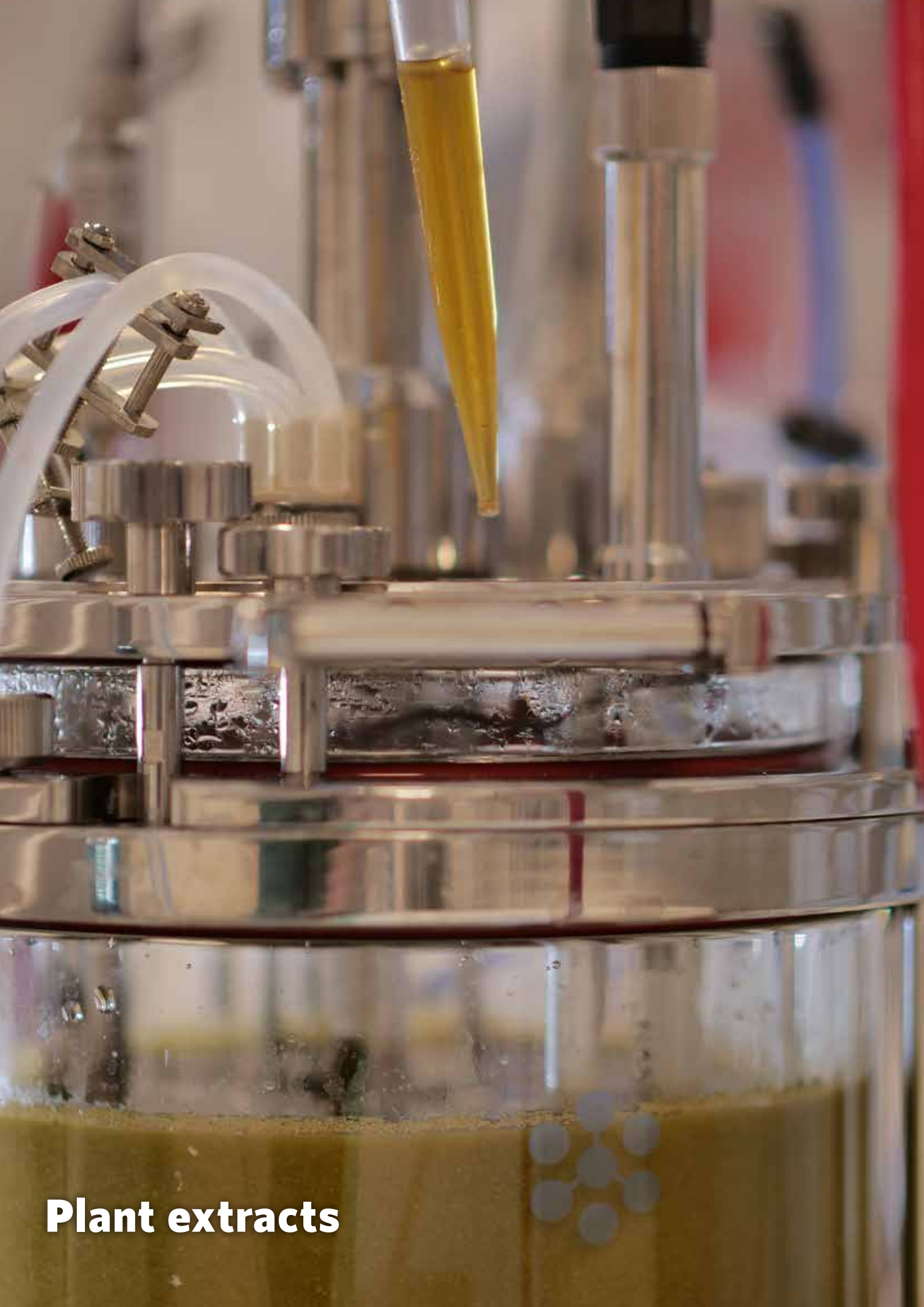
4 types of seaweeds

Macrocystis pyrifera
Seaweed from the Kingdom Protista, also known as giant kelp. It is recognized to be the largest and fastest growing algae. It can reach lengths of 45 meters or more and grow up to 16 cm a day under ideal conditions.

Durvillaea antarctica
Brown seaweed of the Kingdom Protista, abundant on the Chilean coasts, is robust and large, being able to reach 15 meters in length.

Ulva lactuca
Green seaweed of the Kingdom Plantae
that is found worldwide.

Pyropia columbina
Red seaweed, sometimes brown or slightly purplish algae of the Kingdom Plantae
that lives on the intertidal zones.



Plant extracts

Plant extracts

Recently, research projects have been initiated to develop the production of a line of plant-based biostimulants using extracts of Moringa oleifera, a plant with multiple beneficial properties.

Proprietary cultivation and patented extraction method

SICIT has developed a high-density cultivation system, specifically tailored to ensure high consistency and quality of the raw material. Currently we cultivate Moringa in own-managed fields in Paraguay and Mexico. The extraction is carried out on fresh Moringa biomass through a patented enzymatic hydrolysis.

Active ingredients

Polyphenols and vitamins
Anti-stress agents due to detoxification of ROS

Tryptophan
Auxin precursor, increases root number and length

Salicilic acid and glucosinolates
Prime plant innate defences

Oligosaccharides, peptides and free amino acids
Signalling and anti-stress agents

Macro and mesonutrients
Help counteract deficiencies in moments of high demand

Auxines, cytokinins and ammines
Stimulators of plant metabolism

Moringa extract mode of action

BOOSTER OF REPRODUCTIVE PHASES

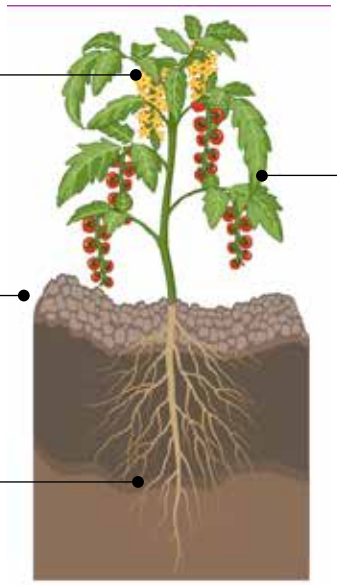
Flowering and fruit set stimulus. Increased fruit growth and quality traits

PROMOTER OF PLANT NATURAL DEFENCES

Priming effect due to salycilic acid and glucosinolates/isothiocyanates

INCREASED NUTRIENT UPTAKE

Accelerated neoformation and elongation of roots due to auxin precursors



METABOLIC REPROGRAMMING IN RESPONCE TO ABIOTIC STRESS

Acceleration of plant growth, development and yield traits via:

- Activation of enzymatic and non enzymatic antioxidant signaling
- Increase in the production of osmoprotectants
- Improvement in photosynthesis and gas exchange parameters

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