

**YOUR
NATURAL
FUTURE**
Made in Italy



BIOSTIMULANTS

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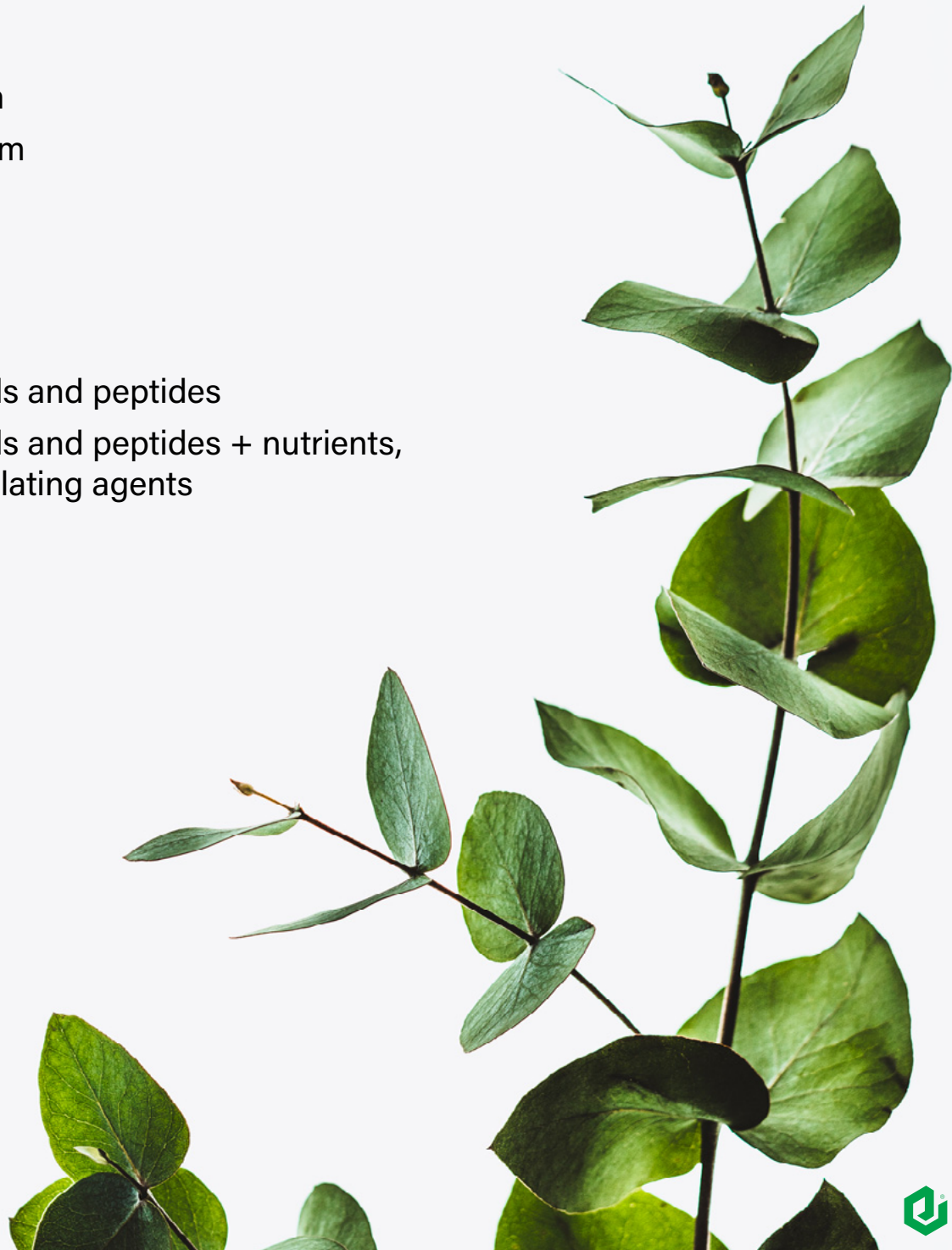
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A photograph of several young green seedlings with two leaves each, growing out of a brown, fibrous, biodegradable pot. The background is a soft, out-of-focus light brown. A semi-transparent green horizontal band is overlaid across the middle of the image, containing the text 'BIOSTIMULANTS' in white, bold, sans-serif capital letters.

BIOSTIMULANTS



A Sustainable Input for Modern Agricultural Challenges

Biostimulants, as defined by the new European Regulation in the field of fertilizers (1009/2019), are substances able to stimulate plant metabolic processes and improve one or more of the following characteristics:

- Nutrients use efficiency
- Tolerance to abiotic stresses
- Crop quality traits
- Nutrients availability in the soil or in the rhizosphere

The integration of biostimulants with other technologies (genetics, crop protection, nutrition, etc.) fosters a sustainable approach to agriculture. For this reason, biostimulants efficiently meet the needs of modern agricultural systems and gather increasing interest from the farmers and technicians.

Further information on these products can be found on EBIC website biostimulants.eu.



A photograph of several small green seedlings growing in a dark brown, textured substrate, likely a seedling tray. A semi-transparent green rectangular overlay covers the middle portion of the image, serving as a background for the text.

SICIT BIOSTIMULANTS



Composition

SICIT biostimulants are formulations based on animal origin hydrolyzed proteins. The hydrolysis of the collagen results in products characterized by a high concentration of amino acids essential for plant metabolism, as glycine as proline.

Our production process, carried out with the latest technologies, grants high quality standard and final products characterized by:

- High concentration of short chain amino acids and peptides (molecular weight < 10.000 Da)
- Constant composition
- Optimal balance between free amino acids and peptides
- Absence of contaminants
- Microbial contamination controlled by the sterilization process
- Stability of the formulation and optimized shelf-life

Tailor-Made Formulations

Our formulations are distributed in the market in partnership with national and international agrochemical companies, with whom we develop the most suitable solutions for the end markets.

Our strategy is one product for one company. We can develop tailor made formulations, in terms of free and total amino acids content, peptides of low molecular weight content, organic nitrogen, addition of micro-nutrient.

Our ability to develop tailor-made solutions makes us the perfect partner to diversify our clients' offering in the end users market.

Organic Agriculture

Our biostimulants can be used in organic agriculture according to European regulations 834/2007 and 354/2014; they are certified by BIOAGRICERT – IFOAM for such use.



A background image showing multiple trays of young seedlings in a nursery. The seedlings are small, green, and growing in dark soil within black plastic trays. The trays are arranged in rows, and the focus is sharp in the middle ground, with the foreground and background slightly blurred.

FORMULATIONS



Liquid form

Highly stable formulations, characterized by high concentration, clearness and complete water solubility. Coincided and developed for foliar application or fertigation, they exert a biostimulant effect in all crops and are suitable to be used in mixture with all the fertilizers and the majority of the most common plant protection products.

Powder form

Completely water- soluble products, reaching a very high concentration of amino acids and peptides (up to 94 %). Specifically developed to be used in fertigation.

Granules

Products in solid form, obtained through a fluid-bed granulation process and characterized by water solubility and ease of use. The size of individual granules which, upon request, can range between 0.5 and 2.5 mm, and their physico-chemical characteristics, grant great flexibility to these formulations: they can be used as such in soil applications on furrow or as a raw material for the production of complex fertilizers; they are also suitable to be dissolved in water for foliar applications or fertigation. We can coat the granules with natural and completely biodegradable materials which can modulate their solubility.

Pills

Innovative formulations, the result of the work of our R&D team and the collaboration with university research centers. Pills, having a size between 3 and 20 mm, are available in different shapes (spherical or elongated pills or discs) and are produced through a manufacturing process utilizing technologies of mixing and compression mainly used in the pharmaceutical industries. These products can have a complex composition, based on hydrolyzed proteins added with microelements, beneficial elements as silicon, or other substances exerting a biostimulant action (for example, seaweeds, humic and fulvic acids, etc.).

Coated granules and pills

Our coating technology, carried out with natural and completely biodegradable materials, allows to modulate the release of the biostimulant in the soil. For both the formulations it is possible to define a release interval, in order to synchronize the maximum availability with the periods of higher demand by the plant.





PRODUCTS



Amino Acids and Peptides

Liquid form

Powder form

Amino acids and peptides in liquid and powder forms, granules and pills.

For these products, formulations with low chlorides content (LCC), particularly suitable to be used to formulate complex products, are available.

	Min % w/w	Max % w/w		Min % w/w	Max % w/w
Organic N	6.5	10	Organic N	10	16
Organic C	15	30	Organic C	38	46
Total amino acids	40	62.5	Total amino acids	82	94
Free amino acids	6	22	Free amino acids	6	8

Some examples of products. We can develop further formulations upon clients' specific request.

Products	organic N %	organic C %	amino acids %		formulation
			total	free	
LMW 10 LCC	10	30	62.5	10	Liquid
LMW 8 LCC	8	24	50	8	Liquid
LMW 6	6	22	37,5	22	Liquid
LN 6,5 LCC	6.5	19	40.6	6	Liquid
LMW 8	8	25	50	15-18	Liquid
LMW 6,3	6.3	22	39.4	13	Liquid
LN 6,5	6.5	23	40.6	6-8	Liquid
PN 15	15.3	44	95.6	5	Powder
PN 14	14	40	87.5	7	Powder
PN 14 GRANULES	14	40	87.5	6	Granules, size 0.5-3 mm
PN 14 PILLS	14	40	87.5	6	Pills, size 2-10 mm



Amino Acids and Peptides + Nutrients

Nutrients complexed to amino acids and peptides, in liquid and powder forms, granules and pills, to allow fast uptake and transport inside plant tissues.

Developed to compensate nutritional deficiency or address specific plant needs on crucial crop stages.

Amino acids and peptides act as chelants, facilitating nutrients uptake.

Nutrients in our formulations: K; Ca; Mg; B; Co; Cu; Fe; Mn; Mo; Zn.

Natural Chelating Agents

We exploited the chelating activity of glycine to develop amino-chelates able to optimize the efficiency of nutrients uptake.

Some examples of products. We can develop further formulations upon clients' specific request.

Products	organic N %	organic C %	amino acids %		micro and meso- elements %		formulation	pH
			total	free				
MICROFERT	7.0	22	43.8	16	Fe 0.2; Mn 0.1; B 0.05; Zn 0.01; Co 0.001; Mo 0.005		Liquid	6 - 7
N-CaO 4-5	4	14	25	12	CaO	6	Liquid	10.5 - 11.5
N-B 4-5	4	11	25	4	B	5	Liquid	8 - 9
N-K 4-16	4	16	25	10	K ₂ O	16	Liquid	6.5 - 7.5
N-Cu 3-5	3	10	18.7	3	Cu	5	Liquid	5 - 6
N-Fe 4-5	4	12	25	4	Fe	5	Liquid	4 - 5
N-Zn 3-6	3	8	18.7	3	Zn	6	Liquid	4.5 - 5.5
FERTIPLUS MgB	9	23.5	56.2	9	MgO 4; B 2; Fe 1; Mn 1; Zn 1; Cu 0.1; Mo 0.015; Co 0.0015		Powder	5.5 - 7
N-CaO 8.8-14	8.8	30	55	27	CaO	14	Powder	11
N-Zn 6.4-14	6.4	21	40	12	Zn	14	Powder	4 - 5.5
N-P-K 7-6.5-9	7	22	43.7	7	P ₂ O ₅ 6.5; K ₂ O 9		Pills, size 2-3 mm	6.5 - 7.5



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