

Manufacturing quality crop inputs

Lock down marginal yield and quality by unlocking the full genetic potential of crops

Modern agriculture is under extreme pressure to drastically increase the production and supply of healthy food for an ever-growing population. The decline in new arable farmland and the increasing pressures from climate change are forcing farmers to produce more food of higher quality on their existing farmland. While modern agriculture provides numerous solutions and new technology to increase the quality and yield of crops, the outcome is not always the same as Mother Nature continues to pose her own challenges. The increasing and more frequent weather extremes, linked with increased pest and disease pressure, can cause biotic and abiotic stress to crops. These stress conditions can negatively affect the yield and quality of crops.



Photo by Tim Mossholder from Pexels

To lock down marginal yield and quality, farmers must implement a holistic and integrated approach to pest management, fertilizer utilization and also enhance the plant's natural defense systems to unlock the full genetic potential of plants. The implementation of a well-balanced crop nutrition program paying special attention to the plant's requirements at each critical growth stage is extremely important to ensure optimum growth and development of plants. A well-balanced crop nutrition program should be based on the 4R's of nutrient management practices:

- R – Right Product
- R – Right Rate
- R – Right Time
- R – Right Place.

This program should be aimed to prevent or relieve stress conditions caused by nutrient deficiencies and unfavourable growing

conditions. By incorporating plant-available nutrients and growth promoters or biostimulants at the correct time, rate and place, plants will be able to manage stress conditions more effectively. This should in return result in healthier plants, producing healthier crops of better quality and increased quantities.

Introlab is a South African based, speciality crop input manufacturer and a leader in the commercialisation of biostimulants and speciality crop inputs for use in agriculture. Founded in 2005, Introlab is privately owned and has achieved consistent growth from day one by focusing and investing in the development of advanced crop solutions and formulations by implementing the latest technology. Introlab strives to provide well-researched, innovative crop solutions with the aim to increase quantity and quality of agricultural crops, while enhancing sustainability and reducing the environmental impact. We develop and provide a complete and holistic crop nutrition solution taking into account the crop's requirements during each critical growth stage, while adapting to changing environmental conditions and needs of our clients. We provide our clients with innovative world class crop solution, backed by professional technical support, ensuring farmers outperform the norm.

In conjunction with a local University and International scientific institutions, Introlab has developed an exclusive process to hydrolyse kelp (*Ecklonia maxima*) and plant protein with specific natural enzymes, ensuring high quality of bio-available amino acids, polyamines, natural growth stimulants and phytohormones. These hydrolysates form the basis of our Biostimulant range, which is effectively used as plant growth promoters and stress elevators, or both.

Our company vision is to create prosperity for our shareholders, employees as well as our direct and indirect clients. We focus on sound financial and business principles. In

collaboration with international specialists, we develop and improve unique and innovative products that offer exceptional results and solutions to various challenges. We specialize in and supply leading plant nutrition products for local and international markets. Our expertise and advanced technology distinguish us and enable us to offer a wide range of quality products that meet multiple quality accreditation standards. Our experienced team with a proven track record for professional service ensures that we are the go-to solution provider. We invest in the training and development of our people and focus on teamwork to bring about growth.

Introlab's business ethics and values centres on 4P's:

People, Plants, Products and Prosperity.

At Introlab, we believe and strive to ensure that:

- Our customers are our business and deserve the full attention and support of all our staff;
- We develop solutions to all challenges and build long-term mutually beneficial partnerships;
- We outperform the norm and keep our promises;

- We never give up and maintain a work ethic based on integrity; and
- We empower our employees and encourage them to be:
 - Supportive,
 - Passionate,
 - Innovative,
 - Versatile and
 - Creative.

Introlab implements the latest formulation technology and equipment with production expertise, ensuring technologically advanced formulations suitable for modern agriculture. Our manufacturing facilities consists of three production units: the main production facility is used to manufacture specialized plant nutrition and adjuvants, the second facility produces natural biostimulants from enzymatically hydrolysed *Ecklonia maxima* seaweed and plant protein and the third facility is used to manufacture fungicides.

Introlab produces a wide range of products that is currently supplied to more than 17 countries. Our current product offering consist of:

- Biostimulants
- Aminogluconate chelated nutrients

- Suspension concentrate fertilizers
- Soil conditioners
- Gel fertilizers
- Speciality liquid fertilizers
- Speciality water soluble fertilizers
- Plant defence inducers
- Nutritional seed treatments
- Adjuvants and spray aids
- Fungicides.

As a proud member of FERTASA (Fertilizer Association of South Africa), CropLife South Africa and SABO (South African Bioproducts Organisation) all our products are manufactured in accordance with International quality and safety standards and registered in South Africa under Act 36 of 1947. Efficacy and registration trials are conducted by independent research centres and consultants. ■

Contact us for more information or assistance with an innovative world class crop solution that will outperform the norm and unlock the full genetic potential of your crop.

Hendri Botha, Sales and Marketing Manager International, Introlab