



Innovative Solutions for Abundant, Nutritious Harvests:

Cultivating Resilient Crops Globally
and Advancing Climate-Smart Agriculture

Ashwathy Green Enterprise Pvt. Ltd.



Protect. Preserve. Prosper.



VISION

To be an ethical partner of Global Agriculture Production Systems, ensuring abundant and nutritious food production by facilitating rapid adaptation to climate change through strengthened crop resilience.



MISSION

To produce and supply Biologically Synthesized Growth Regulators and Biostimulants that meet global standards on a large scale.

To collaborate with organizations capable and willing to create **Climate Smart Agriculture Production Systems**, ensuring timely delivery of crop-specific solutions worldwide to support global food and nutritional security.

ABOUT US

Ashwathy Green Enterprise, established in Chennai in 2013, specializes in developing sustainable technologies aimed at enhancing global agricultural productivity. By employing scientific interventions in plant physiology to optimize hormonal and enzymatic balance, Ashwathy facilitates substantial increases in crop yield and quality. The innovative solutions also support the swift adoption of **Climate Smart Agriculture** practices.

These scientifically formulated and tested products play a crucial role in enhancing global food security and nutritional sufficiency by progressively narrowing yield gaps and promoting the adoption of **Climate Smart Agriculture** principles





GLOBAL CHALLENGE IN FOOD PRODUCTION SYSTEM

The inactive and defunct defence mechanisms in plants, caused by hormonal imbalances, significantly increases crop susceptibility to changes in abiotic factors, soil limitations, and pest epidemics. This leads to a gradual decline in crop productivity and widening yield gaps, despite efforts to ensure adequate crop nutrition and timely pest and disease management.

The adverse effects of climate change on agricultural production systems result in frequent crop losses and reduced yields worldwide. Even a minor variation in weather patterns, such as temperature extremes, frost, rain, floods, droughts, and high wind speeds during crucial growth stages, negatively affect Global Food Security initiatives.

PROVEN SOLUTION

Biologically Synthesized Growth Regulators (BS-PGR) and Biostimulants (BS) are crucial in addressing yield stagnation and enhancing farm productivity sustainably. These specialized agricultural inputs operate synergistically at the cellular level, ensuring the timely production of endogenous phytohormones and essential enzymes to maintain optimal enzymatic and hormonal levels. BS-PGR and BS have become indispensable components for maximizing crop yields in Global Agriculture Production System that faces unpredictable natural conditions and pest outbreaks.



BIOLOGICALLY SYNTHESIZED PLANT GROWTH REGULATOR WITH GIBBERELLIN, CYTOKININ, AUXINS & ENZYME PRECURSORS

BioGibb is a premium class plant growth regulator featuring biologically derived heterogenous organic substances known for their growth-promoting properties such as gibberellins, cytokinins, enzyme precursors, and biologically activated chelated essential plant nutrients stabilized in an aqueous biomass extract.

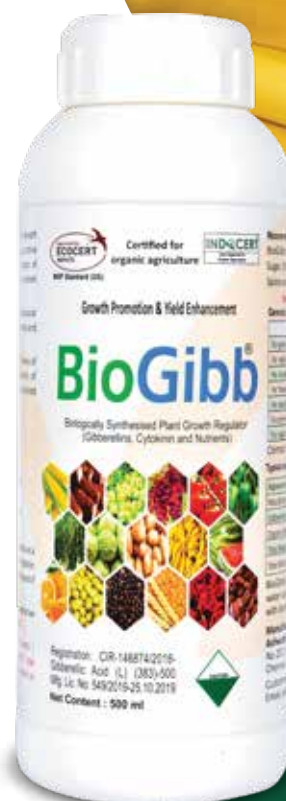
Scientifically manufactured using latest biotechnology processes under aseptic conditions. The select biomass undergoes enzymatic degradation during a specialized fermentation process to produce bio-active complexes. These complexes are scientifically preserved to ensure prolonged efficacy and shelf life.

BioGibb functions by ensuring an optimal balance of phytohormones and enzymes through supplementation and stimulation of endogenous synthesis. BioGibb enhances the metabolic efficiency of crops, promoting active growth and yielding superior quality harvests.

Application of BioGibb under irrigated agriculture systems, particularly during active vegetative and early reproductive stages, significantly boosts marketable yield and enhances produce quality in terms of color, texture, and nutritional value.

Typical analysis

Parameters	Observations
Appearance, colour and state	Brown Turbid Liquid
Specific gravity at 25 Deg C	1.12 ~ 1.14
Miscibility in water	Easily soluble
pH of 5% (w/v) solution	3.2 ~ 3.4
Total organic matter on dry basis, g/100 g	54 ~ 57
Gibberellic Acid	0.001 ~ 0.0015 %
Auxins & Cytokinin	Traces
Trace elements (Fe, Cu, Zn, Mn & B)	2.45~2.65%



BIOSTIMULANT WITH PROTEIN HYDROLYSATES AND AMINO ACIDS.

ADVANZ is a unique Biostimulant formulation comprising biologically synthesized organic compounds such as hydrolysed proteins and activated L-amino acids, that are known for their properties in mitigating physiological stress. Carefully crafted using advanced partial hydrolysis technology facilitated by a consortium of beneficial microbes through a multi-level, multi-stage fermentation process. The technical is carefully formulated in an aqueous extract of select sea plants rich in organic matter.

ADVANZ operates synergistically at cellular level to stimulate natural defence mechanisms to enhance crop resilience against physiological stress induced by climate variations, soil limitations and pest outbreaks. The free amino acids facilitates efficient scavenging of free radicals released during such stress conditions.

In rainfed agriculture systems, ADVANZ serves as a robust shield against the impacts of climate change, enabling rapid recovery to normal conditions while promoting vigorous vegetative growth. It significantly enhances yield with superior quality traits.

Typical analysis

Parameters	Observations
Appearance, colour and state	Brown Turbid Liquid
Specific gravity at 25 Deg C	1.12 ~ 1.14
Miscibility in water	Completely soluble in water
pH of 5% (w/v) solution	2.95 ~ 3.2
Total Organic Carbon on dry basis, g/100 g	31 ~ 34
Hydrolysed protein g/100g	15.5 ~ 17.0
Total Amino Acids in g/100g	8.5 ~10.0



GLOBAL OPPORTUNITY

BioGibb & ADVANZ complement the natural physiology of crops to boost crop efficiency, thereby enhancing yield and its quality. Significant improvements in growth, yield and quality of produce was observed across various crop segments tested under normal and stressed situations covering different agro climatic zones.

A consistent yield enhancement was recorded in cereals & grains crops (8 ~ 10%), pulses & oil seeds (10~ 12%), tubers (12 ~ 15 %), vegetables & seasonal fruits (10 ~ 15%), sugarcane (12~15%) and tree crops (10~18%).

The crop specific solutions has opened Global Opportunity complimenting various agriculture production system.

DOSAGE AND APPLICATION

These formulations are highly concentrated liquids requiring a dilution of 0.2 ~ 0.3% (200 ml to 300 ml per 1,000 ml) in the spray solution for application on crops. As a result, the dosage is reduced substantially and ranges from 600 ml to 750 ml per hectare.

To prepare the spray solution, mix the required quantity of the formulation with a small quantity of water till complete dissolution. Make up the spray solution with clean water with mild agitation. Non-ionic sticker is recommended for prolonged contact and rain fastness.

The spray solution is applied as a foliar spray on the foliage or administer through the drip line for root zone treatment. The active ingredients are absorbed quickly into the vascular system through stomata, lenticels, cuticular fissures, and root hairs, and move to the growing tissues to bring about the intended result quickly.

CROP RECOMMENDATIONS

Through various field efficacy trials we recommend the following doses for different crop groups. These are most economical doses and assuring significant economic benefits.

Crop	Dosage per Ha per time	Specific responses
Cereals & millets	650 ml / ha	More filled grains
Pulses & beans	600 ml / ha	Bold grains, higher protein
Oil Crops	500 ml / ha	Higher oil recovery
Vegetables	550 ml / ha	Ture to type colour, shape and nutritive values.
Cotton & Jute	600 ml / ha	Stronger fibre
Sugarcane	750 ml / ha	High CCS & brick value
Seasonal fruits	550 ml / ha	Colour, aroma and taste
Annual fruits	750 ml / ha	Colour, aroma and taste
Tubers & bulbs	600 ml / ha	Uniform sizes
Spices & condiments	700 ml / ha	Aroma and higher quality
Tea, coffee and cocoa	750 ml / ha	Superior quality
Cut flowers	550 ml / ha	Higher bud size and longer wase-life

Note: For crop specific requirements, contact us.

MANUFACTURING

The company operates a cutting-edge facility in Tamil Nadu, India, dedicated to manufacturing BS-PGR and BS that meet global standards. Stringent quality assurance protocols ensure consistent product quality in every batch.

Our team comprises of biotechnologists, biochemists, microbiologists, analytical chemists, process engineers, and management graduates with extensive hands-on experience in research & development, product development, production & formulation, and quality assurances.

The production capacity stands at 2.00 million Liters annually, with an expandable capacity of additional 2.00 million Litres per annum.

ASSOCIATIONS

Agriculture research



National Institute of Abiotic Stress Management.



Tamil Nadu Agriculture University



Keladi Shivappa Nayaka University Of Agricultural And Horticultural Sciences, Iruvacki, Shivamogga, Karnataka

Quality Assurance Services



Bioscience Research Foundation, Chennai.



Institute for Industrial Research & Toxicology



Shiram Institute for Industrial Research



General Society of Surveillance

Industry Bodies



CERTIFICATIONS





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