Plant Growth Regulators Market Assessment, By Type [Auxins, Cytokinin, Gibberellins, Ethylene, Others], By Crop Type [Cereals and Grains, Fruits and Vegetables, Oilseeds and Pulses, Turf and Ornamentals], By Function [Promoters, Inhibitors], By Region, Opportunities and Forecast, 2017-2031F

Market Report | 2024-04-19 | 226 pages | Market Xcel - Markets and Data

AVAILABLE LICENSES:

- Single User License $4500.00
- Muti-User/Corporate Licence $5700.00
- Custom Research License $8200.00

Report description:

Global plant growth regulators market is projected to witness a CAGR of 7.22% during the forecast period 2024-2031, growing from USD 3.28 billion in 2023 to USD 5.73 billion in 2031. Plant growth regulators, or PGRs, are chemicals that regulate plant growth and development. They alter features such as enhanced branching, shoot growth suppression, return bloom increase, excess fruit removal, or fruit maturity. Furthermore, various factors influence the performance of plant growth regulators, including how well the plant absorbs the chemical, the vigor and age of the tree, dosage timing, and the weather conditions before, during, and after application.

The market for plant growth regulators has grown steadily in recent years, driven by rising demand for increased agricultural productivity and crop yield optimization. Farmers and growers employ PGRs to control plant growth, improve crop quality, increase yield, and offset the effects of harsh environmental conditions. Furthermore, using PGRs in horticulture, floriculture, and grass management has boosted market growth. Factors influencing the global market for plant growth regulators include population increase, changing dietary choices, and the need for sustainable agriculture techniques.

As a result, the industry will likely continue growing, driven by rising food demand and the desire to increase agricultural productivity while reducing resource consumption. Additionally, the plant growth regulators market is expanding due to the growing popularity of organic farming. As more farmers switch from traditional to organic agricultural methods, there is an increased demand for PGRs, particularly those generated from natural resources. These natural PGRs are sought after as they are compatible with organic agricultural practices and can promote plant growth while maintaining environmental sustainability. Furthermore, with major players investing in research and development, the future market for PGRs appears favorable, with great opportunities to improve agricultural production and sustainability.

For example, in July 2022, the United States Department of Agriculture (USDA) launched Organic Transition Initiative (OTI). This USD 300 million investment offers technical assistance to producers interested in transitioning to organic farming.

Technological Advancements in the Agriculture Sector

Technical innovations have altered the agricultural sector, particularly the market for plant growth regulators. These advances have paved the way for creating more effective and efficient PGRs, which play an important role in increasing crop output, improving crop quality, and mitigating environmental stress factors. Precision farming has helped to drive up demand for plant growth regulators in the market. The modern strategy relies largely on innovative technology to improve resource utilization, reduce environmental impact, and increase crop yields. In this setting, PGRs have evolved into an essential component of precision farming, assisting farmers in achieving optimal agricultural results. Thus, the global plant growth regulators industry is seeing increased demand, particularly for PGRs with protective qualities. As more farmers recognize the benefits of integrating PGRs into their farming methods, the demand for new and efficient plant growth regulators is expected to increase.

For instance, in March 2023, Sumitomo Chemical Co., Ltd. launched a plant growth regulator called Promalin in Himachal Pradesh, India. It is a game-changer for apple growers and is expected to boost the production of apples in Himachal Pradesh, Jammu & Kashmir, and Uttarakhand.

Adoption of Sustainable Farming Methods

Organic farming and novel indoor farming methods, such as greenhouses and glass houses, are becoming increasingly popular. These approaches perfectly align with sustainable agriculture's ideals, as they prioritize resource efficiency, reduce environmental impact, and promote healthy crop development. Plant growth regulators stimulate crop yield by reducing environmental stressors and increasing crop resistance. Farmers can use PGRs to improve yields, optimize input management, and greatly contribute to the agricultural sector's overall productivity.

For instance, in February 2024, The Agriculture and Farmer's Welfare Minister of the state government of Tripura, announced the establishment of two new organic farming research institutes to boost organic farming in Tripura, India.

Auxins Dominate the Market

Auxins are a class of plant growth regulators that control many aspects of plant development, including cell division and vascular tissue production. They are essential in stimulating root initiation, enabling shoot maturation, and preserving apical dominance, which refers to the main stem's inclination to grow taller while not forming side branches. Furthermore, Auxins help fruits develop and ripen by controlling cell expansion, cell division, and hormone synthesis. Given their critical function in plant growth and development, auxins are projected to be the primary driver of the global plant growth regulators market. Their versatile application and modulation capabilities make them an indispensable tool for farmers, horticulturists, and researchers.

For instance, in December 2022, Krishak Bharati Cooperative (KRIBHCO) launched SIVARIKA, a seaweed bio simulant. Its granules are fortified with seaweed extract derived from red and brown algae. It functions as a metabolic bioenhancer containing proteins, carbohydrates, inorganic salts and other nutrients, vitamins, and plant growth hormones, including auxins, cytokinin, gibberellins, etc.

Europe Dominates Plant Growth Regulator Market

Europe dominates the global plant growth regulators market due to the region's increased embrace of sustainable agriculture techniques. Europe has a robust agricultural business producing diverse commodities, including fruits, vegetables, grains, and ornamentals. Farmers and producers in the region are employing innovative agricultural strategies to improve crop output, quality, and sustainability. Plant growth regulators have been crucial in reaching these objectives. European farmers increasingly use PGRs to control plant growth, increase fruit and vegetable yields, and improve crop uniformity.

Furthermore, Europe's well-established horticulture industry, which includes floriculture and vineyards, relies heavily on PGRs to deliver high-quality harvests while meeting market demands. Furthermore, European pesticide and herbicide use is governed by tight rules and standards. Plant growth regulators are considered safer and more ecologically friendly crop management tools. Farmers are drawn to PGRs because of the region's emphasis on sustainable agriculture and low chemical inputs. European authorities have aggressively encouraged the responsible use of PGRs, accelerating their uptake. These efforts have helped to advance the growth and development of plant growth regulators in the region.

For instance, in January 2023, the European Union launched the NUTRI-KNOW initiative, which aims to modernize the agricultural industry by gathering data from 11 organizations in six countries, including Spain, Belgium, Ireland, and Italy. The groups have

developed a variety of solutions, including technologies, tools, fertilizer products, and recommendations for the sustainable farming value chain.

Future Market Scenario (2024 - 2031F)

- Increasing investment in the agriculture sector and the increasing trend of organic farming is expected to boost the demand for plant growth regulators.
- Global demand for all crops, including cereals and grains, is increasing as the world's population grows and consumer lifestyles change, likely boosting the global plant growth regulators market.
- Technological breakthroughs such as new growth hormones and nano sensors for rapid testing of PGRs have the potential to change agricultural productivity, which is projected to fuel market growth in the future.

Key Players Landscape and Outlook

Major market players in global plant growth regulators market are eager to introduce new crop-targeted goods, especially in the fruit and vegetable category. Market leaders invest in R&D for affordable and effective products. Multinational corporations employ strategic techniques such as mergers and acquisitions to expand their footprint in developing markets.

In January 2023, Valiant Biosciences LLC announced the acquisition of FBSciences Holding, Inc. With the acquisition, Valent BioSciences and its parent company, Sumitomo Chemical Co., Ltd., have expanded their product portfolio with integrated biorational solutions, such as bio stimulants, biopesticides, and crop nutrition solutions.

Table of Contents:

6.1.5.4.2. Inhibitors
6.1.6. Canada
6.1.7. Mexico
*All segments will be provided for all regions and countries covered
6.2. Europe
6.2.1. Germany
6.2.2. France
6.2.3. Italy
6.2.4. United Kingdom
6.2.5. Russia
6.2.6. Netherlands
6.2.7. Spain
6.2.8. Turkey
6.2.9. Poland
6.3. Asia-Pacific
6.3.1. India
6.3.2. China
6.3.3. Japan
6.3.4. Australia
6.3.5. Vietnam
6.3.6. South Korea
6.3.7. Indonesia
6.3.8. Philippines
6.4. South America
6.4.1. Brazil
6.4.2. Argentina
6.5. Middle East & Africa
6.5.1. Saudi Arabia
6.5.2. UAE
6.5.3. South Africa
7. Market Mapping, 2023
7.1. By Type
7.2. By Crop Type
7.3. By Function
7.4. By Region
8. Macro Environment and Industry Structure
8.1. Demand Supply Analysis
8.2. Import Export Analysis
8.3. Value Chain Analysis
8.4. PESTEL Analysis
8.4.1. Political Factors
8.4.2. Economic System
8.4.3. Social Implications
8.4.4. Technological Advancements
8.4.5. Environmental Impacts
8.4.6. Legal Compliances and Regulatory Policies (Statutory Bodies Included)
8.5. Porter's Five Forces Analysis

*Companies mentioned above DO NOT hold any order as per market share and can be changed as per information available during research work.

SCOTTS INTERNATIONAL

Plant Growth Regulators Market Assessment, By Type [Auxins, Cytokinin, Gibberellins, Ethylene, Others], By Crop Type [Cereals and Grains, Fruits and Vegetables, Oilseeds and Pulses, Turf and Ornamentals], By Function [Promoters, Inhibitors], By Region, Opportunities and Forecast, 2017-2031F

Market Report | 2024-04-19 | 226 pages | Market Xcel - Markets and Data

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	$4500.00
	Muti-User/Corporate Licence	$5700.00
	Custom Research License	$8200.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	

Date	2025-05-07
Signature	