

Global Agricultural Biologicals Market | Types, Applications and Crops

Market Report | 2025-07-08 | 300 pages | Industry Experts

AVAILABLE LICENSES:

- Single user licence (PDF) \$4500.00
- Enterprise Electronic (PDF) \$7200.00

Report description:

Global Agricultural Biologicals Market Trends and Outlook

Agricultural biologicals are naturally derived crop inputs that improve plant health, productivity, and resilience by leveraging biological mechanisms rather than synthetic chemicals. These include biopesticides, biostimulants, biofertilizers, and emerging technologies like biological seed treatments, plant-incorporated protectants (PIPs), and synthetic microbial communities (SynComs). Applied through seed coatings, foliar sprays, or soil amendments, these inputs enhance nutrient uptake, promote growth, suppress pests, and improve soil health, all while minimizing ecological disruption. Biopesticides utilize microbes or natural substances to control pests with low toxicity; biostimulants enhance plant metabolism and stress tolerance; and biofertilizers biologically enrich soils through nitrogen fixation and phosphate solubilization. Their compatibility with organic farming, integration into diverse crop systems, and minimal residue make them key tools in sustainable agriculture.

The global agricultural biologicals market, estimated at US\$14.2 billion in 2024, is poised to grow to over US\$29 billion by 2030, registering a CAGR of 12.7% during 2024-2030. This growth is being driven by increasing regulatory pressure to reduce chemical use, heightened awareness of soil degradation, and rising consumer demand for organically grown, residue-free food. Government initiatives like India's National Mission for Sustainable Agriculture and global subsidy programs are supporting biological adoption. At the same time, advancements in synthetic biology, microbial genomics, and AI-powered precision farming are accelerating product innovation and field deployment. Rising costs of conventional agrochemicals are also prompting farmers to explore more sustainable, cost-effective alternatives. As integrated pest and nutrient management strategies evolve, agricultural biologicals are emerging as vital components of next-generation crop input solutions, enabling environmentally responsible and economically viable farming.

Agricultural Biologicals Regional Market Analysis

North America dominates the global agricultural biologicals market, holding an estimated 31.6% share in 2024, driven by a mature organic farming ecosystem, strong regulatory frameworks, and substantial investment in research and development. The region benefits from targeted USDA programs, stringent EPA and FDA oversight, and broad adoption of precision agriculture and integrated pest management practices, all of which reinforce its leadership in sustainable farming. Increasing consumer demand

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

for organic, residue-free food and rising concerns over soil and groundwater degradation are accelerating the shift from chemical to biological inputs. Conversely, Asia-Pacific is projected to record the fastest growth, with a CAGR of 14.3% during the forecast period 2024-2030, fueled by rapid population growth, food security concerns, and government-backed sustainability initiatives. Countries like China, India, and Australia are promoting biofertilizers and biopesticides through subsidies and public-private partnerships, while consumer preference for organic food and rising environmental awareness are pushing regional adoption of sustainable farming inputs.

Agricultural Biologicals Market Analysis by Type

The biopesticides segment accounts for the largest share of the agricultural biologicals market by type, with 50.4% in 2024, driven by growing demand for environmentally safe pest control, supportive regulations, and increased awareness of soil and pollinator health. Sourced from natural materials, they offer targeted, residue-free protection, especially suited for organic and high-value crops, with strong adoption in North America and Europe backed by IPM practices and formulation innovations. Meanwhile, the biostimulants segment is projected to grow at the fastest rate, with a CAGR of 13% from 2024 to 2030, driven by increasing demand for higher crop quality, better nutrient uptake, and improved plant resilience to environmental stress. With the growth of organic farming and a rising consumer demand for chemical-free food, biostimulants are becoming increasingly popular due to their capacity to enhance plant performance through environmentally responsible practices.

Agricultural Biologicals Market Analysis by Application

In 2024, the foliar spray segment dominates the agricultural biologicals market with a 48.6% share, driven by its ease of application, rapid absorption, and effectiveness in delivering nutrients and crop protection agents directly to plant foliage. Its compatibility with precision farming and ability to provide targeted action during key growth stages make it widely adopted, especially in high-value crops. Foliar sprays also support sustainable practices by minimizing input waste and environmental impact. Meanwhile, the seed treatment segment is expected to register the fastest CAGR of 13.3% from 2024 to 2030, supported by the growing demand for disease-resistant, high-yielding crops and advancements in biological coating technologies that enhance germination, root development, and early plant vigor.

Agricultural Biologicals Market Analysis by Crop Type

In 2024, the cereals and grains segment leads the agricultural biologicals market with a 36.7% share, primarily driven by rising global demand for staple crops such as wheat, rice, and corn, combined with increasing adoption of biofertilizers like azotobacter and phosphate-solubilizing bacteria that improve nutrient efficiency and yield. Microbiological innovations tailored to cereal crops, combined with a strategic shift away from chemical inputs to address soil degradation, are reinforcing the segment's dominance, particularly in major agricultural markets such as the US, China, and India. Conversely, the fruits and vegetables segment is expected to register the fastest CAGR of more than 13% from 2024 to 2030, propelled by surging consumer demand for organic and residue-free produce, stringent regulatory scrutiny on synthetic pesticide residues, and the need for frequent pest and disease control in short-cycle, high-value crops. The growing use of biopesticides, biostimulants, and biofertilizers in export-sensitive markets, along with the integration of these products into pest management strategies, is further accelerating growth in this segment.

Agricultural Biologicals Market Report Scope

This global report on Agricultural Biologicals analyzes the market based on type, application, and crop type for the period 2021-2030 with projections from 2024 to 2030 in terms of value in US\$. In addition to providing profiles of major companies operating in this space, the latest corporate and industrial developments have been covered to offer a clear panorama of how and where the market is progressing.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Key Metrics

Historical Period: 2021-2024

Base Year: 2024

Forecast Period: 2024-2030

Units: Value market in US\$

Companies Mentioned: 35

Agricultural Biologicals Market by Geographic Region

- North America (The United States, Canada, and Mexico)
- Europe (Germany, France, United Kingdom, Italy, Spain, and Rest of Europe)
- Asia-Pacific (Japan, China, India, South Korea, and Rest of Asia-Pacific)
- South America (Brazil, Argentina, and Rest of South America)
- Rest of World

Agricultural Biologicals Market by Type

- Biopesticides
- Biostimulants
- Biofertilizers
- Other Types (Including Biological Seed Treatments, Endophytes, Plant-Incorporated Protectants (PIPs), and Synthetic microbial communities (SynComs))

Agricultural Biologicals Market by Application

- Foliar Spray
- Soil Treatment
- Seed Treatment
- Other Applications (Including Root Drenching, Drip Irrigation, Fertigation, Hydroponic Systems, Controlled Environment Agriculture, and Others)

Agricultural Biologicals Market by Crop Type

- Cereals & Grains
- Oilseeds & Pulses
- Fruits & Vegetables
- Other Crop Types (Including Turf & Ornamental Plants, Plantation Crops, Medicinal Plants, and Others)

Table of Contents:

PART A: GLOBAL MARKET PERSPECTIVE

1. INTRODUCTION

- Product Outline
- Agricultural Biologicals Defined
- Agricultural Biologicals Types
 - o Biopesticides
 - o Biostimulants
 - o Biofertilizers
 - o Other Types (Including Biological Seed Treatments, Endophytes, Plant-Incorporated Protectants (PIPs), and Synthetic microbial communities (SynComs))

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- Agricultural Biologicals Applications
 - o□ Foliar Spray
 - o□ Soil Treatment
 - o□ Seed Treatment
 - o□ Other Applications (Including Root Drenching, Drip Irrigation, Fertigation, Hydroponic Systems, Controlled Environment Agriculture, and Others)
- Agricultural Biologicals usage in Crops
 - o□ Cereals & Grains
 - o□ Oilseeds & Pulses
 - o□ Fruits & Vegetables
 - o□ Other Crop Types (Including Turf & Ornamental Plants, Plantation Crops, Medicinal Plants, and others)

2. Key Market Trends

3. Key Market Players

- AgriLife (India) Private Limited
- American Vanguard Corporation
- Andermatt Group AG
- BASF SE
- Bayer AG
- BioFirst Group
- Biolchim S.P.A.
- Biomaxnaturals
- Biostadt India Limited
- BioWorks Inc.
- Certis Biologicals
- Corteva Agriscience
- FMC Corporation
- Gujarat State Fertilizers and Chemicals Ltd
- Haifa Group
- Hello Nature Italia S.r.l.
- IPL Biologicals Limited
- Isagro Group
- Kiwa Bio-Tech Products Group Corporation
- Koppert B.V.
- Lallemand Inc.
- Mapleton Agri Biotec Pty Ltd
- National Fertilizers Limited
- Novonesis A/S
- Nufarm
- Pro Farm Group Inc.
- Rizobacter Argentina S.A.
- Rovensa Group
- Som Phytopharma India Limited
- STK Bio-Ag Technologies
- Symborg
- Syngenta
- Syngenta Crop Protection AG
- T.Stanes and Company Limited

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- [] UPL Ltd.
- [] Valent BioSciences LLC
- [] Vegalab SA
- 4. Key Business & Product Trends
- 5. Global Market Overview
- [] Global Agricultural Biologicals Market Overview by Type
 - o [] Agricultural Biologicals Type Market Overview by Global Region
 - [] Biopesticides
 - [] Biostimulants
 - [] Biofertilizers
 - [] Other Types
- [] Global Agricultural Biologicals Market Overview by Application
 - o [] Agricultural Biologicals Application Market Overview by Global Region
 - [] Foliar Spray
 - [] Soil Treatment
 - [] Seed Treatment
 - [] Other Applications
- [] Global Agricultural Biologicals Market Overview by Crop Type
 - o [] Agricultural Biologicals Crop Type Market Overview by Global Region
 - [] Cereals & Grains
 - [] Oilseeds & Pulses
 - [] Fruits & Vegetables
 - [] Other Crop Types

PART B: REGIONAL MARKET PERSPECTIVE

- [] Global Agricultural Biologicals Market Overview by Geographic Region

REGIONAL MARKET OVERVIEW

6. North America

- [] North American Agricultural Biologicals Market Overview by Geographic Region
- [] North American Agricultural Biologicals Market Overview by Type
- [] North American Agricultural Biologicals Market Overview by Application
- [] North American Agricultural Biologicals Market Overview by Crop Type
- [] Country-wise Analysis of North American Agricultural Biologicals Market
 - o [] The United States
 - [] United States Agricultural Biologicals Market Overview by Type
 - [] United States Agricultural Biologicals Market Overview by Application
 - [] United States Agricultural Biologicals Market Overview by Crop Type
 - o [] Canada
 - [] Canadian Agricultural Biologicals Market Overview by Type
 - [] Canadian Agricultural Biologicals Market Overview by Application
 - [] Canadian Agricultural Biologicals Market Overview by Crop Type
 - o [] Mexico
 - [] Mexican Agricultural Biologicals Market Overview by Type
 - [] Mexican Agricultural Biologicals Market Overview by Application
 - [] Mexican Agricultural Biologicals Market Overview by Crop Type

7. Europe

- [] European Agricultural Biologicals Market Overview by Geographic Region
- [] European Agricultural Biologicals Market Overview by Type

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- European Agricultural Biologicals Market Overview by Application
 - European Agricultural Biologicals Market Overview by Crop Type
 - Country-wise Analysis of European Agricultural Biologicals Market
 - o□Germany
 - German Agricultural Biologicals Market Overview by Type
 - German Agricultural Biologicals Market Overview by Application
 - German Agricultural Biologicals Market Overview by Crop Type
 - o□France
 - French Agricultural Biologicals Market Overview by Type
 - French Agricultural Biologicals Market Overview by Application
 - French Agricultural Biologicals Market Overview by Crop Type
 - o□The United Kingdom
 - United Kingdom Agricultural Biologicals Market Overview by Type
 - United Kingdom Agricultural Biologicals Market Overview by Application
 - United Kingdom Agricultural Biologicals Market Overview by Crop Type
 - o□Italy
 - Italian Agricultural Biologicals Market Overview by Type
 - Italian Agricultural Biologicals Market Overview by Application
 - Italian Agricultural Biologicals Market Overview by Crop Type
 - o□Spain
 - Spanish Agricultural Biologicals Market Overview by Type
 - Spanish Agricultural Biologicals Market Overview by Application
 - Spanish Agricultural Biologicals Market Overview by Crop Type
 - o□Rest of Europe
 - Rest of Europe Agricultural Biologicals Market Overview by Type
 - Rest of Europe Agricultural Biologicals Market Overview by Application
 - Rest of Europe Agricultural Biologicals Market Overview by Crop Type
8. Asia-Pacific
- Asia-Pacific Agricultural Biologicals Market Overview by Geographic Region
 - Asia-Pacific Agricultural Biologicals Market Overview by Type
 - Asia-Pacific Agricultural Biologicals Market Overview by Application
 - Asia-Pacific Agricultural Biologicals Market Overview by Crop Type
 - Country-wise Analysis of Asia-Pacific Agricultural Biologicals Market
 - o□Japan
 - Japanese Agricultural Biologicals Market Overview by Type
 - Japanese Agricultural Biologicals Market Overview by Application
 - Japanese Agricultural Biologicals Market Overview by Crop Type
 - o□China
 - Chinese Agricultural Biologicals Market Overview by Type
 - Chinese Agricultural Biologicals Market Overview by Application
 - Chinese Agricultural Biologicals Market Overview by Crop Type
 - o□India
 - Indian Agricultural Biologicals Market Overview by Type
 - Indian Agricultural Biologicals Market Overview by Application
 - Indian Agricultural Biologicals Market Overview by Crop Type
 - o□South Korea
 - South Korean Agricultural Biologicals Market Overview by Type

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- South Korean Agricultural Biologicals Market Overview by Application
- South Korean Agricultural Biologicals Market Overview by Crop Type
- o□Rest of Asia-Pacific
- Rest of Asia-Pacific Agricultural Biologicals Market Overview by Type
- Rest of Asia-Pacific Agricultural Biologicals Market Overview by Application
- Rest of Asia-Pacific Agricultural Biologicals Market Overview by Crop Type

9. South America

- South American Agricultural Biologicals Market Overview by Geographic Region
- South American Agricultural Biologicals Market Overview by Type
- South American Agricultural Biologicals Market Overview by Application
- South American Agricultural Biologicals Market Overview by Crop Type
- Country-wise Analysis of Asia-Pacific Agricultural Biologicals Market

o□Brazil

- Brazilian Agricultural Biologicals Market Overview by Type
- Brazilian Agricultural Biologicals Market Overview by Application
- Brazilian Agricultural Biologicals Market Overview by Crop Type

o□Argentina

- Argentine Agricultural Biologicals Market Overview by Type
- Argentine Agricultural Biologicals Market Overview by Application
- Argentine Agricultural Biologicals Market Overview by Crop Type

o□Rest of South America

- Rest of South American Agricultural Biologicals Market Overview by Type
- Rest of South American Agricultural Biologicals Market Overview by Application
- Rest of South American Agricultural Biologicals Market Overview by Crop Type

10. Rest of World

- Rest of World Agricultural Biologicals Market Overview by Type
- Rest of World Agricultural Biologicals Market Overview by Application
- Rest of World Agricultural Biologicals Market Overview by Crop Type

PART C: GUIDE TO THE INDUSTRY

PART D: ANNEXURE

1. RESEARCH METHODOLOGY
2. FEEDBACK

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Global Agricultural Biologicals Market | Types, Applications and Crops

Market Report | 2025-07-08 | 300 pages | Industry Experts

To place an Order with Scotts International:

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

ORDER FORM:

Select license	License	Price
	Single user licence (PDF)	\$4500.00
	Enterprise Electronic (PDF)	\$7200.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scott's-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*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-22"/>
		Signature	<input type="text"/>

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scott's-international.com

www.scott's-international.com