

# CONNECTING SCIENCE WITH NATURE

## Biologicals market overview

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# So how big is the Biological market really?

## The Market and Potential for Biopesticides

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DOI: 10.1021/bk-2014-1172.ch016

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Chapter Views

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*Biopesticides: State of the Art and Future Opportunities*  
Chapter 16, pp 245-258

Biopesticides represent approximately **\$2-3 billion** of the \$56 billion pesticide market. Growth of biopesticides is projected to outpace that of chemical pesticides, with compounded annual growth rates of more than **15% = (2030 value 28b USD)**

**New** Global Biopesticides Market 2021-2025  
February 2021 | 120 pages | ID: 1592853 | Format: PDF | Infiniti Research Limited

[Summary](#) | [Table of Contents](#)

**Global Biopesticides Market 2021-2025**  
The analyst has been monitoring the biopesticides market and it is poised to grow by \$ 4.46 bn during 2021-2025 progressing at a CAGR of 17% during the forecast period. Our report on

**Today 5b, 9.5b by 2025**



**Biopesticides Market to reach US\$ 10.19 Billion by 2025, at a CAGR of 14.93% | Exclusive Report by Fortune Business Insights**

Key companies covered in the Biopesticides Market Research Report include Bayer CropScience, BASF, DowDupont, Marrone Bioinnovations, Koppert, Valent BioSciences, BioWorks Inc., Isagro, Stockton Ltd. among others.

Climate Change and Environmental Sustainability (October 2016) 4(2): 129-136  
DOI: 10.5958/2320-642X.2016.00014.4

REVIEW ARTICLE

## Current Challenges, Constraints and Future Strategies for Development of Successful Market for Biopesticides

growth with compound annual growth rate (CAGR) of **8.64% that will rise at least 2023** and accounts more than **\$4.5 billion or more than 7% of global crop protection market** (Olson, 2015). The major microbial and plant-based



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### Biopesticides Market

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**Biopesticides Market by Type (Bioinsecticides, Biofungicides, Bionematicides, and Bioherbicides), Source (Microbials, Biochemicals, and Beneficial Insects), Mode of Application, Formulation, Crop Application, and Region - Global Forecast to 2025**

DESCRIPTION | TABLE OF CONTENTS | METHODOLOGY | [DOWNLOAD PDF](#)

The global biopesticides market is projected to grow at a CAGR of 14.7% from an estimated value of USD 4.3 billion in 2020 to reach USD 8.5 billion by 2025. The usage of synthetic chemicals

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pesticides Market

**Biopesticides Market by Type (Bioinsecticides, Biofungicides, Bionematicides, Bioherbicides), Application (Foliar Spray, Seed Treatment), Formulation (Liquid and Dry), Origin (Microbial, Biochemical, PIP), Crop Type - Global Forecast to 2025**

Report ID: MRAGR - 104352 | Pages: 240 | Nov-2019 | Formats: PDF | Category: Agriculture | Delivery: 2 to 4 Hours

The global biopesticides market is expected to reach **\$10.24 billion by 2025**, supported by a CAGR of 16.1% during the forecast period of 2019 to 2025

Biologicals are products derived or inspired by nature for protecting & strengthening plants. They fall under **two key classifications**.

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## Biocontrols

Products based on naturally occurring materials that are used for biotic stress management in **controlling** fungal and bacterial diseases, arthropod pests, nematodes and weeds.



## Biostimulants

Any substance, that is applied to plants, seeds or the root environment with the intention to **stimulate** natural processes of plants. Benefiting nutrient use efficiency, tolerance to abiotic stress or crop quality.

# Growth opportunities in Biologicals

## Growth drivers

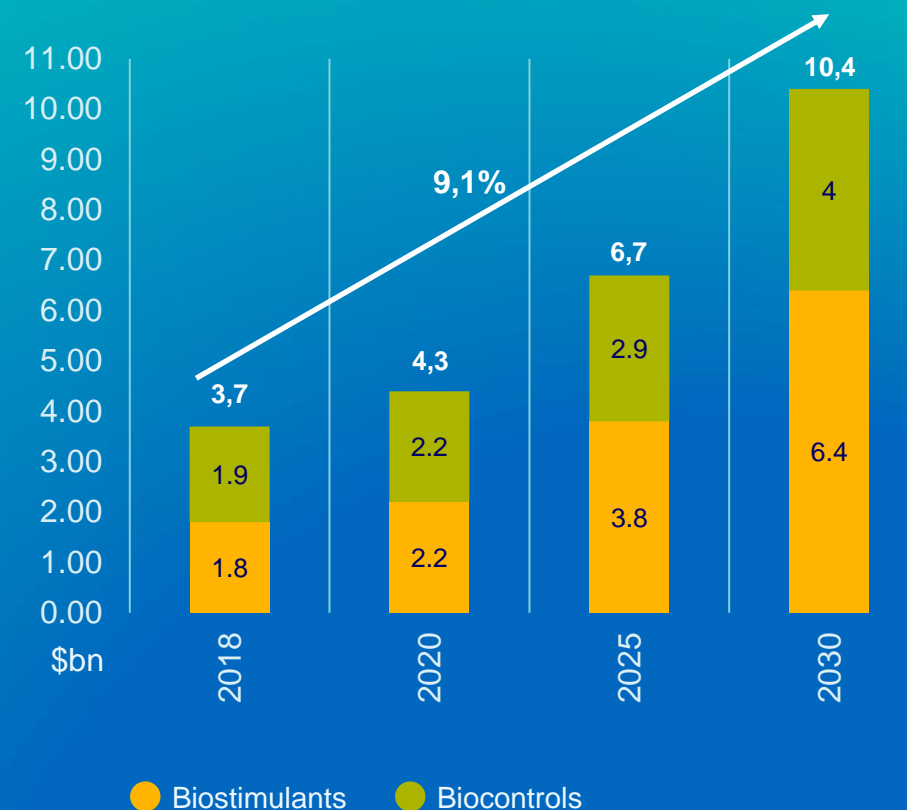
### Biocontrols

- **Food chain** and public pressure towards low or no residues in food
- **EU “Green Deal”** 50% reduction in synthetic CP use, and 25% of all farming under organic protocols by 2030
- **Resistance/pest shifts** to require new mode of action
- **R&D investment** into high efficacy biological products

### Biostimulants

- **Climate change**
- **Increased grower awareness**
- **Entrance of large agriculture players:** leverage of market footprint and integration into existing crop solutions
- **Long term growth driven by R&D investments**

## Biologicals are an attractive market and critical to our CP strategy



Source: SYT market estimation based on: Kline 2015&2017 market data, SYT Biocontrol and Crop enhancement strategy (2017&2018) base case market growth, Iplan 2018

# Potential hurdles hindering rapid biological uptake short mid-term

- Exciting pipeline innovation, yet in early stage -> several years to reach market
- Lack of global/regional regulatory framework for biopesticides and Biostimulants
- Low technology differentiation, lack of IP
- Product efficacy, consistency, application inferiority
- Industry and grower readiness to develop and implement a truly integrated approach pest/crop management
- Unconsolidated digital AG landscape and yet a few practical solution

# A shifting innovation model in agriculture?

