

# **Agricultural Nanotechnology Market: Segmented By End User (Electronics, Energy, Cosmetics, Biomedical, Defense, Food/Drink & Agriculture, and Automotive); By Application (Nanoscale Carriers, Nanolignocellulosic Materials, Clay Nanotubes, Biosensors, and Others) and Region – Global Analysis of Market Size, Share & Trends for 2019–2020 and Forecasts to 2030**

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## **Abstracts**

### Product Overview

The use of incredibly small instruments like sensors that can be used for agricultural development is nanotechnology in agriculture. Nanotechnology is a new industrial revolution and can lead to significant changes in the agricultural sector. The development of nanotechnology-based instruments and equipment contributes to improving efficiency and overcoming agrarian industry challenges. Agricultural tools based on nanotech have a considerable benefit; they assist in detecting disease at an early age, improve the plants' nutrient absorption capacity and promote molecular disease treatment.

### Market Highlights

Global Agricultural Nanotechnology market is expected to project a notable CAGR of 16.65% in 2030.

Global Agricultural Nanotechnology to surpass USD 256 billion by 2030 from USD 120 billion in 2020 at a CAGR of 16.65 % in the coming years, i.e., 2021-30. Original agrochemical businesses drive global nanotechnology on the agricultural market because they study the prospects of the nanotechnology industry to achieve high

efficiencies and greater technology insertion into agricultural plant components. Several nano-products specially used in the agricultural industry have been introduced in the market by technologically oriented medium-sized enterprises producing soil improvement products that promote the distribution, storage, and consequent water savings of water evenly.

### Global Agricultural Nanotechnology Market: Segments

Nanoscale carriers segment to grow with the highest CAGR during 2020-30

Global Agricultural Nanotechnology market is segmented by application into nanoscale carriers, nanolignocellulosic materials, clay nanotubes, biosensors, and others. Efficient supplies of fertilizers, pesticides, herbicides, and plant growth regulators can be used by nanoscale carriers. Its process helps to avoid plant degradation and reduces the environmental chemical flux. Nanocarriers contribute to improved stabilization against environmental degradation and lessen overall environmental problems.

Nanolignocellulose materials are obtained from plants and trees, creating new opportunities for nano-size materials and products with innovation and value-added.

Agriculture segment to grow with the highest CAGR during 2020-30

Global Agricultural Nanotechnology is divided by end-users into Electronics, Energy, Cosmetics, Biomedical, Defense, Food/Drink & Agriculture, and Automotive.

Nanotechnology is a new industrial revolution and can lead to significant changes in the agricultural sector. The development of nanotechnology-based instruments and equipment contributes to improving efficiency and overcoming agrarian industry challenges. Agricultural tools based on nanotech have a considerable benefit; they assist in detecting disease at an early age, improve the plants' nutrient absorption capacity and promote molecular disease treatment.

### Market Dynamics

#### Drivers

Recent developments in research

In agriculture, the market in nanotechnology has grown dramatically. Research has been done to measure the potential advantages of nanotechnology in agriculture in the marketing agrochemical sector. Nanotechnology applications in consumer goods have also expanded in some nations, including health and environmental safety, consumer perceptions and intellectual property laws, a number of ethical and societal concerns.

Increase in overall productivity

Nanotechnology is a new industrial revolution and can lead to significant changes in the agricultural sector. The development of nanotechnology-based instruments and

equipment contributes to improving efficiency and overcoming agrarian industry challenges. Agricultural tools based on nanotech have a considerable benefit; they assist in detecting disease at an early age, improve the plants' nutrient absorption capacity and promote molecular disease treatment.

### Restraint

Lack of technological know-how

Nanotechnology in agriculture is an intelligent farming technique requiring technical knowledge. Limited knowledge about and use of advanced technologies creates an imbalance between comprehension and implementation of the concepts in the field of nano agriculture. While several governments and market players around the world take initiatives to provide training and advising farmers on the use of nanotechnology agriculture, many farmers are not involved. Similarly, limited technical know-how is hindering the growth of the Agricultural Nanotechnology industry by farmers in developing countries like China, India, and Brazil.

### Global Agricultural Nanotechnology Market: Key Players

Nanosys Inc

Company Overview, Business Strategy, Key Product Offerings, Financial Performance, Key Performance Indicators, Risk Analysis, Recent Development, Regional Presence, SWOT Analysis

Zyvex Labs

Oxford Instruments plc

Integran Technologies

NanoMaterials Ltd.

Nanoco Group plc

Hyperion Catalysis International

Chemat Technology Inc.

ThalesNano Inc.

Chasm Technologies

ASML Holding

Other Prominent Players

### Global Agricultural Nanotechnology Market: Regions

Global Agricultural Nanotechnology market is segmented based on regional analysis into five major regions. These include North America, Latin America, Europe, Asia Pacific, and the Middle East and Africa.

Global Agricultural Nanotechnology in North America held the largest market share of XX.X% in the year 2020. Countries like the United States and Canada in America are the first to implement nanotechnology agriculture technologies, which is a key reason for the region's significant proportion of the nanotechnology in agricultural market. In the United States, Western European nations, and Japan, agricultural nanotechnology is widely used. Nanotechnology users have grown significantly in countries like Brazil, India, China, South Korea, South Africa, and Thailand. South Africa and Thailand have conducted substantial research development projects in nanotechnology and have established national activities to address particular needs of agriculture nanotechnology.

Global Agricultural Nanotechnology Market is further segmented by region into:

North America Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – United States and Canada

Latin America Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – Mexico, Argentina, Brazil, and Rest of Latin America

Europe Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – United Kingdom, France, Germany, Italy, Spain, Belgium, Hungary, Luxembourg, Netherlands, Poland, NORDIC, Russia, Turkey, and Rest of Europe

Asia Pacific Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – India, China, South Korea, Japan, Malaysia, Indonesia, New Zealand, Australia, and Rest of APAC

Middle East and Africa Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – North Africa, Israel, GCC, South Africa, and Rest of MENA

Global Agricultural Nanotechnology Market report also contains analysis on:

Agricultural Nanotechnology Market Segments:

By End-User

Electronics

Energy

Cosmetics

Biomedical

Defense

Food/Drink & Agriculture

Automotive

By Application

Nanoscale carriers

Nanolignocellulosic materials

Clay nanotubes

Biosensors

Others

Agricultural Nanotechnology Market Dynamics  
Agricultural Nanotechnology Market Size  
Supply & Demand  
Current Trends/Issues/Challenges  
Competition & Companies Involved in the Market  
Value Chain of the Market  
Market Drivers and Restraints  
Agricultural Nanotechnology Market Report Scope and Segmentation

#### Frequently Asked Questions

How big is the Agricultural Nanotechnology market?  
What is the Agricultural Nanotechnology market growth?  
Which segment accounted for the largest Agricultural Nanotechnology market share?  
Who are the key players in the Agricultural Nanotechnology market?  
What are the factors driving the Agricultural Nanotechnology market?

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**10. CHASM TECHNOLOGIES**

**11. ASML HOLDING**

**12. OTHER PROMINENT PLAYERS**

Consultant Recommendation

**\*\*The above-given segmentations and companies could be subjected to further modification based on in-depth feasibility studies conducted for the final deliverable.**

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