

Mycorrhizal Mapping Market Forecasts to 2032 – Global Analysis By Type of Mycorrhiza (Endomycorrhiza, Ectomycorrhiza, Ericoid Mycorrhiza and Other Mycorrhizal Types), Product Form, Mode of Application, Technology, Application, End User and By Geography

<https://marketpublishers.com/r/M21868007CBCEN.html>

Date: October 2025

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: M21868007CBCEN

Abstracts

According to Statistics MRC, the Global Mycorrhizal Mapping Market is accounted for \$1.3 billion in 2025 and is expected to reach \$3.1 billion by 2032 growing at a CAGR of 12.6% during the forecast period. Mycorrhizal mapping is the systematic identification and spatial analysis of symbiotic associations between mycorrhizal fungi and plant roots across ecosystems. It involves tracking fungal distribution, colonization patterns, and ecological interactions to understand nutrient exchange, soil health, and biodiversity. This mapping supports agricultural planning, forest management and restoration efforts by revealing functional zones of fungal activity. Techniques include molecular sequencing, root sampling, and geospatial modeling to visualize fungal networks and their influence on plant productivity and ecosystem resilience.

According to Nature Communications mapped global mycorrhizal vegetation and estimated that arbuscular mycorrhizal (AM) plants account for approximately 45% of global plant biomass, while ectomycorrhizal (EcM) plants represent about 20%. These spatially explicit maps were derived from multiple datasets and highlight the ecological significance of mycorrhizal associations in shaping terrestrial biogeochemical cycles.

Market Dynamics:

Driver:

Rising demand for sustainable agriculture

As global agriculture shifts toward regenerative and eco-friendly practices, mycorrhizal mapping is gaining traction for its role in enhancing soil fertility and reducing chemical inputs. By identifying symbiotic fungal networks, this technology enables precision farming and supports biodiversity conservation. Governments and agritech firms are increasingly investing in soil microbiome research to boost crop resilience and productivity, positioning mycorrhizal mapping as a critical tool in sustainable land management strategies.

Restraint:

Limited awareness among farmers and agronomists

Despite its ecological benefits, the adoption of mycorrhizal mapping remains constrained by low awareness and technical literacy among end users. Many farmers are unfamiliar with the role of fungal networks in nutrient cycling, and lack access to training or advisory services. This knowledge gap, particularly in developing regions, limits market penetration and slows the integration of mapping tools into mainstream agricultural practices.

Opportunity:

Improved sequencing and GIS technologies enable accurate fungal network visualization

Recent breakthroughs in genetic sequencing and geospatial imaging have significantly improved the accuracy and scalability of mycorrhizal mapping. These innovations allow researchers and agronomists to visualize underground fungal networks in real time, enabling site-specific interventions. The integration of AI-driven analytics and cloud-based platforms further enhances data interpretation, opening new avenues for commercial applications in precision agriculture, reforestation, and ecosystem restoration.

Threat:

Habitat destruction and urbanization

Rapid urban expansion, deforestation, and intensive land use are disrupting native mycorrhizal communities, threatening the ecological balance required for effective mapping. As fungal biodiversity declines, the reliability of mapping data diminishes, undermining its utility in long-term soil health monitoring. Additionally, fragmented habitats and monoculture farming reduce the diversity of host plants, limiting the scope of symbiotic interactions that mapping technologies aim to capture.

Covid-19 Impact:

The COVID-19 pandemic had a dual impact on the mycorrhizal mapping market. While initial lockdowns disrupted field research, laboratory access, and supply chains for sequencing reagents, the crisis also accelerated interest in resilient agricultural systems. Remote sensing and digital mapping tools gained prominence as researchers adapted to travel restrictions. Moreover, the pandemic underscored the importance of food security and sustainable land use, indirectly boosting investments in soil microbiome research and mapping technologies.

The ectomycorrhiza segment is expected to be the largest during the forecast period

The ectomycorrhiza segment is expected to account for the largest market share during the forecast period due to its extensive presence in temperate and boreal forest ecosystems. These fungi form symbiotic relationships with trees such as pine, oak, and birch, playing a vital role in nutrient absorption, particularly phosphorus and nitrogen. Their contribution to carbon sequestration and soil stabilization makes them indispensable in forestry, conservation, and reforestation initiatives.

The genetic sequencing segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the genetic sequencing segment is predicted to witness the highest growth rate driven by its unmatched accuracy in identifying diverse fungal taxa and their functional roles in soil ecosystems. The technology enables researchers to decode complex microbial communities and trace symbiotic interactions at the molecular level. With the cost of sequencing technologies steadily declining and bioinformatics platforms becoming more accessible, adoption is surging across academic institutions, agritech firms, and environmental consultancies.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share attributed to robust research ecosystem, advanced agricultural infrastructure, and proactive government initiatives promoting sustainable land use. The region hosts several leading biotech companies and universities that specialize in soil microbiome research and precision agriculture. Additionally, widespread adoption of GIS and remote sensing technologies enhances the scalability of mapping efforts.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR fueled by rapid agricultural modernization and increasing awareness of soil health among farmers and policymakers. Countries such as India, China, and Australia are witnessing a surge in demand for microbial inputs and sustainable farming practices. Government-backed initiatives aimed at improving crop yields and combating land degradation are creating fertile ground for mycorrhizal mapping technologies.

Key players in the market

Some of the key players in Mycorrhizal Mapping Market include Symborg, Koppert Biological Systems, Biolchim S.p.A., Atl?ntica Agr?cola, Gujarat State Fertilizers & Chemicals Ltd, Premier Tech, Mycorrhizal Applications LLC, Groundwork BioAg, Novozymes, Valent BioSciences, TerraSpase, EcoFungi, Soil Foodweb Inc., Regen Ag Lab, and Earthfort.

Key Developments:

In October 2025, Symborg secured additional funding from SOPEF to expand its microbial biostimulant portfolio. The company continues to develop root-enhancing biologicals for sustainable agriculture.

In October 2025, Premier Tech unveiled new Pro-Mix AGTIV solutions for Controlled Environment Agriculture (CEA). The launch at the Canadian Greenhouse Conference introduced tailored substrates and biologicals for CEA growers.

In September 2025, Koppert partnered with Windset Farms to launch a digital campaign on sustainable pest management. The initiative educates consumers on IPM practices using beneficial insects in greenhouse farming.

Type of Mycorrhizas Covered:

Endomycorrhiza

Ectomycorrhiza

Ericoid Mycorrhiza

Other Mycorrhizal Types

Product Forms Covered:

Liquid

Solid

Mode of Applications Covered:

Seed Treatment

Soil Treatment

Transplant Treatment

Technologies Covered:

Genetic Sequencing

Microscopy-Based Mapping

Remote Sensing & GIS

Bioinformatics Platforms

Other Technologies

Applications Covered:

Environmental Monitoring

Soil Health Assessment

Restoration Ecology

Agriculture

Forestry

End Users Covered:

Research Institutions

Government Agencies

Agritech Companies

Environmental Consultancies

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

2 PREFACE

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
 - 2.4.1 Data Mining
 - 2.4.2 Data Analysis
 - 2.4.3 Data Validation
 - 2.4.4 Research Approach
- 2.5 Research Sources
 - 2.5.1 Primary Research Sources
 - 2.5.2 Secondary Research Sources
 - 2.5.3 Assumptions

3 MARKET TREND ANALYSIS

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Technology Analysis
- 3.7 Application Analysis
- 3.8 End User Analysis
- 3.9 Emerging Markets
- 3.10 Impact of Covid-19

4 PORTERS FIVE FORCE ANALYSIS

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

5 GLOBAL MYCORRHIZAL MAPPING MARKET, BY TYPE OF MYCORRHIZA

- 5.1 Introduction
- 5.2 Endomycorrhiza
- 5.3 Ectomycorrhiza
- 5.4 Ericoid Mycorrhiza
- 5.5 Other Mycorrhizal Types

6 GLOBAL MYCORRHIZAL MAPPING MARKET, BY PRODUCT FORM

- 6.1 Introduction
- 6.2 Liquid
- 6.3 Solid

7 GLOBAL MYCORRHIZAL MAPPING MARKET, BY MODE OF APPLICATION

- 7.1 Introduction
- 7.2 Seed Treatment
- 7.3 Soil Treatment
- 7.4 Transplant Treatment

8 GLOBAL MYCORRHIZAL MAPPING MARKET, BY TECHNOLOGY

- 8.1 Introduction
- 8.2 Genetic Sequencing
- 8.3 Microscopy-Based Mapping
- 8.4 Remote Sensing & GIS
- 8.5 Bioinformatics Platforms
- 8.6 Other Technologies

9 GLOBAL MYCORRHIZAL MAPPING MARKET, BY APPLICATION

- 9.1 Introduction
- 9.2 Environmental Monitoring
- 9.3 Soil Health Assessment
- 9.4 Restoration Ecology
- 9.5 Agriculture
- 9.6 Forestry

10 GLOBAL MYCORRHIZAL MAPPING MARKET, BY END USER

- 10.1 Introduction
- 10.2 Research Institutions
- 10.3 Government Agencies
- 10.4 Agritech Companies
- 10.5 Environmental Consultancies
- 10.6 Other End Users

11 GLOBAL MYCORRHIZAL MAPPING MARKET, BY GEOGRAPHY

- 11.1 Introduction
- 11.2 North America
 - 11.2.1 US
 - 11.2.2 Canada
 - 11.2.3 Mexico
- 11.3 Europe
 - 11.3.1 Germany
 - 11.3.2 UK
 - 11.3.3 Italy
 - 11.3.4 France
 - 11.3.5 Spain
 - 11.3.6 Rest of Europe
- 11.4 Asia Pacific
 - 11.4.1 Japan
 - 11.4.2 China
 - 11.4.3 India
 - 11.4.4 Australia
 - 11.4.5 New Zealand
 - 11.4.6 South Korea
 - 11.4.7 Rest of Asia Pacific
- 11.5 South America
 - 11.5.1 Argentina
 - 11.5.2 Brazil
 - 11.5.3 Chile
 - 11.5.4 Rest of South America
- 11.6 Middle East & Africa
 - 11.6.1 Saudi Arabia

- 11.6.2 UAE
- 11.6.3 Qatar
- 11.6.4 South Africa
- 11.6.5 Rest of Middle East & Africa

12 KEY DEVELOPMENTS

- 12.1 Agreements, Partnerships, Collaborations and Joint Ventures
- 12.2 Acquisitions & Mergers
- 12.3 New Product Launch
- 12.4 Expansions
- 12.5 Other Key Strategies

13 COMPANY PROFILING

- 13.1 Symborg
- 13.2 Koppert Biological Systems
- 13.3 Biolchim S.p.A.
- 13.4 Atl?ntica Agr?cola
- 13.5 Gujarat State Fertilizers & Chemicals Ltd
- 13.6 Premier Tech
- 13.7 Mycorrhizal Applications LLC
- 13.8 Groundwork BioAg
- 13.9 Novozymes
- 13.10 Valent BioSciences
- 13.11 TerraSpase
- 13.12 EcoFungi
- 13.13 Soil Foodweb Inc.
- 13.14 Regen Ag Lab
- 13.15 Earthfort

List Of Tables

LIST OF TABLES

Table 1 Global Mycorrhizal Mapping Market Outlook, By Region (2024-2032) (\$MN)

Table 2 Global Mycorrhizal Mapping Market Outlook, By Type of Mycorrhiza (2024-2032) (\$MN)

Table 3 Global Mycorrhizal Mapping Market Outlook, By Endomycorrhiza (2024-2032) (\$MN)

Table 4 Global Mycorrhizal Mapping Market Outlook, By Ectomycorrhiza (2024-2032) (\$MN)

Table 5 Global Mycorrhizal Mapping Market Outlook, By Ericoid Mycorrhiza (2024-2032) (\$MN)

Table 6 Global Mycorrhizal Mapping Market Outlook, By Other Mycorrhizal Types (2024-2032) (\$MN)

Table 7 Global Mycorrhizal Mapping Market Outlook, By Product Form (2024-2032) (\$MN)

Table 8 Global Mycorrhizal Mapping Market Outlook, By Liquid (2024-2032) (\$MN)

Table 9 Global Mycorrhizal Mapping Market Outlook, By Solid (2024-2032) (\$MN)

Table 10 Global Mycorrhizal Mapping Market Outlook, By Mode of Application (2024-2032) (\$MN)

Table 11 Global Mycorrhizal Mapping Market Outlook, By Seed Treatment (2024-2032) (\$MN)

Table 12 Global Mycorrhizal Mapping Market Outlook, By Soil Treatment (2024-2032) (\$MN)

Table 13 Global Mycorrhizal Mapping Market Outlook, By Transplant Treatment (2024-2032) (\$MN)

Table 14 Global Mycorrhizal Mapping Market Outlook, By Technology (2024-2032) (\$MN)

Table 15 Global Mycorrhizal Mapping Market Outlook, By Genetic Sequencing (2024-2032) (\$MN)

Table 16 Global Mycorrhizal Mapping Market Outlook, By Microscopy-Based Mapping (2024-2032) (\$MN)

Table 17 Global Mycorrhizal Mapping Market Outlook, By Remote Sensing & GIS (2024-2032) (\$MN)

Table 18 Global Mycorrhizal Mapping Market Outlook, By Bioinformatics Platforms (2024-2032) (\$MN)

Table 19 Global Mycorrhizal Mapping Market Outlook, By Other Technologies (2024-2032) (\$MN)

Table 20 Global Mycorrhizal Mapping Market Outlook, By Application (2024-2032) (\$MN)

Table 21 Global Mycorrhizal Mapping Market Outlook, By Environmental Monitoring (2024-2032) (\$MN)

Table 22 Global Mycorrhizal Mapping Market Outlook, By Soil Health Assessment (2024-2032) (\$MN)

Table 23 Global Mycorrhizal Mapping Market Outlook, By Restoration Ecology (2024-2032) (\$MN)

Table 24 Global Mycorrhizal Mapping Market Outlook, By Agriculture (2024-2032) (\$MN)

Table 25 Global Mycorrhizal Mapping Market Outlook, By Forestry (2024-2032) (\$MN)

Table 26 Global Mycorrhizal Mapping Market Outlook, By End User (2024-2032) (\$MN)

Table 27 Global Mycorrhizal Mapping Market Outlook, By Research Institutions (2024-2032) (\$MN)

Table 28 Global Mycorrhizal Mapping Market Outlook, By Government Agencies (2024-2032) (\$MN)

Table 29 Global Mycorrhizal Mapping Market Outlook, By Agritech Companies (2024-2032) (\$MN)

Table 30 Global Mycorrhizal Mapping Market Outlook, By Environmental Consultancies (2024-2032) (\$MN)

Table 31 Global Mycorrhizal Mapping Market Outlook, By Other End Users (2024-2032) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

I would like to order

Product name: Mycorrhizal Mapping Market Forecasts to 2032 – Global Analysis By Type of Mycorrhiza (Endomycorrhiza, Ectomycorrhiza, Ericoid Mycorrhiza and Other Mycorrhizal Types), Product Form, Mode of Application, Technology, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/M21868007CBCEN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/M21868007CBCEN.html>