+357 96 030922
info@marketpublishers.com

Agrobots Market - Global Industry Size, Share, Trends, Opportunity and Forecast, Segmented By Type (UAVs (Fixed Wing Drones, Rotary Blade Drones, Hybrid Drones), Milking Robots, Driverless Tractors, Automated Harvesting Systems & Others), By Component (Hardware, Software & Services), By Application (Dairy & Livestock Management, Harvest Management, Irrigation Management, Field Mapping, Inventory Management, Weather Tracking and Forecast & Others), By Farming Environment (Indoor Farming & Outdoor Farming) By Region & Competition, 2021-2031F

https://marketpublishers.com/r/A83A00533921EN.html
Date: May 2026
Pages: 185
Price: US$ 4,500.00 (Single User License)
ID: A83A00533921EN

Abstracts

The Global Agrobots Market is set to expand significantly, projected to increase from USD 17.82 billion in 2025 to USD 71.34 billion by 2031, demonstrating a robust compound annual growth rate of 26.01%. Agrobots are defined as automated machines specifically engineered to perform various agricultural tasks, such as planting, harvesting, and crop monitoring, with minimal human intervention. A primary force driving this market expansion is the severe shortage of agricultural labor worldwide, which compels farm operators to adopt automated processes to maintain essential production levels. Furthermore, the growing demand for precision agriculture, aimed at optimizing input efficiency and maximizing crop yields, further fuels the continuous need for these advanced robotic solutions. However, a significant impediment to market growth is the substantial initial capital investment required for acquiring and

+357 96 030922
info@marketpublishers.com

implementing these technologies. This financial barrier restricts smaller agricultural enterprises from accessing automation. Despite these economic challenges, data from the International Federation of Robotics indicates that the professional service robotics sector recorded sales exceeding 199,000 units in the year prior to 2025, highlighting a progressive integration of automation within the industry.

Market Driver

The most immediate catalyst propelling the Global Agrobots Market is the escalating global shortage of skilled agricultural labor. As the agricultural workforce diminishes, producers are confronting unprecedented increases in wages and numerous unfilled positions, making it imperative to replace manual tasks with autonomous systems. The financial unsustainability of relying heavily on human capital is pushing many operations to urgently integrate robotic alternatives for labor-intensive activities like harvesting and weeding. According to the American Farm Bureau Federation's October 2025 report, 'Declining Farm Economy Continues to Pressure Profitability,' labor expenses were forecast to reach $53.7 billion for the year, constituting nearly 11% of total farm production costs, thereby making automation a crucial survival strategy rather than just an efficiency upgrade. Concurrently, rapid advancements in AI, machine vision, and IoT technologies are transforming the capabilities of agricultural robotics, moving beyond simple mechanization to intelligent decision-making. Innovations in computer vision now enable machines to accurately differentiate between crops and weeds, while IoT integration facilitates real-time data analysis essential for optimal crop management. AgFunderNews reported in January 2026 that the farm robotics sector showed resilience, with startups raising approximately $744 million in 2024 to further develop these sophisticated platforms. These technological strides are vital for mitigating broader operational risks beyond labor; for example, the Association of Equipment Manufacturers noted in 2025 that 48% of North American farmers experienced weather-related financial losses exceeding $10,000, underscoring the market-wide need for the predictive capabilities and operational resilience offered by advanced agrobotics.

Market Challenge

The significant upfront capital cost associated with acquiring agricultural robots presents a critical obstacle to market expansion. These autonomous systems necessitate a considerable initial investment in advanced hardware, sensors, and specialized software, creating a formidable barrier to entry, particularly for small and medium-sized farming operations. Operating with limited liquidity and often tight profit margins, these businesses frequently find the high price tag of robotic technologies prohibitive, thus

+357 96 030922
info@marketpublishers.com

preventing them from modernizing their equipment fleets. This financial hurdle effectively concentrates advanced automation within a restricted group of large-scale agribusinesses, consequently limiting the technology's widespread scalability and slowing its broader adoption across the agricultural industry. This economic constraint is clearly visible in recent trends concerning machinery procurement, where financial pressures have curtailed investment in capital equipment. For instance, the Association of Equipment Manufacturers reported that in 2025, U.S. sales of total agricultural tractors saw a 19.6% decline in October compared to the previous year. This downturn highlights the agricultural sector's sensitivity to capital expenditure challenges; when the market for essential machinery contracts due to cost-related hesitation, the adoption of more expensive, specialized robotic solutions is inevitably hampered. Therefore, the high cost of implementation remains a direct impediment to the growth of the global agrobots market.

Market Trends

A significant trend reshaping the market landscape is the growing availability of autonomous retrofit kits designed for legacy machinery, offering a cost-effective route to automation. Instead of replacing functional equipment, farmers can integrate advanced sensor suites and control software into their existing tractors, enabling autonomous navigation and task execution. This approach substantially reduces the capital outlay required to modernize farm operations and facilitates the gradual integration of mixed autonomous fleets. According to an AgFunderNews article from October 2025, 'Agtonomy bags $18m to bring more AI to the next frontier of automation,' Agtonomy successfully secured $18 million in Series B funding to expand its retrofit technology, which transforms standard tractors into remotely operated, task-driven vehicles. Simultaneously, the market is undergoing a notable shift from specialized, single-purpose machines towards modular and multi-functional robotic platforms. Agricultural technology developers are now engineering versatile systems capable of interchanging various implements to perform diverse tasks, such as spraying, weeding, and monitoring, throughout the entire growing season. This evolution aims to optimize machinery utilization rates and enhance the return on investment for farmers who cannot afford the downtime associated with expensive, single-task robots. As reported by GeekWire in October 2025, in the article 'Carbon Robotics raises $20M as LaserWeeder maker plans secretive new AI robot for farms,' Carbon Robotics raised $20 million specifically to develop a new artificial intelligence-powered platform designed to execute a broader range of agricultural applications beyond its primary weeding function.

+357 96 030922
info@marketpublishers.com

Key Market Players

Agrobot, S.A.

FFRobotics, Inc.

Na?o Technologies

Ecorobotix SA

AgXeed B.V.

Small Robot Company Ltd

Robotics Plus Ltd

AGCO Corporation

Deere & Company

Blue River Technology

Report Scope

In this report, the Global Agrobots Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Agrobots Market, By Type

UAVs

Milking Robots

Driverless Tractors

Automated Harvesting Systems

Others

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

Canada

Mexico

Europe

France

United Kingdom

Italy

Germany

Spain

Asia Pacific

China

India

Japan

Australia

South Korea

South America

Brazil

Argentina

Colombia

Middle East & Africa

South Africa

+357 96 030922
info@marketpublishers.com

Saudi Arabia

UAE

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Agrobots Market.

Available Customizations:

Global Agrobots Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

6. NORTH AMERICA AGROBOTS MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

7. EUROPE AGROBOTS MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

8. ASIA PACIFIC AGROBOTS MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

9. MIDDLE EAST & AFRICA AGROBOTS MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

10. SOUTH AMERICA AGROBOTS MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Agrobots Market - Global Industry Size, Share, Trends, Opportunity and Forecast, Segmented By Type (UAVs (Fixed Wing Drones, Rotary Blade Drones, Hybrid Drones), Milking Robots, Driverless Tractors, Automated Harvesting Systems & Others), By Component (Hardware, Software & Services), By Application (Dairy & Livestock Management, Harvest Management, Irrigation Management, Field Mapping, Inventory Management, Weather Tracking and Forecast & Others), By Farming Environment (Indoor Farming & Outdoor Farming) By Region & Competition, 2021-2031F

Product link: https://marketpublishers.com/r/A83A00533921EN.html

Price: US$ 4,500.00 (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/A83A00533921EN.html