

Plant Biotechnology Equipment Market Size, Share & Trends Analysis Report By Plant Phenotyping, By Plant Genotyping, By Cell Culture, By Smart Farm Equipment, By Region, And Segment Forecasts, 2018 - 2025

<https://marketpublishers.com/r/PFB09FDD729EN.html>

Date: June 2018

Pages: 375

Price: US\$ 4,950.00 (Single User License)

ID: PFB09FDD729EN

Abstracts

This report can be delivered to the clients within 48 Business Hours

The global plant biotechnology equipment market size is estimated to reach USD 18.35 billion by 2025, according to the new report by Grand View Research, Inc. it is likely to expand at a CAGR of 12.8% over the forecast period. High demand for transgenic crops and biofuel is driving the market growth. Demand for transgenic crops has been rising owing to various benefits, such as improvement in yield, productivity, and quality of output and development of insect-resistant cultivars in crops.

In transgenic plants, one or more species are introduced in the genome using genetic engineering processes. Inserting a combination of genes in a plant makes it more productive. Transgenic plants are also produced to cater to particular needs of pharmaceutical sector. Advent of various genetic engineering processes is expected to drive the market growth over the forecast period.

Advanced techniques, such as next-generation DNA sequencing, can be availed by breeders to boost the rate of genetic improvement by molecular breeding. Plant cell culture methods can also be used for enhancing food grain quality and for increasing food production. These methods are also useful for postharvest applications of food materials. Plant biotech equipment, such as plant phenotyping equipment, cell culture equipment, and smart farm equipment, can play an instrumental role in these methods.

Advances in biotechnology and rising use of biotech equipment for biofuel production are anticipated to further drive the growth of the plant biotech equipment market over the forecast period. Biofuel is gaining popularity due to rising crude oil prices and uncertainty in fuel supply stemming from depleting natural resources. Biofuel is considered as one of the alternatives to fossil fuels owing to its various benefits.

Biofuel can be produced domestically, can be cheaper than fossil fuels, and is also environment-friendly. Technological challenges associated with biofuel production can be addressed using biotech solutions and equipment, which in turn, is expected to boost the demand for plant biotech equipment over the forecast period.

Further key findings from the report suggest:

Rapidly rising global population has boosted demand for agricultural produce

Advances in technology coupled with increasing government funding have enabled the plant biotechnology industry to grow at a significant growth rate in recent years

Agriculture sector has witnessed tremendous developments in terms of advanced technologies in recent times. Usage of electronic sensors, smart devices, and other biotechnological methods have transformed conventional farming into innovative and sustainable farming

Benefits, such as high-quality crops and increased yield, facilitated by biotech equipment are expected to drive the growth of plant biotech equipment market over the forecast period

Advancements in imaging techniques are facilitating a better assessment of plant characteristics, thereby helping in developing better plants breeds.

Contents

CHAPTER 1 METHODOLOGY AND SCOPE

- 1.1 Research Methodology
- 1.2 Research Scope & Assumptions
- 1.3 List of Data Sources

CHAPTER 2 EXECUTIVE SUMMARY

- 2.1 Key Market Trends
 - 2.1.1 Plant phenotyping equipment
 - 2.1.1.1 Key imaging techniques and its purpose
 - 2.1.1.2 Key plant phenotyping image processing software
 - 2.1.1.3 Key plant phenotyping platform
 - 2.1.2 Cell culture equipment
 - 2.1.3 Plant genotyping equipment
 - 2.1.4 Smart farm equipment
 - 2.1.4.1 Internet of Things (IoT)
 - 2.1.4.2 Key advantages of using IoT in agriculture industry
- 2.2 Key Regional Trend Analysis
 - 2.2.1 North America
 - 2.2.2 Europe
 - 2.2.3 Asia Pacific
 - 2.2.4 South America
 - 2.2.5 Middle East and Africa (MEA)
- 2.3 Key Initiatives
- 2.4 Plant Biotechnology Equipment-Industry Snapshot & Key Buying Criteria, 2013 - 2025
 - 2.4.1 Global plant phenotyping market, 2013 - 2025
 - 2.4.1.1 Global plant phenotyping market, by equipment, 2013 - 2025
 - 2.4.1.2 Global plant phenotyping equipment market, by end use 2013 - 2025
 - 2.4.1.3 Global plant phenotyping equipment market, by application 2013 - 2025
 - 2.4.2 Global plant genotyping equipment market, 2013 - 2025
 - 2.4.2.1 Global plant genotyping equipment market, by end use 2013 - 2025
 - 2.4.2.2 Global plant genotyping equipment market, by application 2013 - 2025
 - 2.4.3 Global cell culture equipment market, 2013 - 2025
 - 2.4.3.1 Global cell culture equipment market, by equipment 2013 - 2025
 - 2.4.3.2 Global cell culture equipment market, by end use 2013 - 2025

- 2.4.3.3 Global cell culture equipment market, by application 2013 - 2025
- 2.4.4 Global smart farm equipment market, 2013 - 2025
 - 2.4.4.1 Global smart farm equipment market, by equipment 2013 - 2025
 - 2.4.4.2 Global smart farm equipment market, by end use 2013 - 2025
 - 2.4.4.3 Global smart farm equipment market, by application 2013 - 2025

CHAPTER 3 INDUSTRY OUTLOOK

- 3.1 Market Segmentation & Scope
- 3.2 Plant Biotechnology Equipment Market Size and Growth Prospects
- 3.3 Plant Biotechnology Equipment-Value Chain Analysis
- 3.4 Market Dynamics
 - 3.4.1 Market driver analysis
 - 3.4.1.1 Generating higher crop yields and reducing cultivated farmland
 - 3.4.1.2 Rising demand for transgenic crops and biofuel
 - 3.4.1.3 Advancements in imaging techniques in plant phenotyping
 - 3.4.2 Market restraint analysis
 - 3.4.2.1 Stringent regulations on genetically modified crops
- 3.5 Key Opportunities - Prioritized
- 3.6 Plant Biotechnology Equipment-Key Company Analysis, 2016
 - 3.6.1 Key plant phenotyping equipment company analysis, 2016
 - 3.6.2 Plant phenotyping equipment company market share analysis
 - 3.6.3 Key plant cell culture equipment company analysis, 2016
 - 3.6.4 Plant cell culture equipment company market share analysis
 - 3.6.5 Key plant genotyping equipment company analysis, 2016
 - 3.6.6 Plant genotyping equipment company market share analysis
 - 3.6.7 List of key players by region
- 3.7 Equipment Cost Analysis
 - 3.7.1 Global CO2 incubator market (volume in thousand units), 2013 - 2025
 - 3.7.2 Global centrifuges market (volume in thousand units), 2013 - 2025
 - 3.7.3 Global cell counters market (volume in thousand units), 2013 - 2025
 - 3.7.4 Sensing devices (sensors)
 - 3.7.4.1 Sensors Average Selling Price (ASP)
 - 3.7.4.1.1 Global smart farm equipment market by sensing devices (volume in thousand units), 2013-2025
 - 3.7.4.2 Sensor connectivity
- 3.8 Smart Farm Equipment: Imagery Solutions Analysis
 - 3.8.1 List of data/imagery solution companies and their users
 - 3.8.1.1 Airbus SE

- 3.8.1.1.1 Reseller landscape
- 3.8.1.1.2 Satshot pricing
- 3.8.1.1.3 TerraSAR-X pricing
- 3.8.1.2 DigitalGlobe, Inc.
 - 3.8.1.2.1 Type of license
 - 3.8.1.2.2 DigitalGlobe maps API pricing
 - 3.8.1.2.3 Reseller landscape
- 3.8.1.3 Planet Labs, Inc.
 - 3.8.1.3.1 Notable contracts
- 3.8.1.4 Trimble, Inc.
 - 3.8.1.4.1 Reseller landscape
- 3.9 List of Equipment and its Technical Descriptions
- 3.10 Key Potential Plant Biotechnology Equipment Buyers
- 3.11 Industry Analysis-Porter's
- 3.12 Plant biotechnology-PEST Analysis

CHAPTER 4 PLANT BIOTECHNOLOGY EQUIPMENT MARKET: PLANT PHENOTYPING EQUIPMENT ESTIMATES & TREND ANALYSIS

- 4.1 Plant Biotechnology Equipment Market: Plant Phenotyping Equipment Analysis 2017 & 2025
 - 4.1.1 Hardware
 - 4.1.2 Sensor modules
 - 4.1.2.1 Ultrasonic distance sensors
 - 4.1.2.2 NDVI sensors
 - 4.1.2.3 RGB web cameras
 - 4.1.2.4 Portal spectrometers
 - 4.1.2.5 Temperature sensors
 - 4.1.2.6 Humidity sensors
 - 4.1.3 Imaging devices
 - 4.1.3.1 Infrared imaging
 - 4.1.3.2 Fluorescence imaging
 - 4.1.3.3 Structural tomography
 - 4.1.3.4 Positron Emission Tomography (PET)
 - 4.1.3.5 Hyperspectral imaging
 - 4.1.3.6 Others
 - 4.1.4 Automated systems
 - 4.1.4.1 Bench-based
 - 4.1.4.2 Conveyor based

- 4.1.5 Drones
- 4.1.6 LED lighting
- 4.1.7 Portable devices
- 4.1.8 Software
- 4.1.9 End use
 - 4.1.9.1 Greenhouse
 - 4.1.9.2 Field
 - 4.1.9.3 Laboratory
- 4.1.10 Application
 - 4.1.10.1 Plant research
 - 4.1.10.2 Breeding
 - 4.1.10.3 Product development
 - 4.1.10.4 Quality assessment

CHAPTER 5 PLANT BIOTECHNOLOGY EQUIPMENT MARKET: PLANT GENOTYPING EQUIPMENT OUTLOOK

5.1 Plant Biotechnology Equipment Market: Plant Genotyping Equipment Analysis, 2017 & 2025

- 5.1.1 End use
 - 5.1.1.1 Greenhouse
 - 5.1.1.2 Field
 - 5.1.1.3 Laboratory
- 5.1.2 Application
 - 5.1.2.1 Plant research
 - 5.1.2.2 Breeding
 - 5.1.2.3 Product development
 - 5.1.2.4 Quality assessment

CHAPTER 6 PLANT BIOTECHNOLOGY EQUIPMENT MARKET: PLANT CELL CULTURE EQUIPMENT

6.1 Plant Biotechnology Equipment Market: Plant Cell Culture Equipment Analysis, 2017 & 2025

- 6.1.1 Cell Culture Equipment
 - 6.1.1.1 Incubators
 - 6.1.1.2 Centrifuges
 - 6.1.1.3 Seed germinators
 - 6.1.1.4 Microscopes

- 6.1.1.5 Sterilizers
- 6.1.1.6 Cell Counter
- 6.1.1.7 Others
- 6.1.2 End Use
 - 6.1.2.1 Greenhouse
 - 6.1.2.2 Field
 - 6.1.2.3 Laboratory
- 6.1.3 Application
 - 6.1.3.1 Plant research
 - 6.1.3.2 Breeding
 - 6.1.3.3 Product development
 - 6.1.3.4 Quality assessment

CHAPTER 7 PLANT BIOTECHNOLOGY EQUIPMENT MARKET: SMART FARM EQUIPMENT OUTLOOK

7.1 Plant Biotechnology Equipment Market: Smart Farm Equipment Analysis

- 7.1.1 Hardware
 - 7.1.1.1 Automation & control systems
 - 7.1.1.1.1 Drones
 - 7.1.1.1.2 Application control devices
 - 7.1.1.1.3 Guidance system
 - 7.1.1.1.4 Remote sensing
 - 7.1.1.1.5 Driverless tractors
 - 7.1.1.1.6 Mobile devices
 - 7.1.1.1.7 VRT
 - 7.1.1.1.8 Wireless module
 - 7.1.1.1.9 Milking robots
 - 7.1.1.2 Sensing devices
 - 7.1.1.2.1 Soil sensor
 - 7.1.1.2.2 Water sensor
 - 7.1.1.2.3 Climate sensor
 - 7.1.1.2.4 Others
 - 7.1.1.3 HVAC system
 - 7.1.1.4 LED grow light
 - 7.1.1.5 RFID tags & readers
- 7.1.2 Software
 - 7.1.2.1 Web-based
 - 7.1.2.2 Cloud-based

7.1.3 End Use

7.1.3.1 Greenhouse

7.1.3.2 Field

7.1.3.3 Laboratory

7.1.4 Application

7.1.4.1 Plant research

7.1.4.2 Breeding

7.1.4.3 Product development

7.1.4.4 Quality assessment

7.2 Plant Biotechnology Equipment Market Share by Region, 2017 & 2025

7.3 North America

7.3.1 North America plant phenotyping market, 2013 - 2025

7.3.1.1 North America plant phenotyping market, by equipment, 2013 - 2025

7.3.1.2 North America plant phenotyping equipment market, by end use 2013 - 2025

7.3.1.3 North America plant phenotyping equipment market, by application 2013 - 2025

7.3.2 North America plant genotyping equipment market, 2013 - 2025

7.3.2.1 North America plant genotyping equipment market, by end use 2013 - 2025

7.3.2.2 North America plant genotyping equipment market, by application 2013 - 2025

7.3.3 North America cell culture equipment market, 2013 - 2025

7.3.3.1 North America cell culture equipment market, by equipment 2013 - 2025

7.3.3.2 North America cell culture equipment market, by end use 2013 - 2025

7.3.3.3 North America cell culture equipment market, by application 2013 - 2025

7.3.4 North America smart farm equipment market, 2013 - 2025

7.3.4.1 North America smart farm equipment market, by equipment 2013 - 2025

7.3.4.2 North America smart farm equipment market, by end use 2013 - 2025

7.3.4.3 North America smart farm equipment market, by application 2013 - 2025

7.4 U.S.

7.4.1 U.S. plant phenotyping equipment market, 2013 - 2025

7.4.2 U.S. plant genotyping equipment market, 2013 - 2025

7.4.3 U.S. cell culture equipment market, 2013 - 2025

7.4.4 U.S. smart farm equipment market, 2013 - 2025

7.5 Canada

7.5.1 Canada plant phenotyping equipment market, 2013 - 2025

7.5.2 Canada plant genotyping equipment market, 2013 - 2025

7.5.3 Canada cell culture equipment market, 2013 - 2025

7.5.4 Canada smart farm equipment market, 2013 - 2025

7.6 Mexico

- 7.6.1 Mexico plant phenotyping equipment market, 2013 - 2025
- 7.6.2 Mexico plant genotyping equipment market, 2013 - 2025
- 7.6.3 Mexico cell culture equipment market, 2013 - 2025
- 7.6.4 Mexico smart farm equipment market, 2013 - 2025
- 7.7 Europe
 - 7.7.1 Europe plant phenotyping market, 2013 - 2025
 - 7.7.1.1 Europe plant phenotyping market, by equipment, 2013 - 2025
 - 7.7.1.2 Europe plant phenotyping equipment market, by end use 2013 - 2025
 - 7.7.1.3 Europe plant phenotyping equipment market, by application 2013 - 2025
 - 7.7.2 Europe plant genotyping equipment market, 2013 - 2025
 - 7.7.2.1 Europe plant genotyping equipment market, by end use 2013 - 2025
 - 7.7.2.2 Europe plant genotyping equipment market, by application 2013 - 2025
 - 7.7.3 Europe cell culture equipment market, 2013 - 2025
 - 7.7.3.1 Europe cell culture equipment market, by equipment 2013 - 2025
 - 7.7.3.2 Europe cell culture equipment market, by end use 2013 - 2025
 - 7.7.3.3 Europe cell culture equipment market, by application 2013 - 2025
 - 7.7.4 Europe smart farm equipment market, 2013 - 2025
 - 7.7.4.1 Europe smart farm equipment market, by equipment 2013 - 2025
 - 7.7.4.2 Europe smart farm equipment market, by end use 2013 - 2025
 - 7.7.4.3 Europe smart farm equipment market, by application 2013 - 2025
- 7.8 U.K.
 - 7.8.1 U.K. plant phenotyping equipment market, 2013 - 2025
 - 7.8.2 U.K. plant genotyping equipment market, 2013 - 2025
 - 7.8.3 U.K. cell culture equipment market, 2013 - 2025
 - 7.8.4 U.K. smart farm equipment market, 2013 - 2025
- 7.9 Germany
 - 7.9.1 Germany plant phenotyping equipment market, 2013 - 2025
 - 7.9.2 Germany plant genotyping equipment market, 2013 - 2025
 - 7.9.3 Germany cell culture equipment market, 2013 - 2025
 - 7.9.4 Germany smart farm equipment market, 2013 - 2025
- 7.10 France
 - 7.10.1 France plant phenotyping equipment market, 2013 - 2025
 - 7.10.2 France plant genotyping equipment market, 2013 - 2025
 - 7.10.3 France cell culture equipment market, 2013 - 2025
 - 7.10.4 France smart farm equipment market, 2013 - 2025
- 7.11 Asia Pacific
 - 7.11.1 Asia Pacific plant phenotyping market, 2013 - 2025
 - 7.11.1.1 Asia Pacific plant phenotyping market, by equipment, 2013 - 2025
 - 7.11.1.2 Asia Pacific plant phenotyping equipment market, by end use 2013 - 2025

- 7.11.1.3 Asia Pacific plant phenotyping equipment market, by application 2013 - 2025
- 7.11.2 Asia Pacific plant genotyping equipment market, 2013 - 2025
 - 7.11.2.1 Asia Pacific plant genotyping equipment market, by end use 2013 - 2025
 - 7.11.2.2 Asia Pacific plant genotyping equipment market, by application 2013 - 2025
- 7.11.3 Asia Pacific cell culture equipment market, 2013 - 2025
 - 7.11.3.1 Asia Pacific cell culture equipment market, by equipment 2013 - 2025
 - 7.11.3.2 Asia Pacific cell culture equipment market, by end use 2013 - 2025
 - 7.11.3.3 Asia Pacific cell culture equipment market, by application 2013 - 2025
- 7.11.4 Asia Pacific smart farm equipment market, 2013 - 2025
 - 7.11.4.1 Asia Pacific smart farm equipment market, by equipment 2013 - 2025
 - 7.11.4.2 Asia Pacific smart farm equipment market, by end use 2013 - 2025
 - 7.11.4.3 Asia Pacific smart farm equipment market, by application 2013 - 2025
- 7.12 China
 - 7.12.1 China plant phenotyping equipment market, 2013 - 2025
 - 7.12.2 China plant genotyping equipment market, 2013 - 2025
 - 7.12.3 China cell culture equipment market, 2013 - 2025
 - 7.12.4 China smart farm equipment market, 2013 - 2025
- 7.13 Japan
 - 7.13.1 Japan plant phenotyping equipment market, 2013 - 2025
 - 7.13.2 Japan plant genotyping equipment market, 2013 - 2025
 - 7.13.3 Japan cell culture equipment market, 2013 - 2025
 - 7.13.4 Japan smart farm equipment market, 2013 - 2025
- 7.14 India
 - 7.14.1 India plant phenotyping equipment market, 2013 - 2025
 - 7.14.2 India plant genotyping equipment market, 2013 - 2025
 - 7.14.3 India cell culture equipment market, 2013 - 2025
 - 7.14.4 India smart farm equipment market, 2013 - 2025
- 7.15 South Korea
 - 7.15.1 South Korea plant phenotyping equipment market, 2013 - 2025
 - 7.15.2 South Korea plant genotyping equipment market, 2013 - 2025
 - 7.15.3 South Korea cell culture equipment market, 2013 - 2025
 - 7.15.4 South Korea smart farm equipment market, 2013 - 2025
- 7.16 South America
 - 7.16.1 South America plant phenotyping market, 2013 - 2025
 - 7.16.1.1 South America plant phenotyping market, by equipment, 2013 - 2025
 - 7.16.1.2 South America plant phenotyping equipment market, by end use 2013 - 2025
 - 7.16.1.3 South America plant phenotyping equipment market, by application 2013 - 2025

- 7.16.2 South America plant genotyping equipment market, 2013 - 2025
 - 7.16.2.1 South America plant genotyping equipment market, by end use 2013 - 2025
 - 7.16.2.2 South America plant genotyping equipment market, by application 2013 - 2025
- 7.16.3 South America cell culture equipment market, 2013 - 2025
 - 7.16.3.1 South America cell culture equipment market, by equipment 2013 - 2025
 - 7.16.3.2 South America cell culture equipment market, by end use 2013 - 2025
 - 7.16.3.3 South America cell culture equipment market, by application 2013 - 2025
- 7.16.4 South America smart farm equipment market, 2013 - 2025
 - 7.16.4.1 South America smart farm equipment market, by equipment 2013 - 2025
 - 7.16.4.2 South America smart farm equipment market, by end use 2013 - 2025
 - 7.16.4.3 South America smart farm equipment market, by application 2013 - 2025
- 7.17 Brazil
 - 7.17.1 Brazil plant phenotyping equipment market, 2013 - 2025
 - 7.17.2 Brazil plant genotyping equipment market, 2013 - 2025
 - 7.17.3 Brazil cell culture equipment market, 2013 - 2025
 - 7.17.4 Brazil smart farm equipment market, 2013 - 2025
- 7.18 Middle East & Africa (MEA)
 - 7.18.1 MEA plant phenotyping market, 2013 - 2025
 - 7.18.1.1 MEA plant phenotyping market, by equipment, 2013 - 2025
 - 7.18.1.2 MEA plant phenotyping equipment market, by end use 2013 - 2025
 - 7.18.1.3 MEA plant phenotyping equipment market, by application 2013 - 2025
 - 7.18.2 MEA plant genotyping equipment market, 2013 - 2025
 - 7.18.2.1 MEA plant genotyping equipment market, by end use 2013 - 2025
 - 7.18.2.2 MEA plant genotyping equipment market, by application 2013 - 2025
 - 7.18.3 MEA cell culture equipment market, 2013 - 2025
 - 7.18.3.1 MEA cell culture equipment market, by equipment 2013 - 2025
 - 7.18.3.2 MEA cell culture equipment market, by end use 2013 - 2025
 - 7.18.3.3 MEA cell culture equipment market, by application 2013 - 2025
 - 7.18.4 MEA smart farm equipment market, 2013 - 2025
 - 7.18.4.1 MEA smart farm equipment market, by equipment 2013 - 2025
 - 7.18.4.2 MEA smart farm equipment market, by end use 2013 - 2025
 - 7.18.4.3 MEA smart farm equipment market, by application 2013 - 2025

List Of Tables

LIST OF TABLES

Table 1 Plant biotechnology- Industry snapshot & critical success factor, 2013 - 2025

Table 2 Global plant phenotyping market estimates and forecast, 2013 - 2025 (USD Million)

Table 3 Global plant phenotyping market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 4 Global plant phenotyping equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 5 Global plant phenotyping equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 6 Global plant genotyping market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 7 Global plant genotyping equipment market estimates and forecast, by end use, 2013 - 2025 (USD Thousands)

Table 8 Global plant genotyping equipment market estimates and forecast, by application, 2013 - 2025 (USD Thousands)

Table 9 Global cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 10 Global cell culture equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 11 Global cell culture equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 12 Global cell culture equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 13 Global smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 14 Global smart farm equipment market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 15 Global smart farm equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 16 Global smart farm equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 17 Key plant phenotyping equipment company analysis

Table 18 Key plant cell culture equipment company analysis

Table 19 Key plant genotyping equipment company analysis

Table 20 Key potential plant biotechnology equipment buyers

Table 21 Global plant phenotyping equipment market by region 2013 - 2025 (USD Million)

Table 22 Global plant phenotyping equipment market by sensor modules, 2013 - 2025 (USD Million)

Table 23 Global plant phenotyping equipment market by ultrasonic distance sensors, 2013 - 2025 (USD Million)

Table 24 Global plant phenotyping equipment market by NDVI sensors, 2013 - 2025 (USD Million)

Table 25 Global plant phenotyping equipment market by RGB web cameras, 2013 - 2025 (USD Million)

Table 26 Global plant phenotyping equipment market by portal spectrometers, 2013 - 2025 (USD Million)

Table 27 Global plant phenotyping equipment market by temperature sensors, 2013 - 2025 (USD Million)

Table 28 Global plant phenotyping equipment market by humidity sensors, 2013 - 2025 (USD Million)

Table 29 Global plant phenotyping equipment market by imaging devices, 2013 - 2025 (USD Million)

Table 30 Global plant phenotyping equipment market by infrared imaging, 2013 - 2025 (USD Million)

Table 31 Global plant phenotyping equipment market by fluorescence imaging, 2013 - 2025 (USD Million)

Table 32 Global plant phenotyping equipment market by structural tomography, 2013 - 2025 (USD Million)

Table 33 Global plant phenotyping equipment market by positron emission tomography, 2013 - 2025 (USD Million)

Table 34 Global plant phenotyping equipment market by hyperspectral imaging, 2013 - 2025 (USD Million)

Table 35 Global plant phenotyping equipment market by others, 2013 - 2025 (USD Million)

Table 36 Global plant phenotyping equipment market by automated systems, 2013 - 2025 (USD Million)

Table 37 Global plant phenotyping equipment market by bench-based, 2013 - 2025 (USD Million)

Table 38 Global plant phenotyping equipment market by conveyor based, 2013 - 2025 (USD Million)

Table 39 Global plant phenotyping equipment market by drones, 2013 - 2025 (USD Million)

Table 40 Global plant phenotyping equipment market by LED lighting, 2013 - 2025

(USD Million)

Table 41 Global plant phenotyping equipment market by portable devices, 2013 - 2025

(USD Million)

Table 42 Global plant phenotyping software market by region 2013 - 2025 (USD Million)

Table 43 Global plant phenotyping equipment market by end use, 2013 - 2025 (USD Million)

Table 44 Global plant phenotyping equipment market by greenhouse, 2013 - 2025 (USD Million)

Table 45 Global plant phenotyping equipment market by field, 2013 - 2025 (USD Million)

Table 46 Global plant phenotyping equipment market by laboratory, 2013 - 2025 (USD Million)

Table 47 Global plant phenotyping equipment market by application, 2013 - 2025 (USD Million)

Table 48 Global plant phenotyping equipment market by plant research, 2013 - 2025 (USD Million)

Table 49 Global plant phenotyping equipment market by breeding, 2013 - 2025 (USD Million)

Table 50 Global plant phenotyping equipment market by product development, 2013 - 2025 (USD Million)

Table 51 Global plant phenotyping equipment market by quality assessment, 2013 - 2025 (USD Million)

Table 52 Global plant genotyping equipment market by end use, 2013 - 2025 (USD Thousands)

Table 53 Global plant genotyping equipment market by greenhouse, 2013 - 2025 (USD Thousands)

Table 54 Global plant genotyping equipment market by field, 2013 - 2025 (USD Thousands)

Table 55 Global plant genotyping equipment market by laboratory, 2013 - 2025 (USD Thousands)

Table 56 Global plant genotyping equipment market by application, 2013 - 2025 (USD Thousands)

Table 57 Global plant genotyping equipment market by plant research, 2013 - 2025 (USD Thousands)

Table 58 Global plant genotyping equipment market by breeding, 2013 - 2025 (USD Thousands)

Table 59 Global plant genotyping equipment market by product development, 2013 - 2025 (USD Thousands)

Table 60 Global plant genotyping equipment market by quality assessment, 2013 - 2025

(USD Thousands)

Table 61 Global cell culture equipment market, 2013 - 2025 (USD Million)

Table 62 Global cell culture equipment market by incubators, 2013 - 2025 (USD Million)

Table 63 Global cell culture equipment market by centrifuges, 2013 - 2025 (USD Million)

Table 64 Global cell culture equipment market by seed germinators, 2013 - 2025 (USD Million)

Table 65 Global cell culture equipment market by microscopes, 2013 - 2025 (USD Million)

Table 66 Global cell culture equipment market by sterilizers, 2013 - 2025 (USD Million)

Table 67 Global cell culture equipment market by cell counter, 2013 - 2025 (USD Million)

Table 68 Global cell culture equipment market by others, 2013 - 2025 (USD Million)

Table 69 Global end use market, 2013 - 2025 (USD Million)

Table 70 Global cell culture equipment market by greenhouse, 2013 - 2025 (USD Million)

Table 71 Global cell culture equipment market by field, 2013 - 2025 (USD Million)

Table 72 Global cell culture equipment market by laboratory, 2013 - 2025 (USD Million)

Table 73 Global application market, 2013 - 2025 (USD Million)

Table 74 Global cell culture equipment market by Plant Research, 2013 - 2025 (USD Million)

Table 75 Global cell culture equipment market by breeding, 2013 - 2025 (USD Million)

Table 76 Global cell culture equipment market by product development, 2013 - 2025 (USD Million)

Table 77 Global cell culture equipment market by quality assessment, 2013 - 2025 (USD Million)

Table 78 Global smart farm equipment market by region 2013 - 2025 (USD Million)

Table 79 Global smart farm equipment market by automation & control systems, 2013 - 2025 (USD Million)

Table 80 Global smart farm equipment market automation & control systems, by drones 2013 - 2025 (USD Million)

Table 81 Global smart farm equipment market automation & control systems by application control devices, 2013 - 2025 (USD Million)

Table 82 Global smart farm equipment market automation & control systems, by guidance systems 2013 - 2025 (USD Million)

Table 83 Global smart farm equipment market guidance system by GIS, 2013 - 2025 (USD Million)

Table 84 Global smart farm equipment market guidance systems by GPS, 2013 - 2025 (USD Million)

Table 85 Global smart farm equipment market automation & control systems by remote

sensing, 2013 - 2025 (USD Million)

Table 86 Global smart farm equipment market remote sensing by household, 2013 - 2025 (USD Million)

Table 87 Global smart farm equipment market remote sensing by satellite sensing, 2013 - 2025 (USD Million)

Table 88 Global smart farm equipment market automation & control systems by driverless tractors, 2013 - 2025 (USD Million)

Table 89 Global smart farm equipment market automation & control systems by mobile devices, 2013 - 2025 (USD Million)

Table 90 Global smart farm equipment market automation & control systems by VRT, 2013 - 2025 (USD Million)

Table 91 Global smart farm equipment market VRT by map-based, 2013 - 2025 (USD Million)

Table 92 Global smart farm equipment market VRT by sensor based, 2013 - 2025 (USD Million)

Table 93 Global smart farm equipment market automation & control systems by wireless module, 2013 - 2025 (USD Million)

Table 94 Global smart farm equipment market wireless module by bluetooth technology, 2013 - 2025 (USD Million)

Table 95 Global smart farm equipment market wireless module by Wi-Fi technology 2013 - 2025 (USD Million)

Table 96 Global smart farm equipment market wireless module by zigbee technology, 2013 - 2025 (USD Million)

Table 97 Global smart farm equipment market wireless module by RF technology, 2013 - 2025 (USD Million)

Table 98 Global smart farm equipment market by milking robots, 2013 - 2025 (USD Million)

Table 99 Global smart farm equipment market by Sensing Devices, 2013 - 2025 (USD Million)

Table 100 Global smart farm equipment market sensing devices by soil sensor 2013 - 2025 (USD Million)

Table 101 Global smart farm equipment market soil sensors by nutrient sensor, 2013 - 2025 (USD Million)

Table 102 Global smart farm equipment market soil sensors by moisture sensors, 2013 - 2025 (USD Million)

Table 103 Global smart farm equipment market soil sensors by temperature sensor, 2013 - 2025 (USD Million)

Table 104 Global smart farm equipment market by water sensor, 2013 - 2025 (USD Million)

Table 105 Global smart farm equipment market by climate sensor, 2013 - 2025 (USD Million)

Table 106 Global smart farm equipment market sensing devices by others, 2013 - 2025 (USD Million)

Table 107 Global smart farm equipment market by HVAC system, 2013 - 2025 (USD Million)

Table 108 Global smart farm equipment market by LED grow light, 2013 - 2025 (USD Million)

Table 109 Global smart farm equipment market by RFID tags & readers, 2013 - 2025 (USD Million)

Table 110 Global smart farm equipment software market by region 2013 - 2025 (USD Million)

Table 111 Global smart farm equipment market software by web-based, 2013 - 2025 (USD Million)

Table 112 Global smart farm equipment market software by cloud-based, 2013 - 2025 (USD Million)

Table 113 Global smart farm equipment market by end use, 2013 - 2025 (USD Million)

Table 114 Global smart farm equipment end use market by greenhouse, 2013 - 2025 (USD Million)

Table 115 Global smart farm equipment market end use by field, 2013 - 2025 (USD Million)

Table 116 Global smart farm equipment market end use by laboratory, 2013 - 2025 (USD Million)

Table 117 Global smart farm equipment market by application, 2013 - 2025 (USD Million)

Table 118 Global smart farm equipment application market by plant research, 2013 - 2025 (USD Million)

Table 119 Global smart farm equipment application market by breeding, 2013 - 2025 (USD Million)

Table 120 Global smart farm equipment application market by product development, 2013 - 2025 (USD Million)

Table 121 Global smart farm equipment market application by quality assessment, 2013 - 2025 (USD Million)

Table 122 North America plant phenotyping market estimates and forecast, 2013 - 2025 (USD Million)

Table 123 North America plant phenotyping market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 124 North America plant phenotyping equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 125 North America plant phenotyping equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 126 North America plant genotyping market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 127 North America plant genotyping equipment market estimates and forecast, by end use, 2013 - 2025 (USD Thousands)

Table 128 North America plant genotyping equipment market estimates and forecast, by application, 2013 - 2025 (USD Thousands)

Table 129 North America cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 130 North America cell culture equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 131 North America cell culture equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 132 North America cell culture equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 133 North America smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 134 North America smart farm equipment market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 135 North America smart farm equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 136 North America smart farm equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 137 U.S. plant phenotyping equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 138 U.S. plant genotyping equipment market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 139 U.S. cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 140 U.S. smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 141 Canada plant phenotyping equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 142 Canada plant genotyping equipment market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 143 Canada cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 144 Canada smart farm equipment market estimates and forecast, 2013 - 2025

(USD Million)

Table 145 Mexico plant phenotyping equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 146 Mexico plant genotyping equipment market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 147 Mexico cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 148 Mexico smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 149 Europe plant phenotyping market estimates and forecast, 2013 - 2025 (USD Million)

Table 150 Europe plant phenotyping market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 151 Europe plant phenotyping equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 152 Europe plant phenotyping equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 153 Europe plant genotyping market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 154 Europe plant genotyping equipment market estimates and forecast, by end use, 2013 - 2025 (USD Thousands)

Table 155 Europe plant genotyping equipment market estimates and forecast, by application, 2013 - 2025 (USD Thousands)

Table 156 Europe cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 157 Europe cell culture equipment market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 158 Europe cell culture equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 159 Europe cell culture equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 160 Europe smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 161 Europe smart farm equipment market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 162 Europe smart farm equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 163 Europe smart farm equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 164 U.K. plant phenotyping equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 165 U.K. plant genotyping equipment market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 166 U.K. cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 167 U.K. smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 168 Germany plant phenotyping equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 169 Germany plant genotyping equipment market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 170 Germany cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 171 Germany smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 172 France plant phenotyping equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 173 France plant genotyping equipment market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 174 France cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 175 France smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 176 Asia Pacific plant phenotyping market estimates and forecast, 2013 - 2025 (USD Million)

Table 177 Asia Pacific plant phenotyping market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 178 Asia Pacific plant phenotyping equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 179 Asia Pacific plant phenotyping equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 180 Asia Pacific plant genotyping market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 181 Asia Pacific plant genotyping equipment market estimates and forecast, by end use, 2013 - 2025 (USD Thousands)

Table 182 Asia Pacific plant genotyping equipment market estimates and forecast, by application, 2013 - 2025 (USD Thousands)

Table 183 Asia Pacific cell culture equipment market estimates and forecast, 2013 -

2025 (USD Million)

Table 184 Asia Pacific cell culture equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 185 Asia Pacific cell culture equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 186 Asia Pacific cell culture equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 187 Asia Pacific smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 188 Asia Pacific smart farm equipment market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 189 Asia Pacific smart farm equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 190 Asia Pacific smart farm equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 191 China plant phenotyping equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 192 China plant genotyping equipment market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 193 China cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 194 China smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 195 Japan plant phenotyping equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 196 Japan plant genotyping equipment market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 197 Japan cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 198 Japan smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 199 India plant phenotyping equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 200 India plant genotyping equipment market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 201 India cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 202 India smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 203 South Korea plant phenotyping equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 204 South Korea plant genotyping equipment market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 205 South Korea cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 206 South Korea smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 207 South America plant phenotyping market estimates and forecast, 2013 - 2025 (USD Million)

Table 208 South America plant phenotyping market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 209 South America plant phenotyping equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 210 South America plant phenotyping equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 211 South America plant genotyping market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 212 South America plant genotyping equipment market estimates and forecast, by end use, 2013 - 2025 (USD Thousands)

Table 213 South America plant genotyping equipment market estimates and forecast, by application, 2013 - 2025 (USD Thousands)

Table 214 South America cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 215 South America cell culture equipment market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 216 South America cell culture equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 217 South America cell culture equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 218 South America smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 219 South America smart farm equipment market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 220 South America smart farm equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 221 South America smart farm equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 222 Brazil plant phenotyping equipment market estimates and forecast, 2013 -

2025 (USD Million)

Table 223 Brazil plant genotyping equipment market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 224 Brazil cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 225 Brazil smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 226 MEA plant phenotyping market estimates and forecast, 2013 - 2025 (USD Million)

Table 227 MEA plant phenotyping market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 228 MEA plant phenotyping equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 229 MEA plant phenotyping equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 230 MEA plant genotyping market estimates and forecast, 2013 - 2025 (USD Thousands)

Table 231 MEA plant genotyping equipment market estimates and forecast, by end use, 2013 - 2025 (USD Thousands)

Table 232 MEA plant genotyping equipment market estimates and forecast, by application, 2013 - 2025 (USD Thousands)

Table 233 MEA cell culture equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 234 MEA cell culture equipment market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 235 MEA cell culture equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 236 MEA cell culture equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

Table 237 MEA smart farm equipment market estimates and forecast, 2013 - 2025 (USD Million)

Table 238 MEA smart farm equipment market estimates and forecast, by equipment, 2013 - 2025 (USD Million)

Table 239 MEA smart farm equipment market estimates and forecast, by end use, 2013 - 2025 (USD Million)

Table 240 MEA smart farm equipment market estimates and forecast, by application, 2013 - 2025 (USD Million)

LIST OF FIGURES

Fig. 1 Market segmentation & scope

Fig. 2 Plant biotechnology market size and growth prospects (Revenue in USD Million)

2013-2025

Fig. 3 Plant biotechnology-Value chain analysis

Fig. 4 Market dynamics

Fig. 5 Key opportunities prioritized

Fig. 6 Porter's five forces analysis

Fig. 7 Plant biotechnology-PEST analysis

Fig. 8 Plant phenotyping equipment analysis (USD Million)

Fig. 9 Plant genotyping equipment analysis (USD Thousands)

Fig. 10 Plant cell culture equipment analysis (USD Thousands)

Fig. 11 Smart farm equipment analysis (USD Million)

Fig. 12 Regional outlook, 2017 & 2025

I would like to order

Product name: Plant Biotechnology Equipment Market Size, Share & Trends Analysis Report By Plant Phenotyping, By Plant Genotyping, By Cell Culture, By Smart Farm Equipment, By Region, And Segment Forecasts, 2018 - 2025

Product link: <https://marketpublishers.com/r/PFB09FDD729EN.html>

Price: US\$ 4,950.00 (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/PFB09FDD729EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below

and fax the completed form to +44 20 7900 3970