

# **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**

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## **Abstracts**

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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.

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