



Market Analysis on Plant Genomics and Plant Science in Japan

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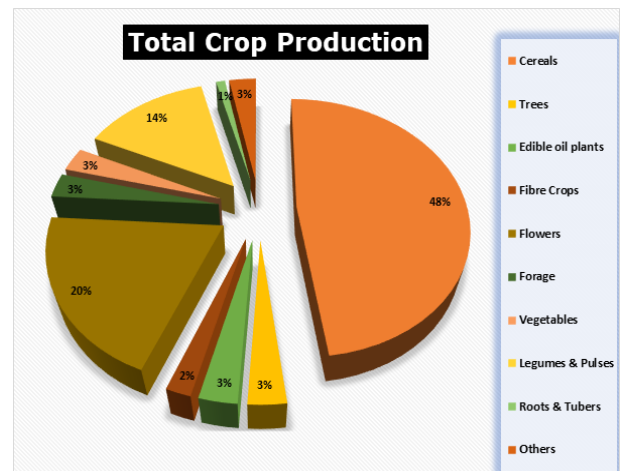
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Why Osaka is chosen for Plant Genomics 2020?

Osaka as one of the world's biggest urban areas, Osaka's populace thickness demonstrates intriguing examples because of the modern zones around the narrows, historically significant area only west of there, and territories of populace development settled in among the mountains adjacent Census information uncovers that populace thickness shifts observably from territory to zone. Little region statistics information completes a superior employment portraying where the swarmed neighbourhoods are. In this guide, territories of most elevated thickness surpass 30,000 people for every square kilometre. High-thickness territories surpass 7,000 people for each square kilometre. High thickness territories surpass 5,200 people for every square kilometre. The last classes break at 3,330 people for each square kilometre, and 1,500 people for every square kilometre The Agricultural Trade Office of the U.S. Government office in Osaka might want to exhibit an Agricultural Products Trade Showcase highlighting basically new-to-advertise sustenance and refreshments in Japan. This sustenance and horticultural grandstand can enhance U.S. organizations discover purchasers and wholesalers - extending market perceivability and deals openings with outside purchasers. This exhibit occasion can help your business in systems administration, associating and one-on-one gatherings, publicizing/advancements with quality merchants and purchasers from the Osaka zone, inside another market

Scope of Agriculture and Plant Breeding in Japan

Japan had the world's third-largest economy with a total gross domestic product (GDP) of US\$4.1 trillion in 2015. Real GDP growth was 0.4% in 2015, a rate that is anticipated to increase to 0.9% throughout 2016. Japan has a large middle class and one of the oldest populations in the world. Individuals aged 65 and over are the largest demographic, representing over 26.7% of the total Japanese population in 2015. An aging population can pose challenges to the market, especially as these older consumers increase in number and their dietary requirements change. Furthermore, older generations require more innovative products, such as easy-to-use packaging or smaller portions. Health-related products, such as functional foods, are also of very high importance. Consequently, opportunities to better serve this segment of the population are emerging in several packaged food categories. Packaged food sales were valued at US\$158 billion in 2015 and are anticipated to reach US\$164.2 billion by 2020.



A Unique Opportunity for Advertisers and Sponsors at Plant Genomics 2020

The worldwide market for genomics is relied upon to achieve USD 22.1 billion by 2020, developing at an expected CAGR of 10.3% from 2014 to 2020, as indicated by another examination by Grand View Research, Inc. Genomics assume a basic part in the field of irresistible infection testing by empowering the utilization of quick and compelling outcome rendering sub-atomic indicative tests. This, combined with developing commonness of irresistible maladies and healing centre obtained diseases is required to drive advertise development amid the conjecture time frame. Other driving elements for this market incorporate diminishing costs of DNA sequencing, expanding interest for genome examination in creature and plant feedstock, broad nearness of both private and open outer subsidizing projects and developing patient mindfulness levels. Also, nearness of undiscovered development openings in rising nations, for example, India, Brazil and China and the expanding wellbeing mindfulness are relied upon to serve this market as future development openings.

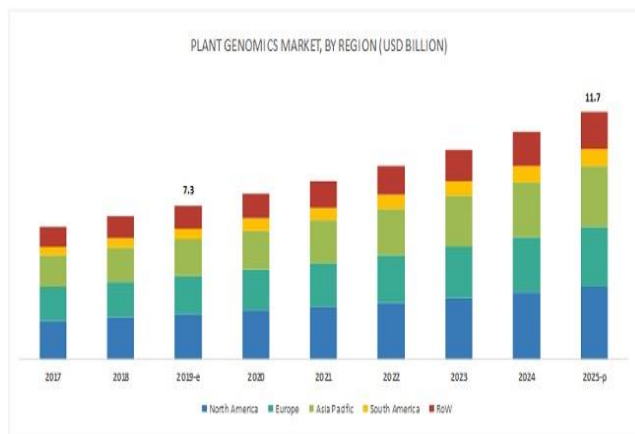
Genomics based diagnostics ruled the general market as far as income at 36.4% out of 2013 significantly inferable from the nearness of a moderately bigger number of R&D programs. Genomics construct customized drug fragment with respect to the next hand is required to develop at the speediest CAGR of more than 12.0% from 2014 to 2020 because of expanding interest for populace based restorative arrangements and resulting increment in R&D activities.

By application, the cereals & grains segment is projected to dominate the plant genomic market during the forecast period.

The adoption of modern plant sequencing techniques has been extensive in developed countries for crops such as corn and wheat; hence, cereals & grains formed the dominant application in 2018. The growth in the adoption of various molecular breeding types, such as molecular engineering and genetic engineering tools, would increase the performance of crops to gain better prices in the market. The plant genomic service companies are largely focusing on the development of major cereals & grains such as corn, wheat, rice, and other grains.

By objective, the DNA/RNA sequencing segment is projected to dominate the plant genomics market during the forecast period.

The DNA sequencing technologies used in plant genomics are Illumina HiSeq, next-generation sequencing, Pacific Biosciences long-read sequencing, 10x Genomics linked reads, Dovetail Hi-C, and BioNano Genomics optical maps. DNA sequencing is the process of determining the precise order of nucleotides within a DNA molecule. It includes any method or technology that is used to determine the order of the four bases—adenine, guanine, cytosine, and thymine—present in a strand of DNA.



The increasing demand for improved varieties in plants in the Asia Pacific region is driving the growth of the plant genomics market.

The key players in various countries of the Asia Pacific region are focusing on directing their investments toward biotechnology research on food crops and crops of high commercial value to cater to the increasing food requirements and to reduce poverty, particularly among resource-poor farming households. With the adoption of modern plant breeding techniques, new crop cultivars can be developed to ensure high crop productivity. Also, key strategies such as the adoption of advanced plant technology by the leading players in the Asia Pacific region ensure food security globally among the end-users. Also, the government in various countries of the region are encouraging companies to adopt these methods by investing in R&D of agricultural biotechnology.

Recent Developments in Plant Genetics Market

In June 2019, NRGene (Israel) entered into a partnership agreement with BGI (Global Genomic Organization, China) for providing NRGene's technology as a part of its wide range of genomic analysis services in agriculture research.

In June 2019, NRGene (Israel) launched a complete genome coverage and high assembly De Novo reference genome-level analysis technology at a much lower cost to accelerate the growth of the agricultural research.

In January 2019, NRGene (Israel) collaborated with Toyota (Japan) for decoding the commercial strawberry genome, a locally produced fruit for the Japanese market. This combination of NRGene's assembly and Toyota's GRAS-Di DNA analysis technology would help in enhancing the production of natural strawberry varieties for Japanese customers.

In January 2019, NRGene and Macrogen Corporation (South Korea) launched ultra-high-density sequencing-based genotyping service—ArrayMAGIC. This technology provides ultra-high-density single nucleotide polymorphism (SNP) genotyping at a low cost per data point, which makes it more accessible for a wide range of agricultural applications.