

# Synthetic Biology in Agriculture and Food Market - A Global Market and Regional Analysis: Focus on Product, Technology, Application, Industry, Country, Patent, Government Programs and Funding - Analysis and Forecast, 2020-2025

https://marketpublishers.com/r/SF8E5D572E06EN.html

Date: December 2020

Pages: 245

Price: US\$ 5,000.00 (Single User License)

ID: SF8E5D572E06EN

# **Abstracts**

Hard copy option is available on any of the options above at an additional charge of \$500. Please email us at <a href="mailto:order@marketpublishers.com">order@marketpublishers.com</a> with your request.

Market Report Coverage - Synthetic Biology in Agriculture and Food

Market Segmentation

Industry – Food Industry and Agriculture Industry

Agriculture Industry Applications- Crop Yield Management, Crop Protection, Soil Health Management, and Others.

Food Industry Applications- Food Process Optimization, Food Nutrition, Food Safety, and Others.

Technology- Gene Synthesis, Next Generation DNA Sequencing, Genome Engineering, Bioinformatics Technologies, and others.

Product- Synthetic Microbes, Software Tools, Bio-Based Specialty Food and Others

Region – North America, South America, Europe, U.K., China, Asia-Pacific



# Japan, and Middle East and Africa

# Regional Segmentation

North America – U.S., Canada, and Mexico

South America - Brazil, Argentina, Chile, and Rest-of-South America

Europe – Germany, France, Italy, Spain, Netherlands, and Rest-of-Europe

U.K.

China

Asia-Pacific and Japan – Japan, India, Australia, and Rest-of-Asia-Pacific and Japan

Middle East and Africa -Israel, South Africa, and Rest-of-Middle East and Africa

#### **Business Drivers**

Increasing Need for Global Food Security

Increasing Consumer Awareness About High-Quality Nutritional Food

Rising Capital Investments for Synthetic Biology Research

# **Business Challenges**

**Ethical Concerns and Stringent Regulations** 

High Implementation Time and Setup Cost

#### Market Opportunities



Rapid Technology Advancements and Inclination Towards Bio-Based Products

Increasing Government Initiatives for Boosting the Global Synthetic Biology Ecosystem

Rise in Research Activities in the Developing Countries of Asia-Pacific Region

Key Synthetic Biology in Agriculture and Food Companies Profiled

BASF SE, Bayer AG, Precigen, Inc., Amyris Inc., Gingko Bioworks, Twist Bioscience, Codexis, Benson Hill Biosystems Inc., Cibus Ltd., Pivot Bio Inc., AgBiome, Inc., Evolva Holding SA, Mosa Meat, Concentric Agriculture Inc. Arzeda, and Agrivida Inc.

Key Questions Answered in this Report:

What is the expected global synthetic biology in agriculture and food market size in terms of value during 2019-2025?

What is the expected future scenario and revenue generated by the application segments for which synthetic biology technology is offered, including crop yield management, crop protection, soil health management, and food nutrition?

What is the expected future scenario and revenue to be generated by the different types of product offerings, including synthetic microbes, bio-based specialty foods, software tools and others, during the forecast period 2020-2025?

Which region is the largest market for global synthetic biology in agriculture and food market?

What is the expected future scenario and the revenue generated by different regions and countries in the synthetic biology in agriculture and food market?

What is the competitive strength of the key players in the synthetic biology in agriculture and food market on the basis of the analysis of their recent developments, product offerings, and regional presence?

Where do the key synthetic biology in agriculture and food companies lie in their



competitive benchmarking, compared to the factors of market coverage and market potential?

How is the government initiative landscape across different regions and countries in the synthetic biology in agriculture and food market?

How is the funding and investment landscape in the global synthetic biology in agriculture and food market?

Which are the leading consortiums and associations in the global synthetic biology in agriculture and food market, and what is their role in the market?

What are the market dynamics of the global synthetic biology in agriculture and food market, including market drivers, restraints, and opportunities?

How has COVID-19 impacted the global synthetic biology in agriculture and food market?

#### Market Overview

The global synthetic biology in agriculture and food market is projected to grow from \$3.20 billion in 2020 to \$14.12 billion by 2025, at a CAGR 34.56% from 2020 to 2025. The growth in synthetic biology in agriculture and food market is expected to be driven by the increasing need for global food security, increasing consumer awareness about high nutritional food, and rising capital investments for synthetic biology research.

Synthetic biology has garnered the attention of industries, such as agriculture and food industry. Synthetic biology has applications in crop yield management, improve diseases and pest resistance, and improve soil health, among others. Similarly, food industry application includes food process optimization, enhancement in food nutritional value, and improving food safety.

The utilization of several technologies in synthetic biology, such as gene synthesis, genome engineering, and bioinformatics technology, is expected to augment the growth of synthetic biology in the technology sector. Moreover, depleting agricultural land and increasing demand for fresh agricultural produce all around the year are expected to propagate the growth of synthetic biology in agriculture and food market.



## Competitive Landscape

The competitive landscape of synthetic biology in agriculture and food market consists of different strategies undertaken by major players across the industry to gain market presence. The competitive landscape for synthetic biology in agriculture and food market demonstrates an inclination toward companies adopting strategies, such as product launches and developments, and partnerships, collaborations, and joint ventures. The major established players in the market focus on partnerships, collaborations, and joint ventures to introduce new technologies or develop further on the existing product portfolio. BASF SE, Bayer, Precigen, Inc., Amyris, Gingko Bioworks, Pivot Bio, Mosa Meat, and Twist Bioscience are some of the prominent players in the synthetic biology in agriculture and food market. The market is highly fragmented with the presence of a large number of small- to medium-sized companies that compete with each other and the large enterprises.

# Regional Market Dynamics

The global synthetic biology in agriculture and food market holds a prominent share in various countries of North America and Europe. North America is at the forefront of the global synthetic biology in agriculture and food market, with a high market penetration rate in the U.S., and Canada, which are expected to display robust market growth in the coming five years.

During the forecast period 2020-2025, the Asia-Pacific and Japan region is expected to flourish as one of the most lucrative markets for synthetic biology in agriculture and food. Asia-Pacific and Japan is expected to exhibit significant growth opportunities for synthetic biology due to increased optimism in the economic conditions of these countries. The countries in this region present immense scope for market development, owing to the increasing urban population size, growing market penetration of advanced technologies, and favorable government investments on the adaptation of innovative farming technologies.



# **Contents**

#### 1 MARKETS

- 1.1 Industry Outlook
  - 1.1.1 Government Programs and Initiatives Landscape
    - 1.1.1.1 North America
    - 1.1.1.2 Europe
    - 1.1.1.3 U.K.
    - 1.1.1.4 Asia-Pacific and Japan
    - 1.1.1.5 China
    - 1.1.1.6 Rest-of-the-World
  - 1.1.2 Investment and Funding Landscape
  - 1.1.3 Industry Attractiveness
    - 1.1.3.1 Threat of New Entrants
  - 1.1.3.2 Bargaining Power of Buyers
  - 1.1.3.3 Bargaining Power of Suppliers
  - 1.1.3.4 Threat from Substitutes
  - 1.1.3.5 Intensity of Competitive Rivalry
  - 1.1.4 Key Consortiums and Associations
- 1.2 Business Dynamics
  - 1.2.1 Business Drivers
    - 1.2.1.1 Increasing Need for Global Food Security
    - 1.2.1.2 Increasing Consumer Awareness About High-Quality Nutritional Food
    - 1.2.1.3 Rising Capital Investments for Synthetic Biology Research
  - 1.2.2 Business Challenges
    - 1.2.2.1 Ethical Concerns and Stringent Regulations for Synthetic Biology
  - 1.2.2.2 High Implementation Time and Setup Cost
  - 1.2.3 Business Opportunities
- 1.2.3.1 Increasing Government Initiatives for Boosting the Global Synthetic Biology Ecosystem
  - 1.2.3.2 Rapid Technology Advancements and Inclination Toward Bio-Based Products
- 1.2.3.3 Rise in Research Activities in the Developing Countries of Asia-Pacific and MEA Region
  - 1.2.4 Business Strategies
    - 1.2.4.1 Product Developments
    - 1.2.4.2 Market Developments
  - 1.2.5 Corporate Strategies
  - 1.2.5.1 Mergers and Acquisitions



## 1.2.5.2 Partnerships, Collaborations, and Joint Ventures

#### **2 APPLICATION**

- 2.1 Global Synthetic Biology in Agriculture and Food Market (by Industry), Applications and Specifications
  - 2.1.1 Agriculture Industry
  - 2.1.2 Food Industry
- 2.2 Global Synthetic Biology in Agriculture and Food Market, Demand Analysis (by Industry)
  - 2.2.1 Demand Analysis (by Industry), Value Data, 2019-2025
    - 2.2.1.1 Agriculture Industry
    - 2.2.1.2 Food Industry
- 2.3 Global Synthetic Biology in Agriculture and Food Market (by Application), Application and Specification
  - 2.3.1 Agriculture Industry Applications
    - 2.3.1.1 Crop Yield Management
    - 2.3.1.2 Crop Protection
    - 2.3.1.3 Soil Health Management
    - 2.3.1.4 Others
  - 2.3.2 Food Industry Applications
    - 2.3.2.1 Food Process Optimization
    - 2.3.2.2 Food Nutrition
    - 2.3.2.3 Food Safety
    - 2.3.2.4 Others
- 2.4 Global Synthetic Biology in Agriculture and Food Market, Demand Analysis (by Application)
  - 2.4.1 Demand Analysis (by Agriculture Industry Application), Value Data, 2019–2025
    - 2.4.1.1 Crop Yield Management
    - 2.4.1.2 Crop Protection
    - 2.4.1.3 Soil Health Management
    - 2.4.1.4 Others
  - 2.4.2 Demand Analysis (by Food Industry Application), Value Data, 2019–2025
    - 2.4.2.1 Food Process Optimization
    - 2.4.2.2 Food Nutrition
    - 2.4.2.3 Food Safety
    - 2.4.2.4 Others

#### **3 PRODUCTS**



- 3.1 Global Synthetic Biology in Agriculture and Food Market (by Product), Products and Specifications
  - 3.1.1 Synthetic Microbes
  - 3.1.2 Software Tools
  - 3.1.3 Bio-Based Specialty Food
  - **3.1.4 Others**
- 3.2 Global Synthetic Biology in Agriculture and Food Market, Demand Analysis (by Product)
  - 3.2.1 Demand Analysis (by Product), Value Data
    - 3.2.1.1 Synthetic Microbes
    - 3.2.1.2 Software Tools
    - 3.2.1.3 Bio-Based Specialty Food
    - 3.2.1.4 Others
- 3.3 Global Synthetic Biology in Agriculture and Food Market (by Technology), Products and Specifications
  - 3.3.1 Gene Synthesis
  - 3.3.2 Next-Generation DNA Sequencing
  - 3.3.3 Genome Engineering
  - 3.3.4 Bioinformatics Technologies
  - 3.3.5 Others
- 3.4 Global Synthetic Biology in Agriculture and Food Market, Demand Analysis (by Technology)
  - 3.4.1 Demand Analysis (by Technology), Value Data, 2019-2025
    - 3.4.1.1 Gene Synthesis
    - 3.4.1.2 Next-Generation DNA Sequencing
    - 3.4.1.3 Genome Engineering
    - 3.4.1.4 Bioinformatics Technologies
    - 3.4.1.5 Others
- 3.5 Patent Analysis
  - 3.5.1 Overview
  - 3.5.2 Patent Analysis (by Status)
  - 3.5.3 Patent Analysis (by Applicant Profile)
  - 3.5.4 Patent Analysis (by Company)
  - 3.5.5 Patent Analysis (by Application)
  - 3.5.6 Patent Analysis (by Patent Office)

#### **4 REGION**



- 4.1 North America
  - 4.1.1 Markets
  - 4.1.1.1 Key Players in North America
  - 4.1.1.2 Business Challenges
  - 4.1.1.3 Business Drivers
  - 4.1.2 Application
- 4.1.2.1 North America Synthetic Biology in Agriculture and Food Market (by Application), Value Data
  - 4.1.3 Product
- 4.1.3.1 North America Synthetic Biology in Agriculture and Food Market (by Technology), Value Data
- 4.1.3.2 North America Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025
- 4.1.3.3 North America Synthetic Biology in Agriculture and Food Market (by Product), Value Data
  - 4.1.4 North America (by Country)
    - 4.1.4.1 U.S.
      - 4.1.4.1.1 Markets
        - 4.1.4.1.1.1 Buyer Attributes
        - 4.1.4.1.1.2 Key Players in the U.S.
        - 4.1.4.1.1.3 Business Challenges
        - 4.1.4.1.1.4 Business Drivers
      - 4.1.4.1.2 Application
- 4.1.4.1.2.1 U.S. Synthetic Biology in Agriculture and Food Market (by Application),

#### Value Data

- 4.1.4.1.3 Product
- 4.1.4.1.3.1 U.S. Synthetic Biology in Agriculture and Food Market (by Technology), Value Data
- 4.1.4.1.3.2 U.S. Synthetic Biology in Agriculture and Food Market (by Product), Value Data
  - 4.1.4.2 Canada
    - 4.1.4.2.1 Markets
      - 4.1.4.2.1.1 Buyer Attributes
      - 4.1.4.2.1.2 Key Players in Canada
      - 4.1.4.2.1.3 Business Challenges
      - 4.1.4.2.1.4 Business Drivers
    - 4.1.4.2.2 Application
- 4.1.4.2.2.1 Canada Synthetic Biology in Agriculture and Food Market (by Application), Value Data



- 4.1.4.2.3 Product
- 4.1.4.2.3.1 Canada Synthetic Biology in Agriculture and Food Market (by

Technology), Value Data

4.1.4.2.3.2 Canada Synthetic Biology in Agriculture and Food Market (by Product),

Value Data

- 4.1.4.3 Mexico
  - 4.1.4.3.1 Markets
    - 4.1.4.3.1.1 Buyer Attributes
    - 4.1.4.3.1.2 Business Challenges
  - 4.1.4.3.1.3 Business Drivers
  - 4.1.4.3.2 Application
    - 4.1.4.3.2.1 Mexico Synthetic Biology in Agriculture and Food Market (by

Application), Value Data

- 4.1.4.3.3 Product
  - 4.1.4.3.3.1 Mexico Synthetic Biology in Agriculture and Food Market (by

Technology), Value Data

4.1.4.3.3.2 Mexico Synthetic Biology in Agriculture and Food Market (by Product),

Value Data

- 4.2 South America
  - 4.2.1 Markets
    - 4.2.1.1 Key Players in South America
    - 4.2.1.2 Business Challenges
  - 4.2.1.3 Business Drivers
  - 4.2.2 Application
- 4.2.2.1 South America Synthetic Biology in Agriculture and Food Market (by

Application), Value Data

- 4.2.3 Product
  - 4.2.3.1 South America Synthetic Biology in Agriculture and Food Market (by

Technology), Value Data

4.2.3.2 South America Synthetic Biology in Agriculture and Food Market (by Product),

Value Data

- 4.2.4 South America (by Country)
  - 4.2.4.1 Brazil
    - 4.2.4.1.1 Markets
      - 4.2.4.1.1.1 Buyer Attributes
      - 4.2.4.1.1.2 Business Challenges
    - 4.2.4.1.1.3 Business Drivers
    - 4.2.4.1.2 Application
    - 4.2.4.1.2.1 Brazil Synthetic Biology in Agriculture and Food Market (by



Application), Value Data

4.2.4.1.3 Product

4.2.4.1.3.1 Brazil Synthetic Biology in Agriculture and Food Market (by

Technology), Value Data

4.2.4.1.3.2 Brazil Synthetic Biology in Agriculture and Food Market (by Product),

Value Data

4.2.4.2 Argentina

4.2.4.2.1 Markets

4.2.4.2.1.1 Buyer Attributes

4.2.4.2.1.2 Business Challenges

4.2.4.2.1.3 Business Drivers

4.2.4.2.2 Application

4.2.4.2.2.1 Argentina Synthetic Biology in Agriculture and Food Market (by

Application), Value Data

4.2.4.2.3 Product

4.2.4.2.3.1 Argentina Synthetic Biology in Agriculture and Food Market (by

Technology), Value Data

4.2.4.2.3.2 Argentina Synthetic Biology in Agriculture and Food Market (by

Product), Value Data

4.2.4.3 Chile

4.2.4.3.1 Markets

4.2.4.3.1.1 Buyer Attributes

4.2.4.3.1.2 Business Challenges

4.2.4.3.1.3 Business Drivers

4.2.4.3.2 Application

4.2.4.3.2.1 Chile Synthetic Biology in Agriculture and Food Market (by Application),

Value Data

4.2.4.3.3 Product

4.2.4.3.3.1 Chile Synthetic Biology in Agriculture and Food Market (by

Technology), Value Data

4.2.4.3.3.2 Chile Synthetic Biology in Agriculture and Food Market (by Product),

Value Data

4.2.4.4 Rest-of-South America

4.2.4.4.1 Markets

4.2.4.4.1.1 Buyer Attributes

4.2.4.4.1.2 Business Challenges

4.2.4.4.1.3 Business Drivers

4.2.4.4.2 Application

4.2.4.4.2.1 Rest-of-South America Synthetic Biology in Agriculture and Food



Market (by Application), Value Data

4.2.4.4.3 Product

4.2.4.4.3.1 Rest-of-South America Synthetic Biology in Agriculture and Food Market (by Technology), Value Data

4.2.4.4.3.2 Rest-of-South America Synthetic Biology in Agriculture and Food Market (by Product), Value Data

4.3 Europe

4.3.1 Markets

4.3.1.1 Key Players in Europe

4.3.1.2 Business Challenges

4.3.1.3 Business Drivers

4.3.2 Application

4.3.2.1 Europe Synthetic Biology in Agriculture and Food Market (by Application),

Value Data

4.3.3 Product

4.3.3.1 Europe Synthetic Biology in Agriculture and Food Market (by Technology),

Value Data

4.3.3.2 Europe Synthetic Biology in Agriculture and Food Market (by Product), Value Data

4.3.4 Europe (by Country)

4.3.4.1 Germany

4.3.4.1.1 Markets

4.3.4.1.1.1 Buyer Attributes

4.3.4.1.1.2 Business Challenges

4.3.4.1.1.3 Business Drivers

4.3.4.1.2 Application

4.3.4.1.2.1 Germany Synthetic Biology in Agriculture and Food Market (by Application), Value Data

4.3.4.1.3 Product

4.3.4.1.3.1 Germany Synthetic Biology in Agriculture and Food Market (by Technology), Value Data

4.3.4.1.3.2 Germany Synthetic Biology in Agriculture and Food Market (by Product), Value Data

4.3.4.2 France

4.3.4.2.1 Markets

4.3.4.2.1.1 Buyer Attributes

4.3.4.2.1.2 Business Challenge

4.3.4.2.1.3 Business Drivers

4.3.4.2.2 Application



4.3.4.2.2.1 France Synthetic Biology in Agriculture and Food Market (by Application), Value Data

4.3.4.2.3 Product

4.3.4.2.3.1 France Synthetic Biology in Agriculture and Food Market (by Technology), Value Data

4.3.4.2.3.2 France Synthetic Biology in Agriculture and Food Market (by Product), Value Data

4.3.4.3 Italy

. . . . . . . . . . .

4.3.4.3.1 Markets

4.3.4.3.1.1 Buyer Attributes

4.3.4.3.1.2 Business Challenges

4.3.4.3.1.3 Business Drivers

4.3.4.3.2 Application

4.3.4.3.2.1 Italy Synthetic Biology in Agriculture and Food Market (by Application),

Value Data

4.3.4.3.3 Product

4.3.4.3.3.1 Italy Synthetic Biology in Agriculture and Food Market (by Technology), Value Data

4.3.4.3.3.2 Italy Synthetic Biology in Agriculture and Food Market (by Product),

Value Data

4.3.4.4 Spain

4.3.4.4.1 Markets

4.3.4.4.1.1 Buyer Attributes

4.3.4.4.1.2 Business Challenge

4.3.4.4.1.3 Business Driver

4.3.4.4.2 Application

4.3.4.4.2.1 Spain Synthetic Biology in Agriculture and Food Market (by

Application), Value Data

4.3.4.4.3 Product

4.3.4.4.3.1 Spain Synthetic Biology in Agriculture and Food Market (by

Technology), Value Data

4.3.4.4.3.2 Spain Synthetic Biology in Agriculture and Food Market (by Product),

Value Data

4.3.4.5 Netherlands

4.3.4.5.1 Markets

4.3.4.5.1.1 Buyer Attributes

4.3.4.5.1.2 Business Challenge

4.3.4.5.1.3 Business Drivers

4.3.4.5.2 Application



4.3.4.5.2.1 Netherlands Synthetic Biology in Agriculture and Food Market (by Application), Value Data

4.3.4.5.3 Product

4.3.4.5.3.1 Netherlands Synthetic Biology in Agriculture and Food Market (by Technology), Value Data

4.3.4.5.3.2 Netherlands Synthetic Biology in Agriculture and Food Market (by Product), Value Data

4.3.4.6 Rest-of-Europe

4.3.4.6.1 Markets

4.3.4.6.1.1 Buyer Attributes

4.3.4.6.1.2 Business Challenges

4.3.4.6.1.3 Business Drivers

4.3.4.6.2 Application

4.3.4.6.2.1 Rest-of-Europe Synthetic Biology in Agriculture and Food Market (by Application), Value Data

4.3.4.6.3 Product

4.3.4.6.3.1 Rest-of-Europe Synthetic Biology in Agriculture and Food Market (by Technology), Value Data

4.3.4.6.3.2 Rest-of-Europe Synthetic Biology in Agriculture and Food Market (by Product), Value Data

4.4 U.K.

4.4.1 Markets

4.4.1.1 Buyer Attributes

4.4.1.2 Key Players in the U.K.

4.4.1.3 Business Challenges

4.4.1.4 Business Drivers

4.4.2 Application

4.4.2.1 The U.K. Synthetic Biology in Agriculture and Food Market (by Application), Value Data

4.4.3 Product

4.4.3.1 The U.K. Synthetic Biology in Agriculture and Food Market (by Technology), Value Data

4.4.3.2 U.K. Synthetic Biology in Agriculture and Food Market (by Product), Value Data

4.5 Middle East and Africa

4.5.1 Markets

4.5.1.1 Key Players in the Middle East and Africa

4.5.1.2 Business Challenges

4.5.1.3 Business Drivers



- 4.5.2 Application
- 4.5.2.1 Middle East and Africa Synthetic Biology in Agriculture and Food Market (by Application), Value Data
  - 4.5.3 Product
- 4.5.3.1 Middle East and Africa Synthetic Biology in Agriculture and Food Market (by Technology), Value Data
- 4.5.3.2 Middle East and Africa Synthetic Biology in Agriculture and Food Market (by Product), Value Data
  - 4.5.4 Middle East and Africa (by Country)
    - 4.5.4.1 Israel
      - 4.5.4.1.1 Markets
        - 4.5.4.1.1.1 Buyer Attributes
        - 4.5.4.1.1.2 Business Challenges
        - 4.5.4.1.1.3 Business Drivers
      - 4.5.4.1.2 Application
- 4.5.4.1.2.1 Israel Synthetic Biology in Agriculture and Food Market (by Application), Value Data
  - 4.5.4.1.3 Product
- 4.5.4.1.3.1 Israel Synthetic Biology in Agriculture and Food Market (by Technology), Value Data
- 4.5.4.1.3.2 Israel Synthetic Biology in Agriculture and Food Market (by Product), Value Data
  - 4.5.4.2 South Africa
    - 4.5.4.2.1 Markets
      - 4.5.4.2.1.1 Buyer Attributes
      - 4.5.4.2.1.2 Business Challenges
      - 4.5.4.2.1.3 Business Drivers
    - 4.5.4.2.2 Application
- 4.5.4.2.2.1 South Africa Synthetic Biology in Agriculture and Food Market (by Application), Value Data
  - 4.5.4.2.3 Product
- 4.5.4.2.3.1 South Africa Synthetic Biology in Agriculture and Food Market (by Technology), Value Data
- 4.5.4.2.3.2 South Africa Synthetic Biology in Agriculture and Food Market (by Product), Value Data
  - 4.5.4.3 Rest-of-Middle East and Africa
    - 4.5.4.3.1 Markets
    - 4.5.4.3.1.1 Buyer Attributes
    - 4.5.4.3.1.2 Business Challenges



- 4.5.4.3.1.3 Business Drivers
- 4.5.4.3.2 Application
- 4.5.4.3.2.1 Rest-of-Middle East and Africa Synthetic Biology in Agriculture and Food Market (by Application), Value Data
  - 4.5.4.3.3 Product
- 4.5.4.3.3.1 Rest-of-Middle East and Africa Synthetic Biology in Agriculture and Food Market (by Technology), Value Data
- 4.5.4.3.3.2 Rest-of-Middle East and Africa Synthetic Biology in Agriculture and Food Market (by Product), Value Data
- 4.6 China
- 4.6.1 Market
  - 4.6.1.1 Buyer Attributes
  - 4.6.1.2 Key Players in China
  - 4.6.1.3 Business Challenges
  - 4.6.1.4 Business Drivers
- 4.6.2 Application
- 4.6.2.1 China Synthetic Biology in Agriculture and Food Market (by Application), Value Data
  - 4.6.3 Product
- 4.6.3.1 China Synthetic Biology in Agriculture and Food Market (by Technology), Value Data
- 4.6.3.2 China Synthetic Biology in Agriculture and Food Market (by Product), Value Data
- 4.7 Asia-Pacific and Japan
  - 4.7.1 Markets
    - 4.7.1.1 Key Players in Asia-Pacific and Japan
    - 4.7.1.2 Business Challenges
    - 4.7.1.3 Business Drivers
  - 4.7.2 Application
- 4.7.2.1 Asia-Pacific and Japan Synthetic Biology in Agriculture and Food Market (by Application), Value Data
  - 4.7.3 Product
- 4.7.3.1 Asia-Pacific and Japan Synthetic Biology in Agriculture and Food Market (by Technology), Value Data
- 4.7.3.2 Asia-Pacific and Japan Synthetic Biology in Agriculture and Food Market (by Product), Value Data
  - 4.7.4 Asia-Pacific and Japan (by Country)
    - 4.7.4.1 Japan
    - 4.7.4.1.1 Markets



4.7.4.1.1.1 Buyer Attributes

4.7.4.1.1.2 Business Challenges

4.7.4.1.1.3 Business Drivers

4.7.4.1.2 Application

4.7.4.1.2.1 Japan Synthetic Biology in Agriculture and Food Market (by

Application), Value Data

4.7.4.1.3 Product

4.7.4.1.3.1 Japan Synthetic Biology in Agriculture and Food Market (by

Technology), Value Data

4.7.4.1.3.2 Japan Synthetic Biology in Agriculture and Food Market (by Product),

Value Data

4.7.4.2 India

4.7.4.2.1 Markets

4.7.4.2.1.1 Buyer Attributes

4.7.4.2.1.2 Business Challenges

4.7.4.2.1.3 Business Drivers

4.7.4.2.2 Application

4.7.4.2.2.1 India Synthetic Biology in Agriculture and Food Market (by Application),

Value Data

4.7.4.2.3 Product

4.7.4.2.3.1 India Synthetic Biology in Agriculture and Food Market (by

Technology), Value Data

4.7.4.2.3.2 India Synthetic Biology in Agriculture and Food Market (by Product),

Value Data

4.7.4.3 Australia

4.7.4.3.1 Markets

4.7.4.3.1.1 Buyer Attributes

4.7.4.3.1.2 Business Challenges

4.7.4.3.1.3 Business Drivers

4.7.4.3.2 Application

4.7.4.3.2.1 Australia Synthetic Biology in Agriculture and Food Market (by

Application), Value Data

4.7.4.3.3 Product

4.7.4.3.3.1 Australia Synthetic Biology in Agriculture and Food Market (by

Technology), Value Data

4.7.4.3.3.2 Australia Synthetic Biology in Agriculture and Food Market (by

Product), Value Data

4.7.4.4 Rest-of-Asia Pacific and Japan

4.7.4.4.1 Markets



- 4.7.4.4.1.1 Buyer Attributes
- 4.7.4.4.1.2 Business Challenges
- 4.7.4.4.1.3 Business Drivers
- 4.7.4.4.2 Application
- 4.7.4.4.2.1 Rest-of-Asia Pacific and Japan Synthetic Biology in Agriculture and Food Market (by Application), Value Data
  - 4.7.4.4.3 Product
- 4.7.4.4.3.1 Rest-of-Asia Pacific and Japan Synthetic Biology in Agriculture and Food Market (by Technology), Value Data
- 4.7.4.4.3.2 Rest-of-Asia-Pacific and Japan Synthetic Biology in Agriculture and Food Market (by Product), Value Data

#### **5 MARKETS - COMPETITIVE BENCHMARKING & COMPANY PROFILES**

- 5.1 Competitive Benchmarking
- 5.2 Company Profiles
  - 5.2.1 Overview
  - 5.2.2 AgBiome, Inc.
  - 5.2.2.1 Company Overview
    - 5.2.2.1.1 Role of AgBiome, Inc. in Synthetic Biology in Agriculture and Food Market
    - 5.2.2.1.2 Product Portfolio
    - 5.2.2.1.3 Production Sites and R&D Analysis
  - 5.2.2.2 Business Strategies
  - 5.2.2.2.1 Product Developments
  - 5.2.2.3 Corporate Strategies
    - 5.2.2.3.1 Partnership and Collaboration
  - 5.2.2.4 Strengths and Weaknesses of AgBiome, Inc.
  - 5.2.3 Agrivida, Inc.
    - 5.2.3.1 Company Overview
      - 5.2.3.1.1 Role of Agrivida, Inc. in Synthetic Biology in Agriculture and Food
      - 5.2.3.1.2 Product Portfolio
    - 5.2.3.1.3 Production Site and R&D Analysis
    - 5.2.3.2 Corporate Strategies
      - 5.2.3.2.1 Partnership and Collaboration
    - 5.2.3.3 Strengths and Weaknesses of Agrivida, Inc.
  - 5.2.4 Arzeda
    - 5.2.4.1 Company Overview
      - 5.2.4.1.1 Role of Arzeda in Synthetic Biology in Agriculture and Food
      - 5.2.4.1.2 Product Portfolio



- 5.2.4.1.3 Production Site and R&D Analysis
- 5.2.4.2 Corporate Strategies
- 5.2.4.2.1 Partnership and Collaboration
- 5.2.4.3 Strengths and Weaknesses of Arzeda
- 5.2.5 Amyris, Inc.
  - 5.2.5.1 Company Overview
    - 5.2.5.1.1 Role of Amyris, Inc. in Synthetic Biology in Agriculture and Food Market
    - 5.2.5.1.2 Product Portfolio
    - 5.2.5.1.3 Production Sites and R&D Analysis
  - 5.2.5.2 Corporate Strategies
  - 5.2.5.2.1 Partnership and Collaboration
  - 5.2.5.3 Strengths and Weaknesses of Amyris, Inc.
- **5.2.6 BASF SE** 
  - 5.2.6.1 Company Overview
    - 5.2.6.1.1 Role of BASF SE in in Synthetic Biology in Agriculture and Food Market
    - 5.2.6.1.2 Product Portfolio
    - 5.2.6.1.3 Production Sites and R&D Analysis
  - 5.2.6.2 Corporate Strategies
  - 5.2.6.2.1 Partnership and Collaboration
  - 5.2.6.3 Strengths and Weaknesses of BASF SE
- 5.2.7 Bayer AG
  - 5.2.7.1 Company Overview
    - 5.2.7.1.1 Role of Bayer AG in Synthetic Biology in Agriculture and Food Market
    - 5.2.7.1.2 Product Portfolio
    - 5.2.7.1.3 Production Site and R&D Analysis
  - 5.2.7.2 Corporate Strategies
  - 5.2.7.2.1 Partnership and Collaboration
  - 5.2.7.3 Strengths and Weaknesses of Bayer AG
- 5.2.8 Concentric Agriculture Inc.
  - 5.2.8.1 Company Overview
- 5.2.8.1.1 Role of Concentric Agriculture Inc. in Synthetic Biology in Agriculture and Food Market
  - 5.2.8.1.2 Product Portfolio
  - 5.2.8.1.3 Production Site and R&D Analysis
  - 5.2.8.2 Corporate Strategies
    - 5.2.8.2.1 Partnership and Collaboration
  - 5.2.8.3 Strengths and Weaknesses of Concentric Agriculture Inc.
  - 5.2.9 Evolva Holding SA
  - 5.2.9.1 Company Overview



- 5.2.9.1.1 Role of Evolva Holding SA in Synthetic Biology in Agriculture and Food
- 5.2.9.1.2 Product Portfolio
- 5.2.9.1.3 Production Site and R&D Analysis
- 5.2.9.2 Corporate Strategy
- 5.2.9.2.1 Partnership and Collaboration
- 5.2.9.3 Strengths and Weaknesses of Evolva Holding SA
- 5.2.10 Pivot Bio, Inc
  - 5.2.10.1 Company Overview
    - 5.2.10.1.1 Role of Pivot Bio, Inc. in Synthetic Biology in Agriculture and Food Market
    - 5.2.10.1.2 Product Portfolio
  - 5.2.10.1.3 Production Sites and R&D Analysis
  - 5.2.10.2 Business Strategies
    - 5.2.10.2.1 Product Developments
  - 5.2.10.3 Market Development
  - 5.2.10.4 Corporate Strategies
    - 5.2.10.4.1 Partnership and Collaboration
  - 5.2.10.5 Strengths and Weaknesses of Pivot Bio, Inc.
- 5.2.11 Precigen. Inc.
  - 5.2.11.1 Company Overview
- 5.2.11 .1.1 Role of Precigen, Inc. in Synthetic Biology in Agriculture and Food
  - 5.2.11.1.2 Product Portfolio
  - 5.2.11.1.3 Production Site and R&D Analysis
  - 5.2.11.2 Business Strategies
    - 5.2.11.2.1 Product Development
  - 5.2.11.3 Corporate Strategies
    - 5.2.11.3.1 Partnership and Collaboration
  - 5.2.11.4 Strengths and Weaknesses of Precigen, Inc.
- 5.2.12 Benson Hill Biosystems, Inc.
  - 5.2.12.1 Company Overview
- 5.2.12.1.1 Role of Benson Hill Biosystems, Inc. in Synthetic Biology in Agriculture and Food
  - 5.2.12.1.2 Product Portfolio
  - 5.2.12.1.3 Production Sites and R&D Analysis
  - 5.2.12.2 Business Strategies
    - 5.2.12.2.1 Product Developments
  - 5.2.12.3 Corporate Strategies
    - 5.2.12.3.1 Merger and Acquisition
    - 5.2.12.3.2 Partnership and Collaboration
  - 5.2.12.4 Strengths and Weaknesses of Benson Hill Biosystems, Inc.



- 5.2.13 Cibus, Ltd
  - 5.2.13.1 Company Overview
  - 5.2.13.1.1 Role of Cibus, Ltd in Synthetic Biology in Agriculture and Food
  - 5.2.13.1.2 Product Portfolio
  - 5.2.13.1.3 Production Sites and R&D Analysis
  - 5.2.13.2 Business Strategies
  - 5.2.13.2.1 Product Developments
  - 5.2.13.3 Corporate Strategies
    - 5.2.13.3.1 Partnership and Collaboration
  - 5.2.13.4 Strengths and Weaknesses of Cibus, Ltd
- 5.2.14 Codexis, Inc.
  - 5.2.14.1 Company Overview
    - 5.2.14.1.1 Role of Codexis, Inc. in Synthetic Biology in Agriculture and Food
    - 5.2.14.1.2 Product Portfolio
  - 5.2.14.1.3 Production Site and R&D Analysis
  - 5.2.14.2 Corporate Strategies
    - 5.2.14.2.1 Partnership and Collaboration
  - 5.2.14.3 Strengths and Weaknesses of Codexis, Inc.
- 5.2.15 GINKGO BIOWORKS
  - 5.2.15.1 Company Overview
- 5.2.15.1.1 Role of GINKGO BIOWORKS in Synthetic Biology in Agriculture and Food
  - 5.2.15.1.2 Product Portfolio
  - 5.2.15.1.3 Production Site and R&D Analysis
  - 5.2.15.2 Corporate Strategies
    - 5.2.15.2.1 Partnership and Collaboration
  - 5.2.15.3 Strengths and Weaknesses of GINKGO BIOWOKRS
  - 5.2.16 Twist Bioscience
    - 5.2.16.1 Company Overview
      - 5.2.16.1.1 Role of Twist Bioscience in Synthetic Biology in Agriculture and Food
      - 5.2.16.1.2 Product Portfolio
    - 5.2.16.1.3 Production Site and R&D Analysis
    - 5.2.16.2 Strengths and Weaknesses of Twist Bioscience

#### **6 RESEARCH METHODOLOGY**

- 6.1 Data Sources
  - 6.1.1 Primary Data Sources
  - 6.1.2 Secondary Data Sources



- 6.2 Market Research Methodology
  - 6.2.1 Data Triangulation
  - 6.2.2 Market Estimation and Forecast
  - 6.2.3 Assumptions
  - 6.2.4 Limitations

#### **7 ANNEXURE**

- 7.1 Annexure A: List of Key Strategies and Developments in Global Synthetic Biology in Agriculture and Food Market (January 2017-August 2020)
- 7.2 Annexure B: List of Patents in Global Synthetic Biology in Agriculture and Food Market (January 2017-August 2020)
- 7.3 Annexure C: List of Investments and Fundings in Global Synthetic Biology in Agriculture and Food Market (January 2017 August 2020)



# **List Of Figures**

#### LIST OF FIGURES

Figure 1: Macroeconomic Trends Impacting Global Synthetic Biology in Agriculture and Food Industry

Figure 2: Drivers and Challenges: Global Synthetic Biology in Agriculture and Food Market

Figure 3: Global Synthetic Biology in Agriculture and Food Market, \$Million, 2019-2025

Figure 4: Global Synthetic Biology in Agriculture and Food Market (by Technology),

\$Million, 2020 and 2025

Figure 5: Global Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2020 and 2025

Figure 6: Global Synthetic Biology in Agriculture and Food Market (by Industry),

\$Million, 2020 and 2025

Figure 7: Global Synthetic Biology in Agriculture and Food Market (by Applications), \$Million, 2020

Figure 8: Regional Synthetic Biology in Agriculture and Food Market Snapshot

Figure 9: Global Synthetic Biology in Agriculture and Food Market: Coverage

Figure 10: Classification and Analysis of Government Programs and Initiatives Landscape (by Focus Area)

Figure 11: Government Initiative Landscape in North America

Figure 12: Government Initiative Landscape in Europe

Figure 13: Government Initiative Landscape in Asia-Pacific and Japan

Figure 14: Government Initiative Landscape in Rest-of-the-World

Figure 15: Global Synthetic Biology in Agriculture and Food Market: Investment and

Funding, \$Million, January 2017- August 2020

Figure 16: Investment and Funding landscape Share (by Round)

Figure 17: Investment and Funding Landscape Share (by Application)

Figure 18: Porter's Five Forces Analysis

Figure 19: Global Synthetic Biology Market in Agriculture and Food, Business Dynamics

Figure 20: Number of Undernourished People in the World, 2019

Figure 21: Key Business Strategies

Figure 22: Product Developments (by Company), January 2017-August 2020

Figure 23: Market Developments (by Company), January 2017-August 2020

Figure 24: Key Corporate Strategies

Figure 25: Partnerships, Collaborations, and Joint Ventures (by Company), January

2017-August 2020

Figure 26: Global Synthetic Biology in Agriculture and Food Market (by Industry)



Figure 27: Benefits of Synthetic Biology in Agriculture Industry

Figure 28: Benefits of Synthetic Biology in Food Industry

Figure 29: Global Synthetic Biology in Agriculture and Food Market (by Agriculture

Industry), \$Million, 2019-2025

Figure 30: Global Synthetic Biology in Agriculture and Food Market (by Food Industry),

\$Million, 2019-2025

Figure 31: Synthetic Biology Application Within the Agriculture Industry

Figure 32: Traits of Healthy Soil

Figure 33: Synthetic Biology Applications Within Food Industry

Figure 34: Global Synthetic Biology in Agriculture and Food Market (for Crop Yield

Management), \$Million, 2019-2025

Figure 35: Global Synthetic Biology in Agriculture and Food Market (for Crop

Protection), \$Million, 2019-2025

Figure 36: Global Synthetic Biology in Agriculture and Food Market (Soil Health

Management), \$Million, 2019-2025

Figure 37: Global Synthetic Biology in Agriculture and Food Market (for Other

Applications), \$Million, 2019-2025

Figure 38: Global Synthetic Biology in Agriculture and Food Market (for Food Process

Optimization), \$Million, 2019-2025

Figure 39: Global Synthetic Biology in Agriculture and Food Market (for Food Nutrition),

\$Million, 2019-2025

Figure 40: Global Synthetic Biology in Agriculture and Food Market (for Food Safety),

\$Million, 2019-2025

Figure 41: Global Synthetic Biology in Agriculture and Food Market (for Other

Applications), \$Million, 2019-2025

Figure 42: Benefits of Synthetic Microbes

Figure 43: Global Synthetic Biology in Agriculture and Food Market (for Synthetic

Microbes), \$Million, 2019-2025

Figure 44: Global Synthetic Biology in Agriculture and Food Market (for Software Tools),

\$Million, 201 9-2025

Figure 45: Global Synthetic Biology in Agriculture and Food Market (for Bio-Based

Specialty Food), \$Million, 2019-2025

Figure 46: Global Synthetic Biology in Agriculture and Food Market (for Others),

\$Million, 2019-2025

Figure 47: Global Synthetic Biology in Agriculture and Food Market (by Technology)

Figure 48: Gene Synthesis Technology in Global Synthetic Biology in Agriculture and

Food Market, \$Million, 2019-2025

Figure 49: Next Generation DNA Sequencing Technology in Global Synthetic Biology

Market in Agriculture and Food Market, \$Million, 2019-2025



Figure 50: Genome Engineering Technology in Global Synthetic Biology in Agriculture and Food Market, \$Million, 2019-2025

Figure 51: Bioinformatics Technology in Global Synthetic Biology in Agriculture and Food Market, \$Million, 2019-2025

Figure 52: Other Technologies in Global Synthetic Biology in Agriculture and Food Market, \$Million, 2019-2025

Figure 53: Year-Wise Patents Filed or Granted for Synthetic Biology in Agriculture & Food Market, January 2017-August 2020

Figure 54: Patent Analysis, (by Status), January 2017 to August 2020

Figure 55: Patent Analysis (by Applicant Profile), January 2017- August 2020

Figure 56: Patent Analysis (by Company), January 2017- August 2020

Figure 57: Patent Analysis (by Application), January 2017- August 2020

Figure 58: Patent Analysis, (by Patent Office), January 2017- August 2020

Figure 59: Competitive Benchmarking Matrix

Figure 60: Segmentation of Key Companies Profiled by Type of Company

Figure 61: Primary Interviews' Breakdown, by Company, Designation, and Region

Figure 62: Sources of Secondary Research

Figure 63: Report Methodology

Figure 64: Data Triangulation

Figure 65: Top-Down and Bottom-Up Approach for Market Estimation



# **List Of Tables**

#### LIST OF TABLES

Table 1: Analyzing Threat of New Entrants

Table 2: Analyzing Bargaining Power of Buyers

Table 3: Analyzing Bargaining Power of Suppliers

Table 4: Analyzing the Threat from Substitutes

Table 5: Analyzing the Intensity of Competitive Rivalry

Table 6: Key Consortiums and Associations in Global Synthetic Biology in Agriculture and Food Market

Table 7: Impact Analysis of Business Drivers

Table 8: Impact Analysis of Business Challenges

Table 9: Initiatives of Governments of Various Countries to Promote Synthetic Biology in Agriculture and Food

Table 10: Global Synthetic biology in Agriculture and Food Market (by Industry), \$ Million, 2019-2025

Table 11: Global Synthetic Biology in Agriculture and Food Market (by Agriculture Industry Application), \$Million, 2019-2025

Table 12: Global Synthetic Biology in Agriculture and Food Market (by Food Industry Application), \$Million, 2019-2025

Table 13: Global Synthetic biology in Agriculture and Food Market (by Product), \$Million, 2019, 2025

Table 14: Global Synthetic Biology in Agriculture and Food Market (by Technology), \$ Million, 2019-2025

Table 15: Global Synthetic Biology in Agriculture and Food (by Region), \$Million, 2019-2025

Table 16: North America Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 17: North America Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 18: North America Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 19: U.S. Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 20: U.S. Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 21: U.S. Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025



Table 22: Canada Synthetic biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 23: Canada Synthetic biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 24: Canada Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 25: Mexico Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 26: Mexico Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 27: Mexico Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 28: South America Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 29: South America Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 30: South America Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 31: Brazil Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 32: Brazil Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 33: Brazil Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 34: Argentina Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 35: Argentina Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 36: Argentina Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 37: Chile Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 38: Chile Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 39: Chile Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 40: Rest-of-South America Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 41: Rest-of-South America Synthetic Biology in Agriculture and Food Market (by



Technology), \$Million, 2019-2025

Table 42: Rest-of-South America Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 43: Europe Synthetic Biology in Agriculture and Food Market (by Industry),

\$Million, 2019-2025

Table 44: Europe Synthetic Biology in Agriculture and Food Market (by Technology),

\$Million, 2019-2025

Table 45: Europe Synthetic Biology in Agriculture and Food Market (by Product),

\$Million, 2019-2025

Table 46: Germany Synthetic Biology in Agriculture and Food Market (by Industry),

\$Million, 2019-2025

Table 47: Germany Synthetic Biology in Agriculture and Food Market (by Technology),

\$Million, 2019-2025

Table 48: Germany Synthetic Biology in Agriculture and Food Market (by Product),

\$Million, 2019-2025

Table 49: France Synthetic Biology in Agriculture and Food Market (by Industry),

\$Million, 2019-2025

Table 50: France Synthetic Biology in Agriculture and Food Market (by Technology),

\$Million, 2019-2025

Table 51: France Synthetic Biology in Agriculture and Food Market (by Product),

\$Million, 2019-2025

Table 52: Italy Synthetic Biology in Agriculture and Food Market (by Industry), \$Million,

2019-2025

Table 53: Italy Synthetic Biology in Agriculture and Food Market (by Technology),

\$Million, 2019-2025

Table 54: Italy Synthetic Biology in Agriculture and Food Market (by Product), \$Million,

2019-2025

Table 55: Spain Synthetic Biology in Agriculture and Food Market (by Industry), \$Million,

2019-2025

Table 56: Spain Synthetic Biology in Agriculture and Food Market (by Technology),

\$Million, 2019-2025

Table 57: Spain Synthetic Biology in Agriculture and Food Market (by Product), \$Million,

201 9-2025

Table 58: Netherlands Synthetic Biology in Agriculture and Food Market (by Industry),

\$Million, 2019-2025

Table 59: Netherlands Synthetic Biology in Agriculture and Food Market (by

Technology), \$Million, 2019-2025

Table 60: Netherlands Synthetic Biology in Agriculture and Food Market (by Product),

\$Million, 2019-2025



Table 61: Rest-of-Europe Synthetic Biology in Agriculture and Food Market (by

Industry), \$Million, 2019-2025

Table 62: Rest-of-Europe Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 63: Rest-of-Europe Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 64: The U.K. Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 65: The U.K. Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 66: U.K. Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 67: Middle East and Africa Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 68: Middle East and Africa Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 69: Middle East and Africa Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 70: Israel Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 71: Israel Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 72: Israel Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 73: South Africa Synthetic Biology in Agriculture and Food Market (by Application), \$Million, 2019-2025

Table 74: South Africa Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 75: South Africa Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 76: Rest-of-Middle East and Africa Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 77: Rest-of-Middle East and Africa Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 78: Rest-of-Middle East and Africa Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 79: China Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 80: China Synthetic Biology in Agriculture and Food Market (by Technology),



\$Million, 2019-2025

Table 81: China Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 82: Asia-Pacific and Japan Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 83: Asia-Pacific and Japan Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 84: Asia-Pacific and Japan Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 85: Japan Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 86: Japan Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 87: Japan Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 88: India Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 89: India Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 90: India Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 91: Australia Synthetic Biology in Agriculture and Food Market (by Application), \$Million, 2019-2025

Table 92: Australia Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 93: Australia Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 94: Rest-of-Asia Pacific and Japan Synthetic Biology in Agriculture and Food Market (by Industry), \$Million, 2019-2025

Table 95: Rest-of-Asia Pacific and Japan Synthetic Biology in Agriculture and Food Market (by Technology), \$Million, 2019-2025

Table 96: Rest-of-Asia-Pacific and Japan Synthetic Biology in Agriculture and Food Market (by Product), \$Million, 2019-2025

Table 97: AgBiome, Inc.: Product Portfolio

Table 98: Product Developments

Table 99: Partnership and Collaboration

Table 100: Agrivida, Inc.: Product Portfolio

Table 101: Partnership and Collaboration

Table 102: Product Portfolio



- Table 103: Partnership and Collaboration
- Table 104: Amyris, Inc.: Product Portfolio
- Table 105: Partnership and Collaboration
- Table 106: BASF SE: Product Portfolio
- Table 107: Partnership and Collaboration
- Table 108: Bayer AG: Product Portfolio
- Table 109: Partnership and Collaboration
- Table 110: Concentric Agriculture Inc.: Product Portfolio
- Table 111: Partnership and Collaboration
- Table 112: Evolva Holding SA: Product Portfolio
- Table 113: Partnership and Collaboration
- Table 114: Pivot Bio, Inc.: Product Portfolio
- Table 115: Product developments
- Table 116: Market Development
- Table 117: Partnership and Collaboration
- Table 118: Product Portfolio
- Table 119: Product Development
- Table 120: Partnership and Collaboration
- Table 121: Benson Hill Biosystems, Inc.: Product Portfolio
- Table 122: Product Developments
- Table 123: Merger and Acquisition
- Table 124: Partnership and Collaboration
- Table 125: Cibus, Ltd: Product Portfolio
- Table 126: Product Developments
- Table 127: Partnership and Collaboration
- Table 128: Codexis, Inc.: Product Portfolio
- Table 129: Partnership and Collaboration
- Table 130: GINKGO BIOWORKS: Product Portfolio
- Table 131: Partnership and Collaboration
- Table 132: Twist Bioscience: Product Portfolio



#### I would like to order

Product name: Synthetic Biology in Agriculture and Food Market - A Global Market and Regional

Analysis: Focus on Product, Technology, Application, Industry, Country, Patent,

Government Programs and Funding - Analysis and Forecast, 2020-2025

Product link: https://marketpublishers.com/r/SF8E5D572E06EN.html

Price: US\$ 5,000.00 (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 <a href="https://marketpublishers.com/r/SF8E5D572E06EN.html">https://marketpublishers.com/r/SF8E5D572E06EN.html</a>

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
	Custumer signature

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

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