+357 96 030922
info@marketpublishers.com

Biofortification Market Forecasts to 2032 – Global Analysis By Crop Type (Cereals & Grains, Pulses & Legumes, Roots & Tubers, Fruits & Vegetables, Oilseeds, and Other Crop Types), Nutrient, Technology, Application and By Geography

https://marketpublishers.com/r/B79042C1D9F8EN.html
Date: January 2026
Pages: 200
Price: US$ 4,150.00 (Single User License)
ID: B79042C1D9F8EN

Abstracts

According to Stratistics MRC, the Global Biofortification Market is accounted for $140.21 million in 2025 and is expected to reach $276.74 million by 2032 growing at a CAGR of 10.2% during the forecast period. Biofortification involves improving the nutritional value of crops by using methods like selective breeding, biotechnology, or soil and crop management. Its primary goal is to boost levels of vital micronutrients, including iron, zinc, and vitamin A, within the parts of the plant people consume. Targeted at populations that depend on staple foods, it offers a preventative strategy against nutrient deficiencies. Unlike conventional fortification added during food processing, biofortification embeds nutrients in the crop itself, providing a sustainable, enduring way to enhance dietary health and fight global malnutrition.

Market Dynamics:

Driver:

Technological advancements in breeding

Modern breeding techniques are enabling the development of nutrient-rich crop varieties that address micronutrient deficiencies in populations worldwide. Innovations such as marker-assisted selection and genome editing are enhancing the efficiency and precision of breeding programs. These technological improvements allow faster introduction of biofortified crops into commercial agriculture. Governments and research

+357 96 030922
info@marketpublishers.com

institutions are increasingly funding programs to support advanced breeding techniques. The adoption of improved varieties is also driven by growing awareness of nutritional deficiencies and public health concerns.

Restraint:

Complex seed distribution networks

Delivering biofortified seeds to remote or smallholder farmers involves multiple intermediaries, which can delay adoption. Logistical challenges, including storage, transportation, and quality control, increase operational costs. Regulatory compliance across different regions adds further complexity to seed distribution. Fragmented supply chains in developing nations often hinder timely availability of improved seeds. Smaller seed companies may struggle to penetrate these networks effectively, limiting their market reach. Consequently, distribution challenges remain a significant restraint on widespread biofortification adoption.

Opportunity:

Blockchain for traceability

By enabling transparent tracking of seeds from production to consumption, blockchain ensures authenticity and reduces counterfeit products. This technology can also help monitor nutrient content and quality throughout the supply chain. Traceability systems improve consumer trust and support regulatory compliance for food safety. Farmers and agribusinesses can leverage blockchain to streamline inventory and reduce wastage. Additionally, digital solutions can provide real-time data for research and market insights. Integrating blockchain into biofortification processes offers a pathway to greater efficiency and market credibility.

Threat:

Competition from synthetic fortification

Processed foods and fortified supplements can provide similar nutritional benefits at scale. These alternatives often bypass the complexities of agricultural production and distribution. Competition from synthetic products may limit adoption of biofortified crops, especially in urban markets. Large food manufacturers may prefer synthetic fortification due to predictable nutrient content and cost efficiency. Market education and consumer

+357 96 030922
info@marketpublishers.com

perception also play a role in adoption rates. As a result, synthetic fortification remains a significant competitive challenge for the biofortification market.

Covid-19 Impact:

The COVID-19 pandemic had a mixed impact on the biofortification market. Supply chain disruptions affected the production and distribution of improved seeds, slowing farmer adoption. Lockdowns and labor shortages created delays in agricultural activities and research programs. However, the pandemic increased awareness of nutrition and immunity, highlighting the importance of nutrient-rich crops. Government support for food security programs and health initiatives bolstered demand for biofortified crops. Digital platforms for seed sales and virtual agricultural extension services emerged as coping strategies.

The conventional plant breeding segment is expected to be the largest during the forecast period

The conventional plant breeding segment is expected to account for the largest market share during the forecast period, due to their reliability and lower implementation costs. These techniques continue to produce nutrient-enriched varieties that are well-adapted to local growing conditions. Farmers are familiar with conventional methods, which supports higher adoption rates. Research programs often combine conventional breeding with modern techniques to enhance effectiveness. Government and NGO initiatives frequently focus on these methods to reach broader populations.

The healthcare & nutraceuticals segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the healthcare & nutraceuticals segment is predicted to witness the highest growth rate, due to demand for nutrient-dense foods and supplements. Biofortified crops are increasingly used as raw materials in functional foods and nutraceutical formulations. Innovations in product development are making nutrient-rich foods more palatable and convenient for consumers. Health-conscious populations are driving the adoption of fortified ingredients in daily diets. Companies are expanding partnerships to commercialize biofortified products in global markets.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market

+357 96 030922
info@marketpublishers.com

share. The region has a significant population exposed to micronutrient deficiencies, driving demand for nutrient-enriched crops. Governments are actively promoting agricultural modernization and nutritional programs to improve public health outcomes. Countries such as India, China, and Indonesia are investing in research and seed production initiatives. Increasing awareness among farmers and consumers supports widespread adoption of biofortified crops. Partnerships between international organizations and local institutions enhance technology transfer and implementation.

Region with highest CAGR:

Over the forecast period, the North America region is anticipated to exhibit the highest CAGR. Strong investment in agricultural research and advanced breeding technologies fuels innovation in biofortification. Regulatory frameworks and government incentives facilitate the commercialization of nutrient-enriched crops. Consumers show increasing interest in functional foods and health-focused diets. Private sector engagement and partnerships accelerate product development and distribution. Technological adoption, including precision agriculture and digital supply chain solutions, enhances market efficiency.

Key players in the market

Some of the key players in Biofortification Market include Bayer AG, Nutrien Ltd., Syngenta Group, Arcadia Biosciences, Corteva Agriscience, Mahyco, BASF SE, Groupe Limagrain, HarvestPlus, UPL Ltd., DuPont de Nemours, Inc., Seed Co International, KWS SAAT SE, East-West Seed Group, Rijk Zwaan Zaadteelt en Zaadhandel BV.

Key Developments:

In January 2026, Bayer and Souffl? Therapeutics™, an innovative biotech company that discovers and develops cell-selective genetic therapies, announced a strategic collaboration and global licensing agreement to advance a heart-targeted small interfering RNA (siRNA) therapy. The companies will collaborate to develop a siRNA-based treatment for a form of dilated cardiomyopathy, addressing a rare subset of heart disease.

In October 2025, Saudi Agricultural and Livestock Investment Company (SALIC), and Syngenta Crop Protection AG, have signed a Letter of Intent (LOI) to combine their expertise to create a resilient agri-food sector in Saudi Arabia and globally. The LOI

+357 96 030922
info@marketpublishers.com

aligns with the shared mission of both entities to bolster global food security through strategic partnerships, technology and responsible practices.

Crop Types Covered:

- Cereals & Grains
- Pulses & Legumes
- Roots & Tubers
- Fruits & Vegetables
- Oilseeds
- Other Crop Types

Nutrients Covered:

- Iron
- Zinc
- Vitamins
- Amino Acids & Protein

Technologies Covered:

- Conventional Plant Breeding
- Genetic Modification / Transgenic
- Agronomic Biofortification
- Other Technologies

+357 96 030922
info@marketpublishers.com

Applications Covered:

- Food Industry
- Feed Industry
- Healthcare & Nutraceuticals
- Biofuel, Cosmetics & Textile
- Direct Consumption
- Other Applications

Regions Covered:

- North America
  - US
  - Canada
  - Mexico
- Europe
  - Germany
  - UK
  - Italy
  - France
  - Spain
  - Rest of Europe

+357 96 030922
info@marketpublishers.com

- Asia Pacific
  - Japan
  - China
  - India
  - Australia
  - New Zealand
  - South Korea
  - Rest of Asia Pacific
- South America
  - Argentina
  - Brazil
  - Chile
  - Rest of South America
- Middle East & Africa
  - Saudi Arabia
  - UAE
  - Qatar
  - South Africa
  - Rest of Middle East & Africa

+357 96 030922
info@marketpublishers.com

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

10 KEY DEVELOPMENTS

+357 96 030922
info@marketpublishers.com

11 COMPANY PROFILING

11.1 Bayer AG
11.2 Nutrien Ltd.
11.3 Syngenta Group
11.4 Arcadia Biosciences
11.5 Corteva Agriscience
11.6 Mahyco
11.7 BASF SE
11.8 Groupe Limagrain
11.9 HarvestPlus
11.10 UPL Ltd.
11.11 DuPont de Nemours, Inc.
11.12 Seed Co International
11.13 KWS SAAT SE
11.14 East-West Seed Group
11.15 Rijk Zwaan Zaadteelt en Zaadhandel BV

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

($MN)
Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Biofortification Market Forecasts to 2032 – Global Analysis By Crop Type (Cereals & Grains, Pulses & Legumes, Roots & Tubers, Fruits & Vegetables, Oilseeds, and Other Crop Types), Nutrient, Technology, Application and By Geography

Product link: https://marketpublishers.com/r/B79042C1D9F8EN.html

Price: US$ 4,150.00 (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/B79042C1D9F8EN.html