

Edible Insects & Alternative Protein Sources Market Forecasts to 2032 – Global Analysis By Source (Insect Protein, Plant Protein, Mycoprotein, Lab-Grown Protein, and Algal), Insect Type, Product Form, Distribution Channel, Application, End User and By Geography

<https://marketpublishers.com/r/E4F0B032C519EN.html>

Date: January 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: E4F0B032C519EN

Abstracts

According to Statistics MRC, the Global Edible Insects & Alternative Protein Sources Market is accounted for \$1.61 billion in 2025 and is expected to reach \$5.76 billion by 2032 growing at a CAGR of 19.9% during the forecast period. Edible insects and alternative protein sources encompass environmentally sustainable protein options obtained from insects and emerging non-conventional origins like plants, fungi, algae, fermentation-based microbes, and cultivated cells. Insects such as crickets and mealworms provide high-quality protein along with key micronutrients, using significantly less land, water, and feed than traditional meat. These protein alternatives help meet increasing global nutritional needs, reduce environmental impact, and contribute to resilient food supply chains amid population growth and climate-related pressures.

Market Dynamics:

Driver:

Circular economy integration

Insect farming supports waste valorization by converting organic by-products into high-quality protein, reducing overall food system inefficiencies. This model aligns with sustainability goals by lowering greenhouse gas emissions, land use, and water

consumption compared to conventional livestock. Governments and food companies are encouraging closed-loop production systems to meet environmental targets. The use of insect frass as organic fertilizer further enhances resource efficiency. Growing consumer awareness of sustainable nutrition is strengthening acceptance of circular protein solutions. Together, these factors are accelerating market adoption across feed and food applications.

Restraint:

High production costs

Setting up controlled farming environments requires significant capital investment in automation, climate control, and biosecurity systems. Processing technologies for drying, milling, and protein extraction add further operational expenses. Limited economies of scale in emerging markets restrict cost optimization. Compliance with food and feed safety regulations also increases certification and monitoring costs. Energy-intensive operations can affect profit margins, especially in regions with high utility prices. These cost pressures can limit affordability and slow mass-market penetration.

Opportunity:

Technological advancements in farming

Innovations in automated rearing, AI-based monitoring, and precision feeding are improving yield efficiency and consistency. Advanced breeding techniques are enhancing insect growth rates and protein quality. Digital platforms enable real-time tracking of environmental conditions, reducing mortality and waste. Scalable vertical farming models are supporting urban and decentralized production. Improvements in processing and extraction technologies are expanding application possibilities. These advancements are making insect protein more commercially viable and competitive.

Threat:

Competition from plant-based & lab-grown meat

Competition from plant-based and lab-grown meat alternatives poses a notable threat to the market. These protein sources benefit from higher consumer familiarity and strong branding investments. Rapid innovation in taste, texture, and nutrition is strengthening

their market appeal. Major food companies are channeling significant funding into alternative protein R&D. Regulatory clarity for plant-based products is often more established than for insect-based foods. Consumer hesitation due to cultural perceptions can shift preference toward plant-based options. This competitive landscape may challenge the growth pace of insect protein adoption.

Covid-19 Impact:

The COVID-19 pandemic had a mixed impact on the edible insects and alternative protein sources market. Supply chain disruptions affected feedstock availability and cross-border trade of insect-based products. Lockdowns slowed pilot projects and delayed capacity expansion for many producers. However, the crisis heightened interest in resilient and sustainable food systems. Demand for alternative proteins increased due to concerns over traditional meat supply vulnerabilities. Research and innovation activities accelerated in controlled-environment farming. Post-pandemic strategies now focus on automation, localization, and supply chain resilience.

The insect protein segment is expected to be the largest during the forecast period

The insect protein segment is expected to account for the largest market share during the forecast period. Insects offer high protein content with favorable amino acid profiles for food and feed applications. Their efficient feed conversion ratio supports cost-effective protein production. Strong demand from aquaculture and animal feed industries is driving large-scale adoption. Regulatory approvals for insect-based feed are expanding across key regions. Increasing use in functional foods and sports nutrition is also supporting growth.

The livestock & aquaculture segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the livestock & aquaculture segment is predicted to witness the highest growth rate, due to rising demand for sustainable and high-quality feed ingredients is a major growth driver. Insect protein improves feed efficiency and animal health outcomes. Aquaculture producers are adopting insect meal as a substitute for fishmeal. Growing global seafood consumption is amplifying feed demand. Regulatory support for insect-based feed is improving market access. These factors collectively support rapid segment expansion.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share, due to strong investment in alternative protein startups is accelerating commercialization. The region benefits from advanced R&D infrastructure and supportive innovation ecosystems. Regulatory frameworks for insect-based feed are relatively well-defined. High awareness of sustainable protein solutions is driving demand. The presence of major aquaculture and pet food industries supports large-scale adoption. Strategic partnerships are further strengthening regional market dominance.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR, owing to the region has a long history of insect consumption, supporting cultural acceptance. Rapid population growth is increasing demand for affordable protein sources. Expansion of aquaculture and livestock farming is driving feed requirements. Governments are promoting sustainable agriculture and alternative proteins. Investments in modern insect farming technologies are rising.

Key players in the market

Some of the key players in Edible Insects & Alternative Protein Sources Market include Ynsect, Protix, Aspire Food Group, Entomo Farms, InnovaFeed, EnviroFlight, Beta Hatch, Exo Protein, Jimini's, Hargol FoodTech, NextProtein, Enterra Feed Corporation, Hexafly, Entobel, and Eat Just, Inc.

Key Developments:

In April 2023, Ynsect signs a Memorandum of Understanding (MOU) with the LOTTE R&D centre, a Korean leader in the Tech industry. The MOU was signed by Guillaume Daoulas, Ynsect Food & Plant Sales Director, in the presence of Cho Juhyeon, Korean Vice-Minister for SMEs and Startups, at the "France – Korea" event organized by French Tech and the French Embassy in Korea on April 26th.

In September 2022, LOTTE Confectionary Co. Ltd and Aspire Food Group Ltd. have signed an MOU to formalize their cooperation in the distribution and promotion of crickets as food. The MOU confirms Aspire's desire to have LOTTE act as exclusive distributor to distribute and sell products produced by Aspire and LOTTE Confectionary in key markets in Asia as well as Europe.

Sources Covered:

Insect Protein

Plant Protein

Mycoprotein

Lab-Grown Protein

Algal

Insect Types Covered:

Crickets

Mealworms

Black Soldier Fly (BSF)

Grasshoppers

Beetles

Ants

Product Forms Covered:

Whole Insects

Powder

Extracts

Ready-to-Eat Products

Distribution Channels Covered:

- Online Retail
- Supermarkets / Hypermarkets
- Specialty Stores
- Direct Sales (B2B)

Applications Covered:

- Human Food & Beverages
- Animal Feed
- Pharmaceuticals & Nutraceuticals
- Cosmetics & Personal Care
- Other Applications

End Users Covered:

- Food & Beverage Manufacturers
- Livestock & Aquaculture
- Retailers & E-commerce
- Research & Academic Institutions
- Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

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

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

Contents

1 EXECUTIVE SUMMARY

2 PREFACE

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
 - 2.4.1 Data Mining
 - 2.4.2 Data Analysis
 - 2.4.3 Data Validation
 - 2.4.4 Research Approach
- 2.5 Research Sources
 - 2.5.1 Primary Research Sources
 - 2.5.2 Secondary Research Sources
 - 2.5.3 Assumptions

3 MARKET TREND ANALYSIS

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Product Analysis
- 3.7 Application Analysis
- 3.8 End User Analysis
- 3.9 Emerging Markets
- 3.10 Impact of Covid-19

4 PORTERS FIVE FORCE ANALYSIS

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

5 GLOBAL EDIBLE INSECTS & ALTERNATIVE PROTEIN SOURCES MARKET, BY SOURCE

- 5.1 Introduction
- 5.2 Insect Protein
- 5.3 Plant Protein
- 5.4 Mycoprotein
- 5.5 Lab-Grown Protein
- 5.6 Algal

6 GLOBAL EDIBLE INSECTS & ALTERNATIVE PROTEIN SOURCES MARKET, BY INSECT TYPE

- 6.1 Introduction
- 6.2 Crickets
- 6.3 Mealworms
- 6.4 Black Soldier Fly (BSF)
- 6.5 Grasshoppers
- 6.6 Beetles
- 6.7 Ants

7 GLOBAL EDIBLE INSECTS & ALTERNATIVE PROTEIN SOURCES MARKET, BY PRODUCT FORM

- 7.1 Introduction
- 7.2 Whole Insects
- 7.3 Powder
- 7.4 Extracts
- 7.5 Ready-to-Eat Products

8 GLOBAL EDIBLE INSECTS & ALTERNATIVE PROTEIN SOURCES MARKET, BY DISTRIBUTION CHANNEL

- 8.1 Introduction
- 8.2 Online Retail
- 8.3 Supermarkets / Hypermarkets
- 8.4 Specialty Stores
- 8.5 Direct Sales (B2B)

9 GLOBAL EDIBLE INSECTS & ALTERNATIVE PROTEIN SOURCES MARKET, BY APPLICATION

- 9.1 Introduction
- 9.2 Human Food & Beverages
 - 9.2.1 Protein Bars
 - 9.2.2 Functional Foods
 - 9.2.3 Nutritional Supplements
- 9.3 Animal Feed
 - 9.3.1 Aquaculture Feed
 - 9.3.2 Poultry Feed
 - 9.3.3 Pet Food
- 9.4 Pharmaceuticals & Nutraceuticals
- 9.5 Cosmetics & Personal Care
- 9.6 Other Applications

10 GLOBAL EDIBLE INSECTS & ALTERNATIVE PROTEIN SOURCES MARKET, BY END USER

- 10.1 Introduction
- 10.2 Food & Beverage Manufacturers
- 10.3 Livestock & Aquaculture
- 10.4 Retailers & E-commerce
- 10.5 Research & Academic Institutions
- 10.6 Other End Users

11 GLOBAL EDIBLE INSECTS & ALTERNATIVE PROTEIN SOURCES MARKET, BY GEOGRAPHY

- 11.1 Introduction
- 11.2 North America
 - 11.2.1 US
 - 11.2.2 Canada
 - 11.2.3 Mexico
- 11.3 Europe
 - 11.3.1 Germany
 - 11.3.2 UK
 - 11.3.3 Italy

- 11.3.4 France
- 11.3.5 Spain
- 11.3.6 Rest of Europe
- 11.4 Asia Pacific
 - 11.4.1 Japan
 - 11.4.2 China
 - 11.4.3 India
 - 11.4.4 Australia
 - 11.4.5 New Zealand
 - 11.4.6 South Korea
 - 11.4.7 Rest of Asia Pacific
- 11.5 South America
 - 11.5.1 Argentina
 - 11.5.2 Brazil
 - 11.5.3 Chile
 - 11.5.4 Rest of South America
- 11.6 Middle East & Africa
 - 11.6.1 Saudi Arabia
 - 11.6.2 UAE
 - 11.6.3 Qatar
 - 11.6.4 South Africa
 - 11.6.5 Rest of Middle East & Africa

12 KEY DEVELOPMENTS

- 12.1 Agreements, Partnerships, Collaborations and Joint Ventures
- 12.2 Acquisitions & Mergers
- 12.3 New Product Launch
- 12.4 Expansions
- 12.5 Other Key Strategies

13 COMPANY PROFILING

- 13.1 Insect
- 13.2 Protix
- 13.3 Aspire Food Group
- 13.4 Entomo Farms
- 13.5 InnovaFeed
- 13.6 EnviroFlight

- 13.7 Beta Hatch
- 13.8 Exo Protein
- 13.9 Jimini's
- 13.10 Hargol FoodTech
- 13.11 NextProtein
- 13.12 Enterra Feed Corporation
- 13.13 Hexafly
- 13.14 Entobel
- 13.15 Eat Just, Inc.

List Of Tables

LIST OF TABLES

Table 1 Global Edible Insects & Alternative Protein Sources Market Outlook, By Region (2024-2032) (\$MN)

Table 2 Global Edible Insects & Alternative Protein Sources Market Outlook, By Source (2024-2032) (\$MN)

Table 3 Global Edible Insects & Alternative Protein Sources Market Outlook, By Insect Protein (2024-2032) (\$MN)

Table 4 Global Edible Insects & Alternative Protein Sources Market Outlook, By Plant Protein (2024-2032) (\$MN)

Table 5 Global Edible Insects & Alternative Protein Sources Market Outlook, By Mycoprotein (2024-2032) (\$MN)

Table 6 Global Edible Insects & Alternative Protein Sources Market Outlook, By Lab-Grown Protein (2024-2032) (\$MN)

Table 7 Global Edible Insects & Alternative Protein Sources Market Outlook, By Algal (2024-2032) (\$MN)

Table 8 Global Edible Insects & Alternative Protein Sources Market Outlook, By Insect Type (2024-2032) (\$MN)

Table 9 Global Edible Insects & Alternative Protein Sources Market Outlook, By Crickets (2024-2032) (\$MN)

Table 10 Global Edible Insects & Alternative Protein Sources Market Outlook, By Mealworms (2024-2032) (\$MN)

Table 11 Global Edible Insects & Alternative Protein Sources Market Outlook, By Black Soldier Fly (BSF) (2024-2032) (\$MN)

Table 12 Global Edible Insects & Alternative Protein Sources Market Outlook, By Grasshoppers (2024-2032) (\$MN)

Table 13 Global Edible Insects & Alternative Protein Sources Market Outlook, By Beetles (2024-2032) (\$MN)

Table 14 Global Edible Insects & Alternative Protein Sources Market Outlook, By Ants (2024-2032) (\$MN)

Table 15 Global Edible Insects & Alternative Protein Sources Market Outlook, By Product Form (2024-2032) (\$MN)

Table 16 Global Edible Insects & Alternative Protein Sources Market Outlook, By Whole Insects (2024-2032) (\$MN)

Table 17 Global Edible Insects & Alternative Protein Sources Market Outlook, By Powder (2024-2032) (\$MN)

Table 18 Global Edible Insects & Alternative Protein Sources Market Outlook, By

Extracts (2024-2032) (\$MN)

Table 19 Global Edible Insects & Alternative Protein Sources Market Outlook, By Ready-to-Eat Products (2024-2032) (\$MN)

Table 20 Global Edible Insects & Alternative Protein Sources Market Outlook, By Distribution Channel (2024-2032) (\$MN)

Table 21 Global Edible Insects & Alternative Protein Sources Market Outlook, By Online Retail (2024-2032) (\$MN)

Table 22 Global Edible Insects & Alternative Protein Sources Market Outlook, By Supermarkets / Hypermarkets (2024-2032) (\$MN)

Table 23 Global Edible Insects & Alternative Protein Sources Market Outlook, By Specialty Stores (2024-2032) (\$MN)

Table 24 Global Edible Insects & Alternative Protein Sources Market Outlook, By Direct Sales (B2B) (2024-2032) (\$MN)

Table 25 Global Edible Insects & Alternative Protein Sources Market Outlook, By Application (2024-2032) (\$MN)

Table 26 Global Edible Insects & Alternative Protein Sources Market Outlook, By Human Food & Beverages (2024-2032) (\$MN)

Table 27 Global Edible Insects & Alternative Protein Sources Market Outlook, By Protein Bars (2024-2032) (\$MN)

Table 28 Global Edible Insects & Alternative Protein Sources Market Outlook, By Functional Foods (2024-2032) (\$MN)

Table 29 Global Edible Insects & Alternative Protein Sources Market Outlook, By Nutritional Supplements (2024-2032) (\$MN)

Table 30 Global Edible Insects & Alternative Protein Sources Market Outlook, By Animal Feed (2024-2032) (\$MN)

Table 31 Global Edible Insects & Alternative Protein Sources Market Outlook, By Aquaculture Feed (2024-2032) (\$MN)

Table 32 Global Edible Insects & Alternative Protein Sources Market Outlook, By Poultry Feed (2024-2032) (\$MN)

Table 33 Global Edible Insects & Alternative Protein Sources Market Outlook, By Pet Food (2024-2032) (\$MN)

Table 34 Global Edible Insects & Alternative Protein Sources Market Outlook, By Pharmaceuticals & Nutraceuticals (2024-2032) (\$MN)

Table 35 Global Edible Insects & Alternative Protein Sources Market Outlook, By Cosmetics & Personal Care (2024-2032) (\$MN)

Table 36 Global Edible Insects & Alternative Protein Sources Market Outlook, By Other Applications (2024-2032) (\$MN)

Table 37 Global Edible Insects & Alternative Protein Sources Market Outlook, By End User (2024-2032) (\$MN)

Table 38 Global Edible Insects & Alternative Protein Sources Market Outlook, By Food & Beverage Manufacturers (2024-2032) (\$MN)

Table 39 Global Edible Insects & Alternative Protein Sources Market Outlook, By Livestock & Aquaculture (2024-2032) (\$MN)

Table 40 Global Edible Insects & Alternative Protein Sources Market Outlook, By Retailers & E-commerce (2024-2032) (\$MN)

Table 41 Global Edible Insects & Alternative Protein Sources Market Outlook, By Research & Academic Institutions (2024-2032) (\$MN)

Table 42 Global Edible Insects & Alternative Protein Sources Market Outlook, By Other End Users (2024-2032) (\$MN)

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

I would like to order

Product name: Edible Insects & Alternative Protein Sources Market Forecasts to 2032 – Global Analysis By Source (Insect Protein, Plant Protein, Mycoprotein, Lab-Grown Protein, and Algal), Insect Type, Product Form, Distribution Channel, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/E4F0B032C519EN.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/E4F0B032C519EN.html>