

Europe Smart Oil Crops Market: Focus on Application, Product, and Country Analysis - Analysis and Forecast, 2025-2035

<https://marketpublishers.com/r/E52A0703AC2CEN.html>

Date: October 2025

Pages: 75

Price: US\$ 3,250.00 (Single User License)

ID: E52A0703AC2CEN

Abstracts

The Europe smart oil crops market is projected to reach \$721.2 million by 2035 from \$292.2 million in 2024, growing at a CAGR of 8.59% during the forecast period 2025-2035. The Europe smart oil crops market has been gaining substantial momentum as agricultural technologies advance to tackle challenges such as climate change, resource scarcity, and the need for higher productivity. Since 2024, adoption of precision agriculture, automation, and IoT-enabled solutions has significantly enhanced crop yields and reduced input costs across the region. Leading innovations include AI-driven tractors and smart irrigation systems that allow farmers to optimize planting, fertilization, and water usage based on real-time field data. For example, European manufacturers and distributors are introducing AI-integrated machinery and IoT-based irrigation tools, helping to conserve water in drought-prone areas while improving overall efficiency. Companies are increasingly focusing on sustainable farming practices, with AI-powered crop management solutions enabling better decision-making and resource utilization. As smart farming systems continue to expand across Europe, they are expected to play a critical role in strengthening food security, reducing environmental impact, and promoting resilient oil crop cultivation, marking a transformative shift toward more efficient, sustainable, and technology-driven agriculture in the region.

Market Introduction

The Europe smart oil crops market is witnessing rapid growth as technological innovations and sustainability initiatives reshape agricultural practices. Smart oil crops, including rapeseed, sunflower, and soybean, are increasingly cultivated using precision farming, IoT-enabled devices, and AI-powered management systems, enabling farmers to optimize irrigation, fertilization, and harvesting. These advancements are helping

European farmers increase yields, reduce input costs, and improve the overall efficiency of crop production.

Rising demand for sustainable and non-GMO vegetable oils, coupled with stricter environmental regulations under initiatives like the EU Green Deal and Farm-to-Fork strategy, is driving adoption of smart oil crop farming. European consumers are increasingly prioritizing healthy and environmentally friendly products, which has encouraged producers to adopt digital farming tools, climate-smart technologies, and automated machinery to meet these expectations while ensuring food security.

Countries such as Germany, France, and Romania are leading the adoption of smart oil crop technologies, benefiting from advanced agricultural infrastructure and strong R&D investments. Meanwhile, emerging markets in Eastern Europe are gradually integrating AI, robotics, and smart irrigation systems to improve productivity and sustainability.

The Europe smart oil crops market is poised for sustained growth as precision agriculture, sustainable farming practices, and digital innovation become central to oil crop cultivation. This trend marks a transformative shift toward efficient, resilient, and environmentally responsible agriculture in the region.

Market Segmentation:

Segmentation 1: by Application

Soybean

Sunflower

Rapeseed (Canola)

Others

Segmentation 2: by Equipment

Tractors

Planters

Sprayers

Harvesters

Segmentation 3: by Systems

Navigation and Guidance Systems

Field Sensing and Harvest Monitoring Systems

Smart Irrigation Systems

Segmentation 4: by Software

Farm Management and Decision Support Software

Remote Sensing and Prescription Software

Segmentation 5: by Region

Europe

Europe Smart Oil Crops Market Trends, Drivers and Challenges

Market Trends

Increasing rapeseed cultivation in countries like France, Germany, and Romania due to high demand for renewable energy and food applications.

Decline in sunflower seed production, leading to greater reliance on imports from non-EU regions.

Growing demand for biofuel feedstock under the EU's renewable energy initiatives.

Rising consumer preference for non-GMO, organic, and sustainably sourced vegetable oils.

Rapid adoption of smart agriculture technologies such as precision farming, IoT-enabled sensors, and AI-driven analytics to enhance yield and resource efficiency.

Market Drivers

EU policies promoting agricultural self-sufficiency to reduce dependency on imports amid geopolitical uncertainties.

Sustainability-focused regulations encouraging traceability, eco-friendly farming, and reduced deforestation.

Expanding biodiesel and renewable energy industries boosting the need for oil-rich crops like rapeseed and soybeans.

Consumer shift toward healthier oils with improved nutritional profiles, such as high-oleic sunflower and canola oils.

Technological innovations enhancing productivity and enabling climate-smart farming across Europe.

Market Challenges

Volatile raw material and input prices caused by climate variability and global supply disruptions.

High production and certification costs for organic and sustainably cultivated oil crops.

Import dependency for specific crops like sunflower and soybean, especially during poor harvest seasons.

Evolving regulatory environment creating uncertainty in compliance, GMO policies, and sustainability standards.

Slow adoption of smart farming tools among small and mid-sized farmers due to infrastructure and cost constraints.

How can this report add value to an organization?

Product/Innovation Strategy: This report provides a detailed analysis of the Europe smart oil crops market segmented by application, equipment, systems, and software. It covers various segments within the Europe smart oil crops market, including equipment, systems, and software, providing insights into its evolving technologies and technical advantages. The equipment segment, comprising tractors, planters, sprayers, and harvesters, highlights design trends based on application-specific requirements for efficient oilseed farming. The systems segment, which encompasses navigation and guidance systems, field sensing and harvest monitoring systems, and smart irrigation systems, enables stakeholders to develop energy-efficient solutions that optimize crop management and resource utilization. The software segment, comprising farm management and decision support software, as well as remote sensing and prescription software, enables product teams to identify opportunities for innovation and adapt strategies to meet the performance, integration, and cost-efficiency demands in the smart oil crops sector.

Growth/Marketing Strategy: The Europe smart oil crops market is evolving rapidly, with key players focusing on integrating smart technologies to enhance oilseed production. Companies are expanding their capabilities by adopting precision farming, AI-driven crop management, and smart irrigation systems to increase yields, improve sustainability, and reduce environmental impact. This report tracks these developments, offering insights into how companies are leveraging innovations such as IoT-based monitoring, remote sensing, and automated machinery to optimize farming operations. It aids marketing teams in identifying high-growth opportunities, aligning value propositions with farmer needs, and creating targeted go-to-market strategies that consider regional agricultural trends, government initiatives, and the market's technological readiness.

Competitive Strategy: A thorough competitive landscape is provided, profiling leading players based on their product offerings, innovation pipelines, partnerships, and expansion plans. Competitive benchmarking enables readers to evaluate how companies are positioned across product types and application areas. collaborations, is expected to aid the reader in understanding the untapped revenue pockets in the

market.

Hard copy option is available on any of the options above at an additional charge of \$500. Please email us at order@marketpublishers.com with your request.

This report will be delivered in 2 working days.

Contents

Executive Summary
Scope and Definition

1 MARKET: INDUSTRY OUTLOOK

1.1 Trends

- 1.1.1 Sensing the Seed: Real-Time Root-to-Oil Intelligence in the Field
- 1.1.2 Swarm Robotics and Micro-Dosing: Redefining Agronomy in Oilseed Farming

1.2 Patent Analysis

- 1.2.1 Patent Filing Trend (by Number of Patents, Country, and Company)

1.3 Regulatory and Standard Landscape

1.4 Market Dynamics

1.4.1 Market Drivers

- 1.4.1.1 Yield-Per-Input Pressure Fueling Data-First Oil Crop Strategies
- 1.4.1.2 Biofuel and Export Demands Accelerating Smart Oilseed Adoption
- 1.4.1.3 Sustainability Mandates Turning Data into a Compliance Tool

1.4.2 Market Challenges

- 1.4.2.1 ROI Uncertainty among Mid-Sized Growers
- 1.4.2.2 Lack of Standardization Delaying AI Precision in Oil Crops

1.4.3 Market Opportunities

- 1.4.3.1 Specialized Precision Toolkits for Non-Row Oil Crops and Intercropping

Systems

- 1.4.3.2 Edge-AI Crop Intelligence Hubs for Remote and Smallholder Oil Crop Farms
- 1.4.3.3 Four Strategic Dimensions of Edge-AI Crop Intelligence Hubs in Smart Oil

Crop Production

1.5 Case Study

1.5.1 Dalecha Agriculture Development PLC and Ethiopian Research – Mechanized Oilseed Production

1.6 Technology Roadmap and Adoption Analysis

2 REGION

2.1 Regional Summary

2.2 Europe

- 2.2.1 Regional Overview
- 2.2.2 Driving Factors for Market Growth
- 2.2.3 Factors Challenging the Market

- 2.2.3.1 Application
- 2.2.3.2 Product
- 2.2.4 Germany
 - 2.2.4.1 Application
 - 2.2.4.2 Product
- 2.2.5 France
 - 2.2.5.1 Application
 - 2.2.5.2 Product
- 2.2.6 Spain
 - 2.2.6.1 Application
 - 2.2.6.2 Product
- 2.2.7 Ukraine
 - 2.2.7.1 Application
 - 2.2.7.2 Product
- 2.2.8 Rest-of-Europe
 - 2.2.8.1 Application
 - 2.2.8.2 Product

3 MARKETS - COMPETITIVE BENCHMARKING & COMPANY PROFILES

- 3.1 CNH Industrial N.V.
 - 3.1.1 Overview
 - 3.1.2 Top Products/Product Portfolio
 - 3.1.3 Top Competitors
 - 3.1.4 Target Customers
 - 3.1.5 Key Personal
 - 3.1.6 Analyst View
 - 3.1.7 Market Share, 2024
- 3.2 BASF
 - 3.2.1 Overview
 - 3.2.2 Top Products/Product Portfolio
 - 3.2.3 Top Competitors
 - 3.2.4 Target Customers
 - 3.2.5 Key Personal
 - 3.2.6 Analyst View
 - 3.2.7 Market Share, 2024

4 RESEARCH METHODOLOGY

4.1 Data Sources

4.1.1 Primary Data Sources

4.1.2 Secondary Data Sources

4.1.3 Data Triangulation

4.2 Market Estimation and Forecast

List Of Figures

LIST OF FIGURES

Figure 1: Europe Smart Oil Crops Market (by Scenario), \$Million, 2025, 2030, and 2035

Figure 2: Europe Smart Oil Crops Market, 2024, 2025, and 2035

Figure 3: Market Snapshot, 2024

Figure 4: Smart Oil Crops Market, \$Million, 2024 and 2035

Figure 5: Europe Smart Oil Crops Market (by Application), \$Million, 2024, 2030, and 2035

Figure 6: Europe Smart Oil Crops Market (by Equipment), \$Million, 2024, 2030, and 2035

Figure 7: Europe Smart Oil Crops Market (by Systems), \$Million, 2024, 2030, and 2035

Figure 8: Europe Smart Oil Crops Market (by Software), \$Million, 2024, 2030, and 2035

Figure 9: Europe Smart Oil Crops Market Segmentation

Figure 10: Patent Filing (by Company)

Figure 11: Patent Filing (by Country)

Figure 12: Key Factors Driving Yield-Per-Input Efficiency in Data-Driven Oil Crop Farming

Figure 13: Six Pillars of Biofuel and Export Demands Accelerating Smart Oilseed Adoption

Figure 14: Turning Data into a Compliance Tool: A Key Driver for Sustainability in the Smart Oil Crops Market

Figure 15: Six Key Advantages of Precision Toolkits for Non-Row Oil Crops and Intercropping Systems

Figure 16: Germany Smart Oil Crops Market, \$Million, 2024-2035

Figure 17: France Smart Oil Crops Market, \$Million, 2024-2035

Figure 18: Spain Smart Oil Crops Market, \$Million, 2024-2035

Figure 19: Ukraine Smart Oil Crops Market, \$Million, 2024-2035

Figure 20: Rest-of-Europe Smart Oil Crops Market, \$Million, 2024-2035

Figure 21: Strategic Initiatives, January 2022-April 2025

Figure 22: Data Triangulation

Figure 23: Top-Down and Bottom-Up Approach

Figure 24: Assumptions and Limitations

List Of Tables

LIST OF TABLES

Table 1: Market Snapshot

Table 2: Competitive Landscape Snapshot

Table 3: Technological Advancements and Seed Deployment Sensing by Leading Companies

Table 4: Key Company Deployments and Technological Advancements in Swarm Robotics and Micro-Dosing

Table 5: Recent Government Programs in Smart Oil Crops Market

Table 6: Penetration Rates for Smart Equipment in Oil Crop Production

Table 7: Penetration Rates for Smart Systems in Oil Crop Production

Table 8: Smart Oil Crops Market (by Region), \$Million, 2024-2035

Table 9: Smart Oil Crops Market (by Region), Units, 2024-2035

Table 10: Europe Smart Oil Crops Market (by Application), \$Million, 2024-2035

Table 11: Europe Smart Oil Crops Market (by Equipment), \$Million, 2024-2035

Table 12: Europe Smart Oil Crops Market (by Equipment), Units, 2024-2035

Table 13: Europe Smart Oil Crops Market (by System), \$Million, 2024-2035

Table 14: Europe Smart Oil Crops Market (by System), Units, 2024-2035

Table 15: Europe Smart Oil Crops Market (by Software), \$Million, 2024-2035

Table 16: Germany Smart Oil Crops Market (by Application), \$Million, 2024-2035

Table 17: Germany Smart Oil Crops Market (by Equipment), \$Million, 2024-2035

Table 18: Germany Smart Oil Crops Market (by Equipment), Units, 2024-2035

Table 19: Germany Smart Oil Crops Market (by System), \$Million, 2024-2035

Table 20: Germany Smart Oil Crops Market (by System), Units, 2024-2035

Table 21: Germany Smart Oil Crops Market (by Software), \$Million, 2024-2035

Table 22: France Smart Oil Crops Market (by Application), \$Million, 2024-2035

Table 23: France Smart Oil Crops Market (by Equipment), \$Million, 2024-2035

Table 24: France Smart Oil Crops Market (by Equipment), Units, 2024-2035

Table 25: France Smart Oil Crops Market (by System), \$Million, 2024-2035

Table 26: France Smart Oil Crops Market (by System), Units, 2024-2035

Table 27: France Smart Oil Crops Market (by Software), \$Million, 2024-2035

Table 28: Spain Smart Oil Crops Market (by Application), \$Million, 2024-2035

Table 29: Spain Smart Oil Crops Market (by Equipment), \$Million, 2024-2035

Table 30: Spain Smart Oil Crops Market (by Equipment), Units, 2024-2035

Table 31: Spain Smart Oil Crops Market (by System), \$Million, 2024-2035

Table 32: Spain Smart Oil Crops Market (by System), Units, 2024-2035

Table 33: Spain Smart Oil Crops Market (by Software), \$Million, 2024-2035

Table 34: Ukraine Smart Oil Crops Market (by Application), \$Million, 2024-2035

Table 35: Ukraine Smart Oil Crops Market (by Equipment), \$Million, 2024-2035

Table 36: Ukraine Smart Oil Crops Market (by Equipment), Units, 2024-2035

Table 37: Ukraine Smart Oil Crops Market (by System), \$Million, 2024-2035

Table 38: Ukraine Smart Oil Crops Market (by System), Units, 2024-2035

Table 39: Ukraine Smart Oil Crops Market (by Software), \$Million, 2024-2035

Table 40: Rest-of-Europe Smart Oil Crops Market (by Application), \$Million, 2024-2035

Table 41: Rest-of-Europe Smart Oil Crops Market (by Equipment), \$Million, 2024-2035

Table 42: Rest-of-Europe Smart Oil Crops Market (by Equipment), Units, 2024-2035

Table 43: Rest-of-Europe Smart Oil Crops Market (by System), \$Million, 2024-2035

Table 44: Rest-of-Europe Smart Oil Crops Market (by System), Units, 2024-2035

Table 45: Rest-of-Europe Smart Oil Crops Market (by Software), \$Million, 2024-2035

Table 46: Company Market Share, 2024

I would like to order

Product name: Europe Smart Oil Crops Market: Focus on Application, Product, and Country Analysis - Analysis and Forecast, 2025-2035

Product link: <https://marketpublishers.com/r/E52A0703AC2CEN.html>

Price: US\$ 3,250.00 (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/E52A0703AC2CEN.html>