

# Agricultural Pheromones Market by Crop Type (Fruits & Nuts, Field Crops, & Vegetable Crops), Function (Mating Disruption, Mass Trapping, Detection & Monitoring), Mode of Application (Dispensers, Traps, & Sprays), Type, and Region - Global Forecast to 2026

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## Abstracts

The global agricultural pheromones market is estimated to be valued at USD 2.9 billion in 2021 and is projected to grow at a CAGR of 16.1% to reach USD 6.1 billion by 2026. Increasing demand for high-value crops, such as organic fruits & vegetables and organic commodities among consumers, is projected to spur the pheromones market over the forecast period. Nowadays, consumers are conscious of the safety and nutritional value of the food they are consuming, thereby transforming the implementation of pest management programs and the utilization of pesticides. Farmers are employing environment-friendly and sustainable initiatives to decrease the usage of traditional pesticides that are recognized as unsafe and hazardous by consumers.

“There is high suppression of insect population through mass trapping”

In mass trapping, either sex or aggregation pheromones are used to suppress the population of certain pest species. Pheromones, in combination with traps, are used to attract and capture large numbers of insects. Aggregation pheromones are also utilized for their effectiveness in attracting both the sexes of the species, which ultimately reduces the damage to crops. Mass trapping is mostly used against Lepidoptera, Coleopteran, Dipteran, and Hemipteran species. For example, in bark beetles (Coleoptera), the species release aggregation pheromone, and in Lepidoptera, the female releases species-specific sex pheromones that only attract males.

“Microencapsulated pheromones increasingly finding application in mating disruption

solutions.”

For controlling insect pests, pheromone sprays, such as piezoelectric micro-sprayer and microencapsulated sprayable, are used. Microencapsulated pheromones are small droplets of pheromones enclosed in polymer capsules that control the pheromone release rate. These are manufactured in small size for application in water through normal air blast sprays in the same manner as conventional pesticides.

Microencapsulated pheromones are gaining popularity for mating disruption and mass trapping purposes due to their convenient application process, higher reachability to multiple complex target points, and enhanced effectiveness of pheromones.

“Pheromones found to act in synergy when combined with host vegetable plant volatiles”

Pheromones are applied to vegetable crops, such as tomatoes, potatoes, peas, and eggplants. *Keiferia lycopersicella* and *Tuta absoluta* are the most common species that attack tomato crops. *Cydia nigricana* and *Leucinodes orbonalis* are major pests that attack pea and eggplant crops, respectively. *Tecia solanivora*, *Phthorimaea operculell*, and *Symmetrischema tangolias* are the key pest species that attack potato crops. The increasing need to control these insects through effective and sustainable insect control methods across the globe is a major factor that is projected to drive the growth of the agricultural insect pheromones market.

“The Asia Pacific region accounted for a 19.6% market share in the agricultural pheromones market in 2020.”.

The farming industry in the region has been shifting toward modern technological and innovative methods from a conventional agricultural practice system. The focus of agriculture has shifted from traditional crops to more commercial crops. These shifts call for effective pest control methods with modernized crop management techniques to gain better premium value for the crops.

The region is also home to major fruit producers in the world, which include China and India. China has a strong domestic demand for high-quality fruits, such as apples, pears, and grapes. Although there is a growing demand for organically produced grapes and other fruit crops, such as apples, from the US, the presence of tariff barriers makes trade difficult. This has led to the need for large-scale organic production of fruit crops to meet the growing domestic demand. This would push the demand for agricultural pheromones for fruit crops.

### Break-up of Primaries:

By Company Type: Tier 1 - 40%, Tier 2 - 30%, and Tier 3 - 30%

By Designation: Managers - 40%, CXOs - 25%, and Executives - 35%

By Region: Europe - 50%, Asia Pacific – 30%, North America - 10%, RoW – 10%

### Leading players profiled in this report:

Shin-Etsu Chemical Co., Ltd. (Japan)

Koppert Biological Systems (Netherlands)

Isagro Group (Italy)

Biobest Group NV (Belgium)

Suterra LLC (US)

Russell IPM (UK)

ISCA Technologies (US)

Tr?c? Incorporated (US)

Bedoukian Research, Inc. (US)

Pherobank B.V. (Netherlands)

BASF SE (Germany)

Certis Europe BV (Netherlands)

Bioline AgroSciences Ltd. (US)

Bio Controle (Brazil)

ATGC Biotech Pvt. Ltd. (India)

Sumi Agro France (France)

SEDQ Healthy Crops S.L. (Spain)

Laboratorios Agrochem, S.L. (Spain)

Novagrica (Greece)

International Pheromone Systems (UK)

#### Research Coverage:

The report segments the agricultural pheromones market on the basis of types, functions, modes of application, crop types, and regions. In terms of insights, this report has focused on various levels of analyses—the competitive landscape, end-use analysis, and company profiles, which together comprise and discuss views on the emerging & high-growth segments of the global agricultural pheromones, high-growth regions, countries, government initiatives, drivers, restraints, opportunities, and challenges.

#### Reasons to buy this report:

To get a comprehensive overview of the agricultural pheromones market

To gain wide-ranging information about the top players in this industry, their product portfolios, and key strategies adopted by them

To gain insights about the major countries/regions in which the agricultural pheromones market is flourishing

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\*Business Overview, Products/Services/Solutions Offered, MnM View, Key Strengths and Right to Win, Strategic Choices Made, Weaknesses and Competitive Threats, Recent Developments might not be captured in case of unlisted companies.

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