+357 96 030922
info@marketpublishers.com

Ovo-Sexing Technology Market Size and Forecast (2021 - 2031), Global and Regional Share, Trend, and Growth Opportunity Analysis Report Coverage: By Technique (Non-Invasive Imaging, Genetic Editing, Volatile Analysis, Sex Reversal, and Liquid-Based Analysis), End User (Hatcheries and Poultry Farms), and Geography (US, Germany, France, Italy, Spain, Rest of Europe, Israel, and ROW)

https://marketpublishers.com/r/O01C9DF5CA1CEN.html
Date: October 2024
Pages: 97
Price: US$ 5,190.00 (Single User License)
ID: O01C9DF5CA1CEN

Abstracts

The ovo-sexing technology market size is projected to reach US$ 105.84 million by 2031 from US$ 54.00 million in 2023. The market is expected to register a CAGR of 8.8% during 2023–2031.

Increasing Emphasis on Ethical Practices for Animal Welfare Propels Ovo-Sexing Technology

According to an article published by the University of Copenhagen in March 2024, the global egg industry kills approximately 7 billion-day-old male chicks every year due to their inability to lay eggs and provide high-quality meat. This activity has led to increased concerns about animal welfare and the ethical implications of culling male chicks by the poultry industry. Ovo-sexing technologies have the potential to address ethical challenges associated with male chick culling. Technologies such as in-ovo sexing allow producers to determine the sex of chicks before they hatch; thus, male chicks can be identified and eliminated before they are born, preventing the need for culling. Thus, adopting in-ovo sexing allows poultry producers to align their operations with ethical standards and animal welfare policies, which are increasingly mandated by

+357 96 030922
info@marketpublishers.com

regulatory bodies in various regions, particularly in Europe. Companies such as Hendrix Genetics BV and Innovate Animal Ag are involved in the research and development of in-ovo sexing technologies. Egg-producing businesses using ovo-sexing technology are viewed favorably by consumers and advocacy groups, enhancing their brand reputation. This shift in approach not only helps manufacturers meet consumer demand for ethical products but also positions them as pioneers of animal welfare. Ovo-sexing technologies contribute to sustainability by reducing waste and improving resource efficiency in poultry farming, making them a critical component of modern, responsible farming practices. Therefore, the growing concerns about animal welfare and the ethical implications of culling drive the demand for in-ovo sexing technologies.

However, the high cost and complexity associated with in-ovo sexing hamper the growth of the in-ovo sexing technologies market. High expenses associated with in-ovo sexing technologies render its adoption unfavorable in many poultry businesses. Smaller farms often find the cost of implementing ovo-sexing technology and acquiring sophisticated machinery to perform these procedures high. Many small and medium poultry producers operate at low profitability levels, making it difficult for them to justify the high initial costs of in-ovo sexing technologies. This economic barrier is associated with the low acceptance rates of these technologies, as producers may continue to rely on cheaper and older methods of egg production. The high costs of in-ovo sexing tests and analyses performed using enzyme-linked immunosorbent assay (ELISA) or radioimmunoassay (RIA) methods, among others, also act as a deterrent for producers to invest in these technologies. These expenses may discourage producers from committing funds to in-ovo sexing because they are unsure of recovering their investments [return on investment (ROI)] or the viability of the technology in the agriculture sector, as the technology has been recently scaled up. Many of the in-ovo hatched chicks have not yet produced eggs for consumer markets. In addition, the highly complex in-ovo sexing technologies come with the possibility of a notable error rate in the gender determination of chicks or a negative impact on hatchability, which might adversely affect the acceptance of in-ovo screenings and hamper the growth of the in-ovo sexing technologies market.

Technique-Based Insights

The ovo-sexing technology market, based on technique, is segmented into noninvasive imaging, genetic editing, volatile analysis, sex reversal, and liquid-based analysis. The noninvasive imaging segment held the largest share of the market in 2023, and it is expected to register the highest CAGR during 2024–2031. Noninvasive imaging

+357 96 030922
info@marketpublishers.com

technology for ovo-sexing of chicks employs advanced techniques such as hyperspectral imaging, magnetic resonance imaging (MRI), Raman spectroscopy, and fluorescence spectroscopy. These methods enable the examination of the embryo inside an egg to determine its sex without harming the shell. Various egg producers are adopting and developing noninvasive imaging technologies to produce high-quality eggs and reduce the ethical concerns associated with traditional sex determination methods. Orbem’s Genus Focus system, which has been implemented in the laying hen hatchery of Hendrix Genetics, and AAT’s Cheggy technology are a few examples of noninvasive technologies available in the ovo-sexing technology market. Orbem's imaging and classification technology is combined with Vencomatic Group's automation equipment to enable the reliable, noninvasive, real-time sex determination of chick embryos on day 12 of incubation. The French Hendrix Genetics hatchery's installation can analyze ~250,000 eggs per day during the incubation of day-old chicks.

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

6. OVO-SEXING TECHNOLOGY MARKET – GLOBAL MARKET ANALYSIS

6.1 Ovo-Sexing Technology Market Revenue (US$ Thousand), 2021–2031

7. OVO-SEXING TECHNOLOGY MARKET ANALYSIS – BY TECHNIQUE

7.1 Non-invasive Imaging
  7.1.1 Overview
  7.1.2 Non-invasive Imaging: Ovo-Sexing Technology Market – Revenue and Forecast to 2031 (US$ Thousand)
7.2 Genetic Editing
  7.2.1 Overview
  7.2.2 Genetic Editing: Ovo-Sexing Technology Market – Revenue and Forecast to 2031 (US$ Thousand)
7.3 Volatile Analysis
  7.3.1 Overview
  7.3.2 Volatile Analysis: Ovo-Sexing Technology Market – Revenue and Forecast to 2031 (US$ Thousand)
7.4 Sex Reversal
  7.4.1 Overview
  7.4.2 Sex Reversal: Ovo-Sexing Technology Market – Revenue and Forecast to 2031 (US$ Thousand)
7.5 Liquid Based Analysis
  7.5.1 Overview
  7.5.2 Liquid Based Analysis: Ovo-Sexing Technology Market – Revenue and Forecast to 2031 (US$ Thousand)

8. OVO-SEXING TECHNOLOGY MARKET ANALYSIS – BY END USER

8.1 Hatcheries
  8.1.1 Overview
  8.1.2 Hatcheries: Ovo-Sexing Technology Market – Revenue and Forecast to 2031 (US$ Thousand)
8.2 Poultry Farms
  8.2.1 Overview
  8.2.2 Poultry Farms: Ovo-Sexing Technology Market – Revenue and Forecast to 2031 (US$ Thousand)

9. OVO-SEXING TECHNOLOGY MARKET – GEOGRAPHICAL ANALYSIS

+357 96 030922
info@marketpublishers.com

10. OVO SEXING TECHNOLOGY MARKET – INDUSTRY LANDSCAPE

+357 96 030922
info@marketpublishers.com

11. COMPANY PROFILES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Ovo-Sexing Technology Market Size and Forecast (2021 - 2031), Global and Regional Share, Trend, and Growth Opportunity Analysis Report Coverage: By Technique (Non-Invasive Imaging, Genetic Editing, Volatile Analysis, Sex Reversal, and Liquid-Based Analysis), End User (Hatcheries and Poultry Farms), and Geography (US, Germany, France, Italy, Spain, Rest of Europe, Israel, and ROW)

Product link: https://marketpublishers.com/r/O01C9DF5CA1CEN.html

Price: US$ 5,190.00 (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/O01C9DF5CA1CEN.html