

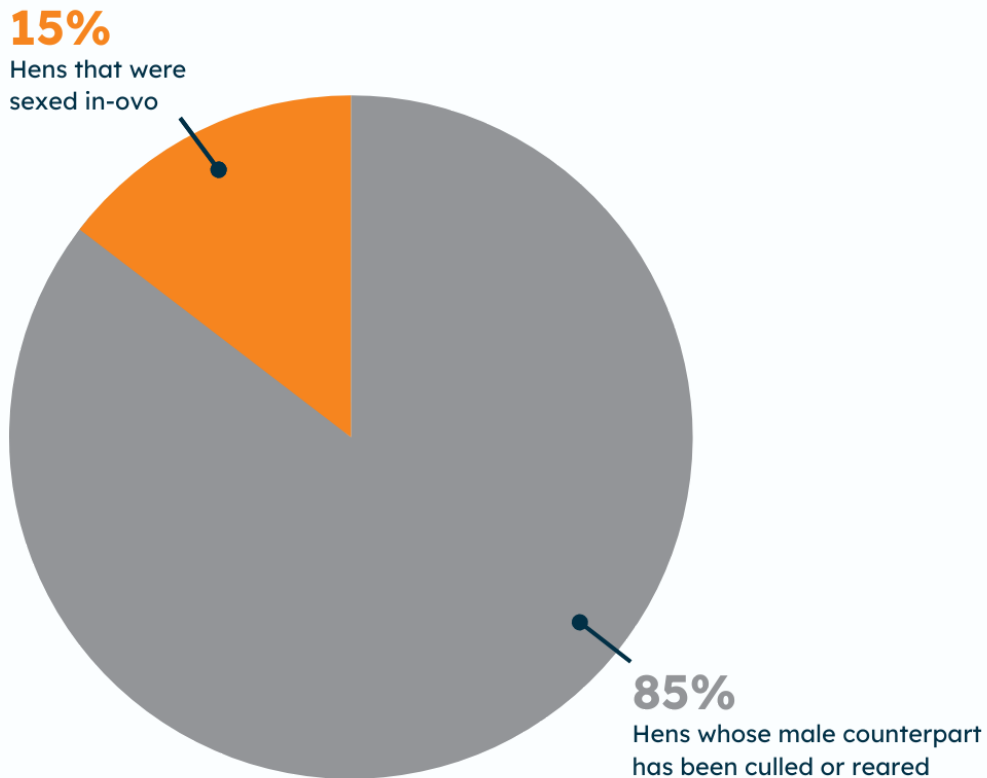


In-Ovo Sexing Achieved 15% EU Market Share in Five Years

Innovate Animal Ag
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The first [in-ovo sexing](#) machine was installed only five years ago, in [2018](#). Since then, multiple companies have commercialized new solutions, and rapidly scaled up. Original research by Innovate Animal Ag indicates that over 56 million of the current layer population of [389 million hens](#) in the European Union were sexed with this technology, indicating a 15% market penetration after only 5 years.

EU Market Penetration of In-Ovo Sexing Technology, Sept 2023



A breakdown of this data by company is as follows:

- Agri Advanced Technologies: 27 million hens
- Respeggt: 15 million hens
- Orbem: 9 million hens (estimated)
- PLANTegg: 5.4 million hens
- In Ovo: unreported

The total number of reported hens is therefore 56.4 million, and the actual number of hens would be higher given In Ovo's production. This number is certain to continue to grow rapidly since [many new machines were installed](#) within the last 18 months. One company, Orbem, only commercialized in spring 2023 so their numbers reflect less than a year of production. There are also new machines that will come online in the near future like [In Ovo's circuit](#) at Vepymo in Belgium, Respeggt's [new circuit](#) at the Ankum hatchery, and [Orbem's machine](#) at a Lohmann hatchery in Germany. Two companies, [Orbem](#) and [In Ovo](#), recently received funding to scale up further.

The companies developing in-ovo sexing technology have clearly shown an ability to scale to meet the demands of the European consumer, and will likely soon expand to the US and the rest of the world where [consumers are eager](#) for the technology to reach their shores.

Where are all the Eggs?

These numbers might come as a surprise to those in Europe that may not see eggs from in-ovo sexed hens in at their local grocery store. There are a couple of ways to explain this discrepancy.

First, there is geographical concentration of sales for table eggs produced by in-ovo sexed hens. Many of these eggs are going specifically to Germany and France, since those are the countries with bans on chick culling currently in place. Residents of other EU countries may therefore not see these eggs on grocery store shelves.

Second, layers only start producing table eggs when they're 16 to 24 weeks old, meaning table eggs hit grocery store shelves up to half a year after the chicks are hatched. Only a fraction of the chicks hatched in 2023 utilizing in-ovo sexing have started to produce table eggs that consumers can buy.

Methodology

The purpose of this study was to identify the percentage of commercial laying hens that were sexed in-ovo out of the total EU flock at the end of September 2023. Innovate Animal Ag solicited self-reported data from the five commercialized companies on the number of hens produced with their technology between April 1, 2022 and September 30, 2023. The start date of April 1, 2022 was chosen because it corresponds with a [typical 72 week lifespan](#) of a commercial laying hen in the EU, which includes 16-24 weeks where the pullet is not yet laying eggs.

One company, Orbem, was only able to provide data on the number of eggs their machine had scanned during this time period, which was 23 million. Using this number, Innovate Animal Ag estimated the amount of hens this corresponds to by using a hatching eggs per female chick ratio of 2.55. We estimated this ratio based on [research](#) into other similar technology that used a non-invasive imaging approach. Another company, In Ovo, was unable to report their data, so was not included in our estimate, but it's likely their production is also in the millions of hens.

The fast scale-up and commercial success of in-ovo sexing has come as a surprise to many, given it initially started as a result of German regulation. It's important to stay up to date given how quickly the technology is developing. A great way to do this is to sign up for our newsletter where we'll send important updates as they occur.