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## One step closer to preventing mass death of roosters

**The Dutch biotech start-up In Ovo is the first company to develop a large-scale solution for determining the sex of a chick while it is still in the egg. This fast and cheap technique can be applied mechanically at hatcheries, which was not possible before.**

In Ovo's innovation brings us one step closer to preventing the mass death of day-old male chicks. There are other techniques for determining the sex of a chick before it has hatched, such as measuring the level of estrogen in the egg. But this method takes four hours and it is very expensive, which makes it unsuitable for use in hatcheries. In Ovo's technology now enables this.

### **Determining the sex of a chick in a matter of seconds**

According to founders Wouter Bruins and Wil Stutterheim, In Ovo is the first company to determine the gender of an unhatched egg in a matter of seconds. The company has found new substances that indicate the sex of an egg as early as day nine of incubation. These substances are fast and relatively easy to detect, says Bruins. The technique has been tested at a Dutch hatchery, where the company was able to hatch roosters and hens separately on several occasions. The method is also fast enough to separate large amounts of eggs automatically. The first prototype for a sorting device is currently being developed.

### **Important innovation**

This new technique is an important breakthrough. On a yearly basis, over 45 million male chicks are killed in the Netherlands alone because they cannot be used for egg production. Globally, 3.2 billion roosters are killed every year. In addition to preventing a lot of unnecessary suffering, the method also yields environmental benefits. Fewer eggs have to be hatched, resulting in lower energy consumption and a lower CO<sub>2</sub>-output. In Ovo's invention consequently also offers hatcheries financial advantages.

### **Partners In Ovo**

The development of this technique was accelerated by financial support from - amongst others - Leiden University and the Dutch Ministry of Economic Affairs. The company is currently working on the next step towards bringing the solution to market: the development of a prototype for the sorting machine. To achieve this, they have joined hands with the Danish-Dutch company Sanovo Technology Group. After field tests, In Ovo aims to bring the first sorting machines to market in early 2018.

## **In Ovo**

In Ovo was founded in 2013 by Wouter Bruins and Wil Stutterheim, who were studying biology and biomedical sciences at the time. The biotech start-up was able to develop the technique with help from the Dutch Ministry of Economic Affairs, Leiden University, the Dutch Society for the Protection of Animals (Dierenbescherming), the Dutch hatcheries (COBK) and the Northern Division of the Dutch Agriculture and Horticulture Organization (LTO Noord).

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### **Note for the editorial team, not for publication**

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