



Breakthrough in livestock sex selection

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A COMPANY based in Wales has made a scientific breakthrough that will enable livestock breeders to pre-select the sex of pigs and cattle.

The development will have a major effect on the livestock industry across the world – creating significant economic and animal welfare benefits.

Ovasort Limited, which is based in Cardiff, has discovered sex-linked proteins on the surface of sperm cells of both pigs and cattle, and has developed a prototype product to identify and separate the male and female cells for each sex in both species.

It is the first time that semen sexing has been commercially possible in pigs, and the technology offers a much easier, faster and cost effective method of semen sexing in cattle.

Ovasort chief executive Dr Ian Cumming said the technological advances had been supported by funding from the Welsh Assembly Government and through access to world-class facilities at Cardiff University's proteomics and genomics laboratories.

It is to be field-trialled later this summer in Scandinavia by the company's worldwide licensee for the pig sector, Danish Pig Production.

Dr Cumming described it as a significant milestone: "We are very excited to get to this stage of product development and hope to have a commercially available product on the market within a couple of years."

He added: "We are indebted to the assistance we have had from Welsh Assembly Government to support our research in Cardiff University, as well as to the participation of our commercial partners."

Money from the Welsh Government enabled Ovasort to take forward research and development and to buy specialist equipment.

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Deputy Minister for Science, Innovation and Skills Lesley Griffiths said this kind of innovation is the key to the country's future competitiveness.

Dr Cumming said the preliminary field trials would enable them to optimise the product for commercial use.

"The technology we have developed does not involve changing or modifying the cells in any way," he said.

Female pigs are preferred by consumers as males can produce boar taint (an offensive odour which is released from pork when it is cooked) unless castrated soon after birth. However, castration is increasingly being banned to improve animal welfare and avoid unnecessary suffering.

By using the Ovasort product, pig farmers will be able to produce mainly females, meeting the market demand.

Dairy farmers also mainly want females, while the beef industry prefers males. The Ovasort product can be used to satisfy both needs, and particularly to reduce the numbers of unwanted male dairy calves.