

The economics of pig tail docking



The Challenge

Tail biting is a problematic behaviour in pig farming. Tail docking can reduce the risk and severity of tail biting but does not eliminate the problem. Tail docking is an unsatisfactory solution to tail biting, as it is painful and does not improve welfare for all pigs. To limit tail biting incidence, most pig producers in Europe tail-dock their piglets despite the EU Council Directives prohibiting it. This study investigated what it takes to fulfil the intentions of the EU Council Directive by examining economic results of four management and housing scenarios.

Policy Implication

Pig producers are acting in an economically risk-averse way by docking their pigs in systems specified by current EU pig housing standards. Although tail-docking in these systems is not clearly better for animal welfare, it is not clearly worse than other options. A ban on docking in current systems, without changes in housing and management, would lead to an increase in tail biting, with a negative impact on farm economy and animal welfare. A new management pattern is necessary and should include increased space and substrate to improve pig welfare.

Research

We studied four housing and management scenarios including the current systems where pigs are tail docked. The studies systems were:

Standard Docked, a conventional housing scenario;

Standard Undocked, the same as “Standard Docked” but with no tail docking;

Efficient Undocked, 0.9 m² extra floor area and 100 g/straw/pig/day;

Enhanced Undocked, 1 m² extra floor area and 200 g/straw/pig/day.

Results

Standard Docked resulted in the best economic return. Standard Docked had slightly higher costs than Standard Undocked, but the losses due to tail biting are approximately five times higher. In contrast, Enhanced Undocked incurs larger fixed costs and higher labour costs caused by the increased use of straw and space than the Standard housing scenarios. Efficient Undocked controlled tail biting with less space and straw than Enhanced Undocked. Enhanced Undocked and Efficient Undocked resulted in losses due to tail biting which are 63% lower than those in Standard Undocked.

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Funding

Scottish Government's Rural and Environment Science and Analytical Services Division (RESAS)

SEGES, Danish Pig Research Centre

Scottish Funding Council supported Universities Innovation Fund



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About

The Land Economy, Environment and Society (LEES) Research Group is one of the largest groupings of economists and social scientists working in the rural, agricultural and land based sectors in the UK. Our vision is to be recognised as one of the leading centres for agricultural and wider rural economic and social research globally, benefiting the land use sector, the environment and rural communities.

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