# PAPULAR DERMATITIS IN PIGS CAUSED BY MIDGE BITES IN NORTHERN IRELAND

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Reports of biting midges are rare in the literature. The importance of parasitic arthropods to pig production depends of the geographical location and the production system used. The direct economic impact of biting midges on pig production has not been studied. Furthermore, it is difficult to calculate the economic losses due to reduced growth rate, reduced feed efficiency, and loss of carcass value at slaughter.

Following a long winter, weather conditions improved in the middle of May 2013 which resulted in warm and sunny days. This favoured insect proliferation. Within 4 days of this changing, the first clinical signs of dermatitis were detected during a routine farm visit. The following week, the two main slaughterhouses in Northern Ireland were voicing concerns about the number of pigs submitted with dermatitis. Sixty two producers were affected. The prevalence of dermatitis ranged from 30% to 100% of the pigs submitted. One producer had 651 kg condemned as a consequence of these skin lesions. The lesions in the live animals and the carcasses were multifocal, slightly raised and hyperaemic with 0.5 to 2 cm in diameter widespread all over the body/carcass. The affected animals showed pruritic discomfort and were rubbing the affected areas against solid surfaces. The incidence of this pathognomonic condition reduced within 3 weeks of the initial outbreak.

Insect bites were suspected and aerial traps were placed in the finishing pens of 4 different affected farms for 2 weeks. The species of insects trapped were Musca domestica, Drosophila melanogaster, wood/window-gnats (family Anisopodidae) and Culicoides obsoletus. Furthermore, live specimens of Culicoides feeding on the pigs were found and submitted to AFBI Newforge Lane (Belfast). These specimens were identified as Culicoides obsoletus.

One farmer developed the same pruritic dermatitis lesions in the arm and legs.

All the affected units contained finishing pens with natural ventilation and there was no insect screen protection.

Control methods of prevention for further occurrence involve slurry treatment with insecticides in order to kill larval stages, regular slurry removal, tidying the surrounding area of the farms, application of insecticides in order to kill adult stages, and fitting insect screen netting in the pig houses.

Skin blemishes from insect bites present at slaughter may lead to unnecessary trimming or even condemnation, as seen in this case. In addition, products improperly used to treat ectoparasitism may produce residues in the tissues causing contamination of pork.