

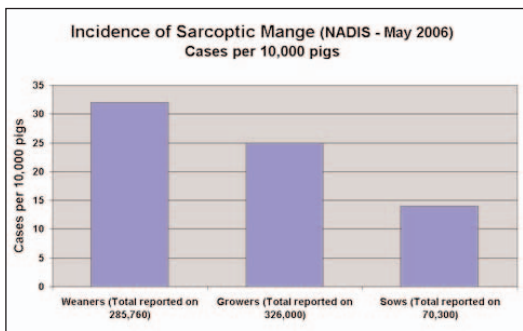
NADIS Pig Health - May 2006

Sarcoptic Mange

Sarcoptic Mange is a parasitic disease of pigs characterised by intense skin irritation and damage. The disease is economically important due to lost productivity as well as having welfare implications for the animals.

Cause

Sarcoptes scabiei var *suis* is a host specific mite that is spread from pig to pig by direct contact or by vectors. It can persist in the environment for up to three weeks in ideal conditions and can then result from pig contact with a contaminated environment including transport.



Graph. 1.

Clinical signs

The mite burrows into the skin and lays eggs in tunnels within the skin with the pig rubbing its body on any available surface continually. The ears are a particularly favoured site of infestation leading to head shaking and secondary ear damage (haematomas). The disease can thus often be detected audibly as much as visually. The skin may be reddened and the ears waxy, although secondary skin damage (cuts and abrasions) and infection (Greasy Pig Disease) are common. This form of the disease is mostly seen in young growing pigs of 8-12 weeks of age. As the disease progresses in the individual, chronic lesions will occur. Thick encrustation in the ears, behind the elbows and on the anterior surface of the back legs

are the most common signs with the whole skin generally discoloured and scurfy. Irritation is still evident.

The allergic form of mange is seen in older pigs and adults and probably represents re-infestation of a sensitive individual. Huge numbers of small round red pimples occur over the whole body and can take several weeks to disappear following treatment.



Fig. 1: Severe hypersensitive (allergic) mange in a sow.

Because of the irritation, secondary fighting damage may be a feature of mange - tail and ear biting, vulval biting and savaging of piglets. In addition, growth rates will decline by up to 15% and feed usage in heavily infested sows will be increased by 10% or more. Chronically infected boars may fail to work due the discomfort causing infertility that may be noticed as the first sign of problems on the farm. Lesions can be severe inside the front and back legs. Chemicals within cigarette smoke have a dramatic effect on a pig with mange with an increase in the levels of irritation that can reach the frantic level. Such effects are not seen on uninfested pigs.

Treatment

Animals that are clinically affected with any of the forms of mange described should be rapidly treated. The most effective treatment is injectable Avermectin and in severe chronic cases a double treatment 10-14 days apart. A topical organophosphate is also available although this clearly has health and safety implications. In pigs close to slaughter, the prolonged meat withdrawal periods associated with the above products may preclude their use. In such cases, in feed Avermectin or topical amitraz can be used.

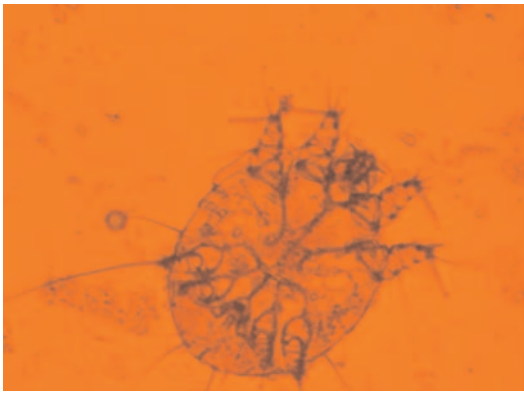


Fig. 2: *Sarcoptes scabiei var suis* – the cause of Sarcoptic Mange in Pigs,



Fig. 3: Active infection in the ear of a pig.



Fig. 4: Hypersensitive reaction to mange mites in a growing pig.

Prevention and control

Most reputable breeding companies in the UK only sell seedstock that are free of Sarcoptic Mange. Provided a herd is set up clean of the disease, is vigilant over its source of replacements and operates to reasonable standard of biosecurity, there should be no reason to acquire the disease.

Where Mange is endemic in a herd, a vigorous and persistent programme of control is needed. This should be split into breeding and feeding herds.

1. Breeding herd. With all dry sows now loose housed in the UK, there is every opportunity for Mange to persist and spread. There is little point, in most cases, of individually treating only part of the breeding herd since contact will rapidly re-infect individuals. It is, thus, preferable to treat all animals simultaneously, either by injection or “off licence” using in feed avermectin. This should be repeated every 6-12 months as necessary. Do not forget the boars.

2. Feeding herd. Young pigs will pick up the mite either from their mother, from contact with older infested pigs or from a contaminated environment. Provided the disease is controlled in the breeding herd and that all in all out pig flow into clean accommodation is practised, there is often no need to treat growing pigs. Where these criteria are not followed, in feed treatment soon after weaning is effective – usually given in the second diet – 1 week after weaning for 7 days. Treatment in the first week after weaning is difficult due to low feed intake. Thereafter, pigs must not mix with older animals or enter dirty pens. Attention is particularly necessary in hospital areas which are frequently permanently occupied, rarely de-populated and cleaned, contain mixed ages of animals and contain compromised animals that are particularly vulnerable to parasites.

Where mange is active, pigs should be treated into and out of hospital pens as a routine – unless going direct to slaughter.

A range of protocols have been developed to eradicate Mange from herds involving a combination of medication and hygiene measures. Each programme must be tailored to the needs of the farm and should be drawn up in consultation with the veterinary advisor. Prolonged meat withdrawal periods for most of the effective injectable Avermectins make a whole herd eradication programme in a breeder/feeder farm difficult without partial depopulation.

NADIS -A better understanding of disease control and prevention will improve the health and welfare of your stock, thereby increasing farm productivity and income. Discuss how health planning can improve the productivity of your farm with your veterinary surgeon.

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