

Pig Owner's News for the

Hunter

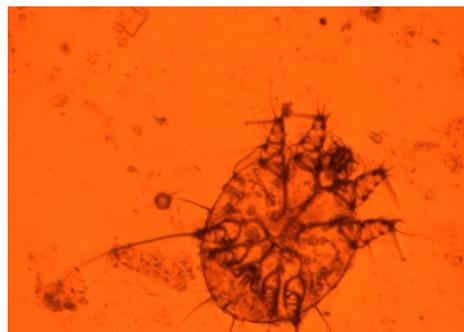


External Parasites: Sarcoptic Mange

September 2020

Clinical signs in pigs of rubbing, scratching and skin lesions are often associated with external parasites. Sarcoptic Mange caused by *Sarcoptes scabiei* var *suis* is the most significant external parasite of pigs in Australia. Other important external parasites include demodectic mites, lice, fungi and ticks. External parasites can cause significant economic effects due to reduced growth rate (up to 12%), reduced feed efficiency and loss of carcass value at slaughter. Sarcoptic mange can also predispose pigs to other skin disorders, particularly bacterial infections. Sarcoptic mange is more severe during the cooler months.

The sarcoptes mite is a small, greyish-white, circular parasite about 0.5mm in length and is just visible to the naked eye when placed on a dark background. Female mites lay eggs as they burrow under the skin. The female lays 1-3 eggs a day in the skin and the adult female lives for about one month. Therefore each female can lay 30-40 eggs. These eggs hatch and mature mites develop in 10-15 days. There may be as many as 18,000 mites per gram of ear skin. Adult mites and eggs can survive for up to 21 days outside the pig, in ideal situations, contaminating the pig's environment. The warmer the conditions the shorter the survival time.



Sarcoptic Mange presents in two clinical forms: one pruritic or hypersensitive form that primarily affects growing pigs and one hyperkeratotic form that mostly affects sows. The main reservoir of these mites is hyperkeratotic encrustations in the ears of multiparous (have had more than one pregnancy) sows. The boars have direct skin contact with these females and then become a chronic carrier. Piglets also become infested whilst suckling.

Acute Disease: commonly seen as ear shaking and severe rubbing against the pen or trees and fence posts. The skin becomes sensitised to the mite protein approximately 3 to 8 weeks after the initial infection, and a severe allergy may develop with very small red pimples covering the skin. These cause intense irritation and rubbing.

Chronic Disease: this occurs after the acute phase where thick encrustations develop on the ear, along the sides of the neck, the elbows, front parts of the hocks and along the top of the neck.

Diagnosis: is confirmed by visual identification of the mite. Samples can be taken from encrusted lesions in the internal surface of the ear. You can then spread this material onto a piece of black paper and leave it for 10 minutes. Turn the page upside down to remove the material. Any mange mites will be left adhering to the paper by the suckers on their feet. They can be seen directly or with a magnifying glass.



Treatment: Eradication of sarcoptic mites might be able to be achieved using products registered for use in pigs. However, in some cases it may be necessary to destock to become sarcoptic mange-free. Always follow the manufacturer's directions for use, storage and instructions for withholding period. Ensure that you record all treatments, date given, product used and dose rate. Most spray products require a second treatment 7-10 days later to kill any mites that have hatched since the first treatment, since eggs are not killed by the spray. Chronically affected animals may not respond to treatment and may need to be culled. There are also pour-on and injectable treatments available.

Biosecurity measures that focus on careful scrutiny of incoming pigs and sourcing pigs from a minimal number of herds with a similar health status, along with quarantining new arrivals, are usually adequate to prevent re-introduction of the parasite.

Control: All control programs must target the breeding herd. Any sows with extensive hyperkeratotic lesions in their ears and on the body should be culled. The remainder of the sows should be treated simultaneously or alternatively in segregated groups prior to farrowing. All contaminated bedding should be removed. Pigs may require multiple treatments. Pens should be left empty for at least 3 days after infected pigs have been moved out. These pens should also be thoroughly cleaned prior to any new pigs using them.

An example treatment program:

- Treat boars every 2-3 months as they are in constant contact with sows
- Treat sows/gilts before farrowing to restrict spreading mange mites to piglets
- Treat piglets at weaning and during the growing period as required

The pig mange mite does not survive in or on other hosts although it can 'live' for a few days on humans and in some cases cause a skin rash.

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