

### **Sheep-scab**



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#### What is sheep-scab?

• Sheep-scab is a condition in sheep caused by infestation with a particular type of mite (*Psoroptes ovis*, known as the **sheep-scab mite**). This mite is a very small wingless parasite that you can only just see with the naked eye, and then

only properly under a magnifying glass or a microscope.

- Sheep-scab is also known as scab, psoroptic mange or brandsiekte.
- Because sheep-scab is severe and spreads easily, it is a controlled disease.
- It occurs in all provinces of South Africa, especially in the Free State and Eastern Cape.

# MARKET

#### Why is sheep-scab important?

- Loss of wool production
- Other production costs (loss of meat, milk, leather, reproductive capacity)
- Death of sheep
- Spreads by contact
- Cost of treatment
- Cost of control

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#### How do sheep develop sheep-scab?

- The mites causing sheep-scab spend most of their life on sheep, and sheep are therefore infested by close contact with other sheep that have scab.
- This can occur by the introduction of infested sheep to your flock, or by contact of your sheep with infested sheep from other flocks (for example, during grazing or at shearing). Note that sheep may not always show signs of disease when infested with mites (particularly short-woolled breeds such as Dorpers).
- Close contact most frequently occurs when the sheep are kraaled or housed in other ways (for example, in shearing sheds).
- The mites can drop or be rubbed off the sheep and survive for up to 10 days, so that other sheep can be infested by mites in kraals, other premises, auction yards, pastures, or on wool that has been rubbed off infested sheep.
- Sheep-scab most frequently occurs in autumn and winter.

#### What are the signs of sheep-scab?

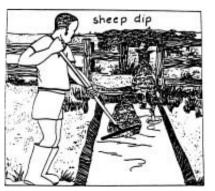
- After piercing the skin with their sharp mouthparts, the mites feed by sucking moisture from the tissue below the skin, which results in irritation of the skin.
- The earliest sign is ragged-looking wool because the sheep bite and scratch themselves. If you inspect the sheep carefully you may feel very small lumps on the skin.
- You will also notice the sheep biting themselves and rubbing against fences and other objects.
- You may see wool in the mouth of the sheep and wool may also be found on fences and other objects against which the sheep rub.
- Fluid leaks from the irritated skin, and dries to form yellow crusts or scabs. This is why the condition is called **scab**.
- You will see bare, scabby patches and matted wool. The affected areas get larger over time as the mite numbers increase, which can lead to the loss of wool over large areas.
- The mites prefer areas covered with wool, particularly on the sides of the sheep. They tend to occur on the shoulders and sides of woolled sheep, and the tails and backs of haired breeds.
- The biting and scratching aggravate the condition, and bacterial infection can result.
- If sheep are left untreated they can become very thin and weak and eventually die.

#### How can you tell if your sheep have scab?

- By the above signs observed in sheep.
- As it is difficult to see the mites with the naked eye, a definite diagnosis requires skin scrapings and looking for mites under a magnifying glass or microscope. The mites live under the scabs, and are best found on the edges of the scabs. Collection and identification of mites can be done by your animal health technician or veterinarian.

#### How can you treat sheep-scab?

- When you suspect the presence of sheep-scab you should report it to your local animal technician or state veterinarian because they can help to control the disease. You should also notify your neighbours so that they can treat their own sheep.
- Treatment and control is by chemicals which kill the sheep-scab mite.
- Treat the sheep as soon as you notice signs. It is important to treat all sheep in the flock at the



same time. If you do not, mites from untreated sheep can later infest treated sheep.

Remember, one scab-infested sheep can result in the reinfestation of your entire flock!

- It is important to treat sheep twice, with the second treatment being given 8 to 10 days after the first in order to kill the young mites which have hatched after the first treatment from the eggs on the skin (the chemicals cannot destroy the eggs). Sheep should be marked and counted after dipping. If unmarked sheep are found at the second dipping, then this dipping should be considered to be the first dipping and all sheep dipped twice.
- You may need to hand dress severely-affected areas.
- Injectable compounds such as those containing Ivermectin are very effective, although they are expensive.
- Plunge dips can also be used, in which case the sheep must be immersed in the dipping tank for at least 2 minutes in order to wet the skin thoroughly and the head should be submerged at least twice. There are many different compounds which can be used, including Diazinon, Cypermethrin, Triazophos, Deltamethrin, Amitraz and combinations of these. It is important to check that the compound is registered for the control of sheep-scab, because not all dips will kill the mites.
- The mites will die if infested kraals and pastures are left empty for at least 17 days. If this is not possible, it may be necessary to spray chemicals on the ground where the sheep are housed because mites and eggs may fall onto the ground and reinfest treated sheep.
- Eradication involves the quarantine of the premises and dipping of all sheep on the farm.

#### How can sheep-scab be prevented?

- Previously, yearly dipping of sheep to control sheep-scab was compulsory. This is no longer so, and the emphasis is on recognising infested flocks and controlling infestations when they are identified.
- You should be careful when introducing new sheep. Check that they do not have scab. Dip all introduced sheep before they come into contact with your sheep.

For further information contact your local animal health technician or state veterinarian

or

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