



Sheep Scab Initiative

Bulletin #4

Sheep Scab in Northern Ireland – Diagnosis

Reasons to test

In the presence of clinical signs which may indicate sheep scab infection, such as scratching or biting along with changes to the fleece, it is important to establish definitively whether the mite is present in a flock or if there is a separate cause of the signs.

In the absence of clinical signs, there are circumstances when it is important to test for sheep scab (as the infection may be in the early stages), for example:

- Screening of sheep that are being purchased or moved
Sheep being added to the flock should be tested following the first three weeks of isolation, allowing an informed choice to be made on the need to treat, possibly cutting out unnecessary treatments.
- Assurance of freedom from infection in a particular area
- Suspect anthelmintic resistance.

Other conditions which may have the appearance of sheep scab are:

- Lice infestation
- Bacterial and Fly-bite dermatitis
- Wool slip
- Photosensitisation
(from ingestion of poisonous plants)
- Fleece rot
- Infestations with keds, ticks or ringworm
(more rarely).

Note that sheep infected with lice may show almost identical clinical signs to those infected with the sheep scab mite.

It is important to find out which of these parasites is present because the injectable products used to treat sheep scab do not kill lice. Both parasites may be present on the sheep at the same time.

Available tests that can be carried out by a veterinary surgeon

Microscopic examination: In clinically affected flocks, skin scrapings from the edges of active lesions and wool samples are taken from the most pruritic (itchy) sheep in the flock, or those with discoloured or wet fleeces. However in the early stages of infection, it can be difficult to find mites.

Blood test: The sheep scab ELISA test can detect antibodies (to a unique protein found in the mite) from 2 weeks after infestation, so it can be useful in identifying infection before the development of clinical signs or in cases where mite numbers are low. The test is best used as a flock test. **A minimum of 12 animals of the affected group, including the pruritic animals, should be blood sampled, identifying the animals to allow retesting 3 weeks later if necessary.** Veterinary interpretation will consider the flock's treatment history and assess the risks, so that the best advice can be given.

TEST BEFORE YOU TREAT!

It is important to test rather than use preventative sheep scab treatment (OP dips or injectable anthelmintics), in particular because of the emergence of anthelmintic resistance.