



Animal Health & Welfare NI

Sheep Scab

AWARENESS MONTH

Spot it. Test it. Treat it. Stop it.

TREAT IT: Confirmed Scab Diagnosis in Your Flock? Think Before You Treat

Once sheep scab infection has been confirmed in a flock, immediate and effective treatment is essential to avoid severe consequences for your animals. There are only two types of treatments available for sheep scab- therefore it's important to consider what would work best for your flock, and ensure that the treatment is carried out correctly to reduce resistance developing in mites.

Whichever treatment option you use for scab, always ensure that every sheep from the same group/mob is treated, not just animals showing symptoms. Any animal that could have come into contact with mites- either through direct contact with an infected sheep or if they have been grazing on land that infected sheep have been on less than 3 weeks ago- needs to be treated. Even if they are not showing symptoms, they could be in the early stages of disease which could result in a wider scab outbreak.

Treatment Options- Which Is Right For Your Flock?

Plunge Dipping with Organophosphates (OPs)

Organophosphate dips can be a very effective treatment for sheep scab if used correctly, but only if they are applied as a plunge dip. Using jets, showers or sprays to apply organophosphate is illegal, will not be effective and can lead to resistance.

Advantages

- Residual effect lasts for several weeks, reducing the risk of reinfection.
- Protects against other ectoparasites such as blowfly, lice and ticks, reducing the number of chemical inputs required.
- Little reported resistance to OPs.

Considerations

- Requires specialist facilities (dipper)- though mobile dipping contractors are available.
- Labour-intensive.
- If not using a contractor, training must be completed to perform dipping at home and authorisation must be acquired for safe disposal of dip.



Image Credits: SCOPS. Sheep being plunge dipped.

Injectable Macrocyclic Lactones (MLs)

Scab can be treated using an injectable 3-ML product which belongs to the clear group of anthelmintics also used to treat roundworms.

Advantages

- Convenient to administer.
- Doesn't require specialist facilities or bringing contractors on farm.

Considerations

- Resistance in sheep scab mites to this product is a major concern.
- MLs are important anthelmintics- unnecessary usage of these will also affect roundworms and can contribute to resistance.
- Some products have no residual protection, increasing the risk of reinfection if correct precautions are not taken.
- Correct dosage, proper injection site/technique and application of the required number of administrations are essential for effective treatment.

Choosing to Plunge Dip- Application Method Matters

OP sheep dip **must not** be applied using a shower, jetter or spray; using these methods is illegal. These methods will not adequately penetrate through the fleece and will expose mites to concentration levels that are too low to kill them, allowing them to develop resistance.

Ensure the following procedures are followed for successful treatment:

- Check that the correct concentration is being used according to manufacturer recommendations.
- Ensure you are dipping on a dry day with good drying conditions.
- The dip will become contaminated with organic matter as sheep go through it, which reduces the effectiveness of the product- follow manufacturers' instructions to ensure that the dip is continuously replenished.
- Ensure sheep are immersed in the dip for at least 60 seconds, and that their heads are completely submerged at least twice- this will ensure all mites are killed, including in ear canals.

Using an Injectable Treatment- Ensure They Are Used Responsibly and Correctly

Injectable ML treatments can be useful where dipping facilities are not available and urgent treatment is required. However, they must be used responsibly and roundworms should only be exposed to the product if it is required. Furthermore, increased use of MLs to treat for scab has resulted in confirmation of resistance of scab mites to these injectables.

Check The Product Data Sheet Before You Treat

- Some MLs may have residual activity against scab mites, but not all. If there is no residual activity this leaves treated sheep at risk of becoming immediately reinfected if the right precautions are not taken.
- Some injectables need two injections to successfully treat scab. All mites don't feed at the same time, and must be feeding to be exposed to the treatment, therefore a second injection increases the likelihood that all will be killed. Always check specifications regarding this as failing to give a second injection where required will result in treatment failure.
- Check that if a second injection is needed, it's given in the correct time frame.
- Check the withdrawal period before deciding on a product- some can be much longer than others.
- Make sure you use the correct dose rate- if there is a wide range of weights within a group, set the dosing rate for the heaviest sheep if adjusting the dose for each sheep is not possible. Giving a sublethal dose will result in some scab mites surviving and developing resistance to the product.
- Ensure the correct injection technique is used. Products need to be given subcutaneously or intramuscularly at the right site of injection- for example a long-acting moxidectin should be given subcutaneously at the base of the ear.

Post Treatment Tips

- If the product doesn't have a residual effect, ensure sheep are turned out into 'clean' pasture (that hasn't carried sheep for at least 3 weeks)- as mites can survive in wool tags off the sheep for up to 17 days.
- Consider any other groups that may be at risk of infection and treat accordingly- could they have had direct contact at boundaries? Have they been moved onto pasture that the affected group grazed less than 17 days since they were moved?
- Fully clean and disinfect any equipment that may have been used with or by the infected sheep- such as trailers.
- Talk to your neighbour if you suspect scab may have come from them OR if they could be at risk of becoming infected from your flock. The most effective way to tackle scab is to work together with other sheep farmers and your vet.
- Following injectable treatment, the scab mites remain on the sheep after they've been killed, therefore itching and other clinical signs may continue to be seen for some time after successful treatment.
- If you believe treatment hasn't been successful, contact your vet and review the protocol that was used. If the protocol has been followed correctly, there is a possibility that the mites are resistant to the product used. Contact the manufacturer of the product used, and do not treat with the same product again.

*Always seek veterinary advice before treating sheep scab. For more information on sheep scab treatments visit the SCOPS website which has a lot of useful information. How to prevent scab entering your flock will be discussed in next week's article- **STOP IT***



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Think before you

TREAT

Plunge Dipping with OPs

- Little risk of mites being resistant to this treatment
- Residual effect prevents immediate reinfection
- Specialist facilities and training are required (although mobile contractors are available)

Injectable MLs

- Mite resistance to these products is increasing
- Not all products have a residual effect
- Convenient to administer, but not recommended as a first line of treatment