

Sheep scab defeats organic production?

An animal health crisis is threatening the future viability of organic sheep production in the UK. The villains of the story are the tiny mite *Psoroptes ovis var. ovis* which causes sheep scab along with the small minority of farmers who seem unable or unwilling to do their bit in controlling it. The question has to be asked - In our high tech society how have we got into such an apparently intractable animal health problem?

Sheep scab was recognised as a serious problem of sheep farming as early as the 10th century. With the help of legislation - enshrined in the Sheep Scab Order - it was effectively eradicated from England, Wales and Scotland by 1952. It re-emerged in 1973, probably through imports of infected live sheep. Up until July 1992 Sheep Scab was a notifiable disease. But, within a year of deregulation every county in Britain was reckoned to contain infected sheep. By January of 1994 the Sheep Veterinary Society calculated that over 3000 flocks were infected and similar levels of flock infection persist today.

This crisis of sheep scab out of control is a particularly thorny issue for organic producers as many of the treatments – once the disease is present – are unacceptable or impractical in organic systems. Far better are regimes of prevention which require the highest levels of biosecurity, which for most organic sheep farmers requires a high degree of isolation and co-operation with neighbours, conventional or otherwise.

Last year the crisis of sheep scab control was compounded by the decision of the Government in Spring 2006 to suspend the marketing authorisation of cypermethrin (synthetic pyrethroid or SP) sheep dips. These had arrived on the market in 1995 as a replacement to the notorious organophosphate (nerve poison) dips. The new products themselves were known to have serious limitations, especially their environmental impacts, particularly on the aquatic environment.

Alongside the use of cypermethrin (and its approval in organic standards) farmers were required to follow risk management guidelines. But by 2005 the Environment Agent had identified serious pollution problems in water courses and it pursued 10 prosecutions. In the process of this crackdown it soon became apparent that the risk management procedures were inadequate for the cypermethrin dips and the marketing suspension of last year followed.

An empty armoury

For organic producers this has left the sheep scab control armoury remarkably bare. The instant fix might well, in the near future, be the simple lifting of the cypermethrin marketing suspension, but this is looking increasingly unlikely. From an organic perspective such a move would be questionable given the devastating environmental impacts of this active ingredient. So, could the product come back with tighter controls or might it be allowed as part of an official scab eradication programme?

At the moment cypermethrin manufacturers are appealing against the marketing suspension, but the date for hearing their arguments is to be November 2007 at the earliest. It is quite possible that these dips might be allowed back on farms, but if the restrictions on use and disposal are too draconian, farmers won't use them, little volume will be used making their licensing and manufacture economically unviable for the chemical companies. Scab is a particular UK problem, so there are no volume sales of cypermethrin dips across the EU and wider afield.

Other weapons in the chemical armoury against scab are known as macrocyclic lactones which act against both internal and external parasites of sheep. Two of this family of chemicals – doramectin and moxidectin – are practical to use and effective against the sheep scab mites. The major disadvantage is the long withholding period after treatment – up to 70 days for conventional farming, a period which is doubled to 140 days for organic sheep. Not then much use for the organic lamb trade. Discussions are taking place at EU level to determine if these long withdrawal periods might be reduced.

The “nuclear” option ticking quietly away in some organic quarters is to use organophosphates (OPs) in organic sheep flocks. Already, as a result of the cypermethrin marketing suspension, the Advisory Committee on Organic Standards (ACOS) has changed the UK's organic compendium to allow OP dipping use. But neither the Soil Association (SA) nor the Scottish Organic Producers Association (SOPA) have amended their standards to permit OP dips. As most organic abattoirs are certified to SA standards this effectively ensures that any OP treated stock will not achieve organic premiums. All stock coming forward for slaughter must have an accompanying declaration on any animal health treatments.

Far more important though is the totemic role of OPs in providing a marker between what is organic and what is conventional. Despite the ignorance of many consumers about most matters agricultural, the one group of chemicals they may well have heard about is OPs. Any linkage of OP use in organic products is destined to undermine consumer confidence and the very credibility of what “organic” stands for, and rightly so.

Scotland leads the way?

It could be that Scotland is leading the way in resolving some of these sheep scab issues where there is growing support for a compulsory control programme. Under the umbrella of the Scottish Executive, the Scottish Animal Health and Welfare Strategy has identified scab as one of the top ten livestock diseases. It has also assessed that there is a good precedent for industry co-operation - and therefore control - building on existing voluntary programmes.

SOPA is keen to see the SP dips back in use north of the border. However, the Veterinary Medicines Directorate (VMD) can only agree on the future approval, licensing and use of these products on a UK basis and not country by country or regionally. So Scotland must throw in its lot with the rest of the UK.

In England and Wales there is no appetite for a compulsory scheme amongst politicians who see scab as simply an "industry problem". The National Sheep Association (NSA) would like to see a national voluntary scheme for control, but as one observer has commented – voluntary schemes only appeal to those farmers who are doing the job properly in the first place, the rest ignore them. The scab argument does though add some urgency to the debate on issuing a "licence to farm" or a "livestock licence" which would allow a process of weeding out those sheep farmers who neglect their scab and other disease control responsibilities.

The focus of attention is now switching to the crucial role of biosecurity. Already in Scotland "sheep hunting", the shooting of feral sheep, has been carried out in an organised way. Farmers are being advised to lock gates and other access points to their farms to prevent neighbours and helpful passers-by from herding stray sheep on to their land.

In Wales and elsewhere there is talk of organic sheep producers having to abandon their use of common land and other common grazings, so important is it to isolate stock from sources of sheep scab infection. Separate flocks of sheep must be isolated completely to stop mites spreading – that could well mean using a separate quad bike, separate fodder, even separate overalls.

In the past, organic sheep farmers have been cited as not playing an active enough role in sheep scab control. In this new world, of a cupboard bare of usable dip active ingredients, the tables are being turned. It is the organic methods of biosecurity and disease prevention which may well save the day.

As North Wales vet Iwan Parry recently wrote – "Only by working closely and openly as an industry can we achieve our goal of eradicating sheep scab from this country. This is an immense challenge, requiring total commitment and dedication from organic and non-organic sheep producers alike. We cannot afford for anyone to be the weakest link in the battle against *Psoroptes ovis*."

Richard Sanders