Control of hide beetles

Department of Agriculture, Western Australia
CONTROL OF HIDE BEETLES

Skin and hide beetles, members of the Dermestid beetle family, can cause serious damage to hides and skins.

British authorities are particularly concerned with the incidence of hide beetle infestation in sheepskins imported from Australia. Local graziers and country abattoirs should pay attention to this problem as damage by hide beetles can greatly reduce the value of all types of skins.

Life cycle

The female hide beetles lay batches of eggs in suitable food material such as the flesh and fat remaining on the skins. Two to twelve days later the young larvae emerge. When the weather is warm and there is plenty of food the larval stages may be completed in three or four weeks, but it can take as long as a year under unfavourable conditions.

The larvae are responsible for the damage to sheep skins. The mature larvae are elongate, brown with tufts of brown hair and are between 1/2 to 3/4 inch long. The name “weevil” is often used for this stage of the pest.

The adult beetles are slightly less than 1/4 inch long, elongate, with dark brown to black skin covered on the upper surface with a mat of very short hairs. Many people do not recognise the adult stage as a potential pest. It is well to remember that the female beetle may live for more than three months, and lay up 1,000 eggs.

Control

Control of the hide beetle should start when you slaughter and skin the sheep. If you are unsure of the correct way to slaughter and skin a sheep the Department of Agriculture’s Bulletin No. 2186 “Farm Slaughtering” will help you.

Remember the ears must be left on the skin as it is freed from the head. Remove any fat and flesh adhering to the skin as is provides a good breeding place. Pay particular attention to ears and feet when they are left attached.

The skin should be hung lengthwise and skin side up over a rail preferably in the
shelter of a shed or tree as exposure to sun damages the pelt. (See illustration.)

Do not leave the skins hanging too long. About two weeks is all that is necessary in summer. Over-long hanging results in the skins losing weight and becoming dry and crackly. On the other hand the skin must be thoroughly dry before it is packed for transhipment to the broker. It is important to check that the points are dry.

Diazinon would provide efficient though expensive protection used either as a spray or dip at 0.5 per cent. (one gallon of 20 per cent. diazinon emulsion concentrate at 40 gallons of water).

Once the skin has been treated and is dry it can be stacked, wool side down. It is a good idea to move the stack of skins once a week and re-stack them in the reverse order.

Larval stages of beetles when mature tend to migrate from their food supply to pupate in cracks and crevices of buildings. It is useful to apply a residual spray to building structures to reduce the general level of beetles. Such treatment will also give fly control. Keep the area where the skins are stored free of litter and debris which can provide a breeding ground for these pests.

The skin can be treated with insecticide before it is thoroughly dry. While arsenic is the suggested treatment, do not use straight sheep dip powder as it damages the fleece, and buyers cannot see the surface of the pelt through the powder. In solution the sheep dip can be sprayed or painted on to the skin side using a concentration of about 2 per cent. Arsenic trioxide weedkiller has been used effectively at the rate of 1 gallon of Arzeen to 44 gallons of water. For successful control particular care must be taken to apply the solution heavily around the ears, legs, and tail flap, and where the edges of the skin fold in as beetle damage mostly starts in such places.

Packing

Skins should not be folded down the middle, but packed flat in bundles. They should be packed in pairs with the flesh sides facing and the bellies slightly folded over to keep the pack as square as possible. Three battens can be laid on the top and bottom of the pack and three double strands of wire pulled round the pack to hold the skins together.

Finally transport the skins to the merchants in clean motor or rail trucks.