

Anthelmintics – getting it right

Choosing the right product and getting the most from it are key factors not only in the fight against anthelmintic resistance but also in ensuring optimum sheep performance at least cost.

In practice, however, this is easier said than done. Working your way through the wide range of products available, the chemical groups, withdrawal periods etc. is difficult and time consuming.

To try and tackle this problem and in response to requests from farmers at meetings and events, SCOPS* have put together this leaflet. The aim is to provide accurate, easy to use information on the products available in the various chemical groups and the parasites they control. We want you to get the most out of an anthelmintic every time you use it by helping you to:

- Choose the right product. Targeting the parasite(s) correctly means better results and reduces the risk you will need to treat again.
- Source a narrow spectrum product where appropriate, which will reduce selection for resistance to the broad spectrum groups
- Use combination products only when they are necessary
- Administer anthelmintics effectively and handle and store them correctly
- Do not mix anthelmintics with any other product prior to administration

Remember, it is not too late to slow the development of anthelmintic resistance down on most farms. Act now and safe-guard the future of worm control on your farm.

From 2011, manufacturers who are members of NOAH, will begin to add symbols to their packaging clearly denoting which group the product belongs to. This should help you choose the most appropriate product more easily.

*SCOPS – Sustainable Control Of Parasites in Sheep

SCOPS is a group representing the interests of the sheep industry. It recognises that if left unchecked, anthelmintic resistance is one of the biggest challenges the industry faces in the next few years.

SCOPS is led by Peter Baber, NSA, and includes representatives from the following organisations: AHDA; AMTRA; Defra; NFU; NOAH; RUMA; SAC; Sheep Veterinary Society; SERAD; SNFU; VLA; VMD; Welsh Assembly, and an independent adviser.

As a group, SCOPS has developed eight new recommendations aimed specifically to reduce the threat of anthelmintic resistance.

More information on SCOPS can also be found at www.nationalsheep.org.uk



Do you drench and inject correctly?

1. Weigh – don't guess

Underestimating the weight of sheep is a common cause of under dosing. Select and weigh the biggest sheep in the group to determine the correct dose. If there is a wide range of weights, consider splitting the group, then weigh the heaviest in each section. Don't forget to check that the weighcrate is accurate before you start!



2. Calibrate and maintain equipment



Always check the gun is delivering the right amount before you drench. Calibrate using a graduated pot (shown) or remove the plunger from a 10ml syringe and put your finger over the end and squirt the dose into it. Make sure there are no air bubbles. Adjust until correct. Clean with warm soapy water after use and check for kinks and worn seals or springs. Use clean, sterile needles for injecting and always follow manufacturer instructions carefully.

3. Drench and inject correctly

The drenching technique is a vital part of ensuring that the wormer does its job effectively. Make sure the sheep are properly restrained and can't leap around when you are drenching, so they swallow the whole amount. Sheep can also suffer serious injury, or even death, if they are unrestrained and the gun penetrates the tissues at the back of the mouth. Place a hand under the head and tilt slightly to the side. Slot the nozzle in the gap between molar and incisor teeth



and then over the back of the tongue. Injections must be given according to manufacturers instructions. Subcutaneous products should be given using a 1.6cm needle making sure it is under the skin of the neck 10-15cm below the ear. Intramuscular injections go into the mid neck with a 2.5-4cm needle aiming inwards and upwards towards the head. Moxidectin 2% LA is given at the base of the ear. Massage the site of any injection gently after administration.

Storage

Wormers should be stored securely, away from direct sunlight at 4–25°C. Check the 'use by' date and once open use within the time shown on the packaging. Shake well before use, particularly the white (BZ) products.

Sustainable Control of Parasites in Sheep

Know your Anthelmintic Groups 2011



The Four Broad Spectrum Anthelmintic Groups

Group 1 - **1-BZ** White

Product	Company	Chemical name	Parasites covered	Use	Trace elements	Meat Withdrawal period (days)
Albacert	Downland	Albendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral	Co Se	5
Albenil Low Dose	Virbac	Albendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral		5
Albenil SC	Virbac	Albendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral	Co; Se	5
Albensure 10%	Animax	Albendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral		5
Albensure 2.5% SC	Animax	Albendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral	Co; Se	5
Albex 10%	Chanelle AH	Albendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral	Co; Se	5
Albex 2.5%	Chanelle AH	Albendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral		5
Allverm 4%	Novartis AH	Ricobendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral	Co; Se	3
Bovex 2.265%	Chanelle AH	Oxfendazole	Roundworm, Lungworm, Tapeworm	Oral		24
Endospec Sc 10%	Bimeda	Albendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral	Co; Se	4
Endospec SC 2.5%	Bimeda	Albendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral	Co; Se	4
Fenzol 5%	Norbrook Labs	Fenbendazole	Roundworm, Lungworm, Tapeworm	Oral		14
Ovidown SC	Downland	Oxfendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)		Co; Se	21
Ovispec S&C 2.5%	Janssen AH	Albendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral	Co; Se	4
Ovispec S&C 10%	Janssen AH	Albendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral	Co; Se	4
Panacur 10%	Intervet Schering Plough	Fenbendazole	Roundworm, Lungworm, Tapeworm	Oral		15
Panacur 2.5%	Intervet Schering Plough	Fenbendazole	Roundworm, Lungworm, Tapeworm	Oral		15
Panacur SC 2.5%	Intervet Schering Plough	Fenbendazole	Roundworm, Lungworm, Tapeworm	Oral	Co; Se	15
Panacur SC 5%	Intervet Schering Plough	Fenbendazole	Roundworm, Lungworm, Tapeworm	Oral	Co; Se	15
Parafend LV	Norbrook Labs	Oxfendazole	Roundworm, Lungworm, Tapeworm	Oral		21
Parafend 2.265%	Norbrook Labs	Oxfendazole	Roundworm, Lungworm, Tapeworm	Oral		10
Parafend 5% SC	Norbrook Labs	Oxfendazole	Roundworm, Lungworm, Tapeworm	Oral	Co; Se	21
Rycoben SC	Novartis AH	Ricobendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral	Co; Se	3
Tramazole 2.5%	Tulivin	Albendazole	Roundworm, Lungworm, Tapeworm, Fluke (adult only)	Oral		4
Valbazen 2.5% SC	Elanco AH	Albendazole	Roundworm, Lungworm, tapeworm, Fluke (adult only)	Oral	Co; Se	8
Zerofen 10%	Chanelle AH	Fenbendazole	Roundworm, Lungworm, Tapeworm	Oral		21
Zerofen 2.5%	Chanelle AH	Fenbendazole	Roundworm, Lungworm, Tapeworm	Oral		21

Group 2 - **2-LV** Yellow

Product	Company	Chemical name	Parasites covered	Use	Trace elements	Meat Withdrawal period (days)
Chanaverm	Chanelle AH	Levamisole	Roundworm, Lungworm	Oral		20
Levacide 3%	Norbrook labs	Levamisole	Roundworm, Lungworm	Oral		21
Levacide injection	Norbrook labs	Levamisole	Roundworm, Lungworm	Injection		15
Levacide Low Volume	Norbrook labs	Levamisole	Roundworm, Lungworm	Oral		21
Levacur SC 3%	Intervet Schering Plough	Levamisole	Roundworm, Lungworm	Oral	Co; Se	20
Levasure 7.5%	Animax	Levamisole	Roundworm, Lungworm	Oral		20
Ripercol Oral	Janssen AH	Levamisole	Roundworm, Lungworm	Oral		20

Group 3 - **3-ML** Clear

Product	Company	Chemical name	Parasites covered	Use	Meat Withdrawal period(days)
Animec	Chanelle	Ivermectin	Roundworm, Lungworm, Nasal bots	Oral drench	10
Bimectin	Bimeda	Ivermectin	Roundworm, Lungworm, Nasal bots	Injection S/C	42
Cydectin Drench	Pfizer	Moxidectin	Roundworm, Lungworm	Oral drench	14
Cydectin 1% injection	Pfizer	Moxidectin	Roundworm, Lungworm, Sheep Scab, Nasal bots	Injection S/C	70
Cydectin 2% LA injection	Pfizer	Moxidectin	Roundworm, Lungworm, Sheep scab, Nasal bots	Injection S/C	104
Dectomax	Elanco AH	Doramectin	Roundworm, Lungworm, Sheep scab Nasal bots	Injection I/M	63
Depidex	Novartis AH	Ivermectin	Roundworm, Lungworm, Nasal bots	Oral drench	14
Ecomectin	Eco AH	Ivermectin	Roundworm, Lungworm, Nasal bots	Injection S/C	42
Ivomec Classic Injection	Merial AH	Ivermectin	Roundworm, Lungworm, Sheep scab, Nasal bots	Injection S/C	37
Noromectin Drench	Norbrook labs	Ivermectin	Roundworm, Lungworm, Nasal bots	Oral drench	14
Noromectin injection	Norbrook Labs	Ivermectin	Roundworm, Lungworm, Sheep scab Nasal bots	Injection S/C	42
Oramec	Merial AH	Ivermectin	Roundworm, Lungworm, Nasal bots	Oral drench	6
Panomec injection	Merial AH	Ivermectin	Roundworm, Lungworm, Sheep scab Nasal bots	Injection S/C	37
Paramectin injection	Norbrook labs	Ivermectin	Roundworm, Lungworm, Sheep scab Nasal bots	Injection S/C	42
Paramectin	Norbrook labs	Ivermectin	Roundworm, Lungworm, Nasal bots	Oral drench	14
Qualimec injection	Janssen AH	Ivermectin	Roundworm, Lungworm, Sheep scab Nasal bots	Injection S/C	42
Vectin 0.08%	Intervet Schering Plough	Ivermectin	Roundworm, Lungworm, Nasal bots	Oral drench	14
Virbamec	Virbac	Ivermectin	Roundworm, Lungworm, Sheep scab Nasal bots	Injection S/C	42
Zermex Drench	Downland	Moxidectin	Roundworm, Lungworm	Oral	14
Zermex 1% injection	Downland	Moxidectin	Roundworm, Lungworm, Sheep scab Nasal bots	Injection S/C	70
Zermex 2% LA for sheep	Downland	Moxidectin	Roundworm, Lungworm, Sheep scab Nasal bots	Injection S/C	104

* Injections: I/M = intramuscular S/C = subcutaneous

Group 4 - **4-AD** Orange

Product	Company	Chemical name	Parasites covered	Use	Trace elements	Meat Withdrawal period (days)
Zolvix	Novartis AH	Monepantel	Roundworm	Oral		7

Combinations

Product	Company	Chemical name	Parasites covered	Use	Trace elements	Meat Withdrawal period (days)
Closamectin	Norbrook Labs	Ivermectin + Closantel	Roundworm, Lungworm, Fluke (including immature fluke over 5 weeks of age)	Injection S/C		28
Combinex Sheep	Novartis AH	Levamisole + Triclabendazole	Roundworm, Lungworm, Fluke (including immature fluke from 2 days of age)	Oral		56
Cydectin Triclamox	Pfizer / FDAH	Moxidectin + Triclabendazole	Roundworm, Lungworm, Fluke (including immature fluke from 2 days of age)	Oral		31
Downland Fluke + Worm	Downland	Levamisole + Oxytoclozanide	Roundworm, Lungworm, Fluke (adults only)	Oral		5
Fasimec Duo	Novartis AH	Ivermectin + Triclabendazole	Roundworm, Lungworm, Fluke (including immature fluke from under 1 week of age),	Oral		27
Levafas Diamond	Norbrook Labs	Levamisole + oxytoclozanide	Roundworm, Lungworm, Fluke (adults only)	Oral		5
Levitape	Novartis AH	Levamisole + praziquantel	Roundworm, Lungworm, Tapeworm	Oral		28
Mebadown Super	Downland	Mebendazole + closantel	Roundworm, Lungworm, Tapeworm Fluke (including immature fluke over 5 weeks of age)	Oral		65
Supaverm	Janssen AH	Mebendazole + closantel	Roundworm, Lungworm, Tapeworm, Fluke (including immature fluke over 5 weeks of age)	Oral		65

Narrow Spectrum Products

Product	Company	Chemical name	Parasites covered	Use	Trace elements	Meat Withdrawal period (days)
Endofluke	Bimeda	Triclabendazole	Fluke (including immature fluke from 2 days of age)	Oral		56
Fasinex 5%	Novartis AH	Triclabendazole	Fluke (including immature fluke from 2 days of age)	Oral		56
Fasinex 100	Novartis AH	Triclabendazole	Fluke (including immature fluke from 2 days of age)	Oral		35
Flukiver	Janssen AH	Closantel	Fluke (including immature fluke over 5 weeks of age) <i>Haemonchus Contortus</i> * Nasal bots	Oral		42
Tribex 5%	Chanelle AH	Triclabendazole	Fluke (including immature fluke from 2 days of age)	Oral		56
Triclcert 5%	Downland	Triclabendazole	Fluke (including immature from 2 days of age)	Oral		56
Triclafas Drench	Norbrook Labs	Triclabendazole	Fluke (including immature fluke from 2 days of age)	Oral		56
Trodax 34%	Merial AH	Nitroxynil	Fluke (including immature fluke) <i>Haemonchus Contortus</i> * ²	Injection S/C		49