

What do breeders need to do

5 Numbers to sample

- The most accurate breeding values will be obtained in flocks that sample all their lambs
- Flocks sampling a subset of their lambs should consider sampling one sex and an absolute minimum of 15 lambs
- Ideally at least 5 lambs should be sampled by each sire
- Sample a cross section of the flock, not just the “best” lambs

6 Sampling procedure

- Information on how to sample lambs will be supplied by Innovis with the FEC sampling kits

Who is involved in Breeding for Worm Resistance

FEC analysis services are available for the following breeds: Texel, Suffolk, Charollais, Welsh Hardy Speckles, Romney, Lleyn, Bluefaced Leicester and Scottish Blackface.

If you are interested in having FEC samples analysed for another breed, please contact Signet prior to sampling.

What does it cost?

In 2009 Innovis will charge:

- If less than 99 samples = £4.50 + VAT / sample
- If more than 100 samples = £4.00 + VAT / sample

Prices include the Signet fee for providing FEC breeding values

Levy body subsidy:

- EBLEX & HCC = £2.50 / sample
- QMS = £2.00 / sample

Signet members must claim the subsidy directly from their levy body by submitting a VAT invoice and a copy of the original Innovis invoice.

More information

- Innovis Ltd • tel: +44 (0)1970 828236
enquiries@innovis.org.uk • <http://www.innovis.org.uk>
- Signet • tel: 01908 844 195 or email: signet@ahdb.org.uk

Breeding for Worm Resistance



Pedigree Pointers

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Signet



Why Breed for Worm Resistance?

Increasing awareness of the costs associated with worm control and concerns about wormer resistance has increased interest in breeding sheep with greater immunity to roundworms



The degree to which sheep are affected by roundworms in their gut is quite variable; with some individuals affected much worse than others. This variation has a genetic component, which if assessed, can be used to select animals that are genetically more resistant to roundworm infection.

Commercial advantages

- Lambs that are more resistant to worms tend to grow faster and require less drenching
- Ewes sired by more resistant rams shed fewer worm eggs at lambing time, reducing pasture contamination and improving lamb growth rates
- In self-contained flocks selection for worm resistance can greatly reduce the need for routine drenching

Worm resistance can be easily incorporated into routine Signet performance recording programmes. Breeders can identify sheep that are more resistant to worms and have superior genes for other performance traits.

Breeding for worm resistance provides both a useful way to improve flock performance and a valuable marketing tool for selling rams.

Subsidy is available from each of the levy bodies, (EBLEX, HCC and QMS) to support the collection and analysis of FEC to enhance the uptake of this technology by pedigree breeders.

What does it involve to Breed for Worm Resistance

Worm resistance can be assessed by analysing an animal's Faecal Egg Count (FEC). Breeders send faecal samples to Innovis, who send FEC scores to Signet for analysis to produce a FEC EBV – indicating resistance to worms.

When sampling remember: -

- Lambs must be experiencing a worm challenge
- Ideally all lambs should be sampled. Test at least 20 lambs per sex to provide a meaningful sample. At least 5 lambs of the same sex should be tested per sire

What do breeders need to do?

1 Contact Innovis

- Order your sampling kits from Innovis • Tel: 01970 828236

2 Take a mob sample

- Ensure lambs are experiencing a challenge. Innovis can advise when mob samples are high enough to consider sampling individuals

3 Take meaningful measurements

- The lambs must not have been treated for worms within at least the last 4 weeks
- Lambs should have grazed 'dirty' pastures for at least the last 4 weeks
- Don't sample lambs given 'long-acting' or 'persistent' drenches
- Ensure all the sampled lambs have been under the same management throughout their life

4 Timing

- Samples can be sent once lambs are over 18 weeks of age
- Samples must be submitted at least 5 days before the BLUP deadline