**Sample**

2-4 g individual faecal samples from groups of 15 animals in sealed containers.

**Collection Method**

Perform individual or bulk FEC on one or more groups of 10 animals to assess herd parasite burden (see

separate protocol). The FECRT is only worthwhile if the FEC is above 300 epg in sheep and goats or 150

epg in cattle.

1. Select one or more drug treatments based on the history of drench use on the property. Common

choices include a benzimidazole (BZ), levamisole, a BZ/levamisole combination, ivermectin and/or

other macrocyclic lactone (ML) e.g. moxidectin. Ivermectin at half dose may also be used to provide an

indication of emerging resistance to MLs.

2. Select groups of 15 animals for each drug or combination of drugs for which resistance testing is

required. The time since last treatment should exceed the reported persistence of the last drench used,

otherwise that drug may still be affecting parasite egg output. Young stock (with active rumens) is

preferable. 15 animals are used because although only 10 faecal samples are needed it is often difficult

to get fresh faecal samples from each animal.

3. Identify all animals with stock marker. Administer the appropriate treatment to animals according to

group; ensure accurate dosing for weight.

4. Return animals to the original paddock or a clean paddock not grazed by ruminants in the past 12

months.

5. Collect individual faecal samples directly from the rectum of each animal after 14 days. (Since immature worms survive treatment with levamisole and can develop to patency by 14 days, samples should be from this group at 7 days).

 6. If not already performed beforehand, individual or bulk FECs can be performed on an untreated control group at this stage.

7. Submit each individual animal sample in a separate well, pot or bag labeled with the animal treatment

group. A minimum of 3-4 g of faeces is required, roughly equivalent to a teaspoon or 3-4 faecal pellets

(more if very liquid).

8. Complete the submission form requesting drench resistance test. Specify the lab number of previous

FECs to allow calculation. Although individual FECs are more accurate, bulk FECs on 10 animals from

each group can be performed more cheaply if desired. State if the samples are to be bulked or assessed

individually. Provide as much historical and therapeutic data as possible so the parasitologist can

provide the most up to date information on drug choices.

9. Submit to the laboratory within 12 hours (chill if submission is delayed).

**Interpretation**

Failure to reduce to <95% of initial FEC indicates resistance.