**Principle**

Many nematode eggs are alike and species such as *Haemonchus, Mecistocirrus, Ostertagia, Trichstrongylus, Cooperia, Bunostomum,*and *Oesophagostomum*cannot be clearly differentiated from the eggs in faecal samples. For these parasites, differentiation can be achieved by the use of faecal cultures. They provide a suitable environment for the hatching and development of helminth eggs into the infective stage (L3).

 **Application**

The identification of parasite species present is an important component of initial surveys and of the investigation of clinical disease caused by gastrointestinal nematodes.

**Equipment**

· Fork, spoon, tongue depressor, spatula

· Water

· Jars, containers

· Charcoal (dried, sterile bovine faeces may be used if charcoal is not available. This is prepared as follows. Faeces should be sterilized to remove any helminth eggs present, completely dried by heating to 70 °C and ground to a fine powder.)

**Procedure**

[(a) Break up collected faeces finely using a stirring device.](http://www.fao.org/wairdocs/ilri/x5492e/x5492e19.jpg)

[(b) Faeces should be moist and crumbly.](http://www.fao.org/wairdocs/ilri/x5492e/x5492e1a.jpg)

[If faeces are too dry, add water.](http://www.fao.org/wairdocs/ilri/x5492e/x5492e1b.jpg)

[If faeces are too wet, add charcoal (or sterile bovine faeces) until the correct consistency is obtained.](http://www.fao.org/wairdocs/ilri/x5492e/x5492e1c.jpg)

(c) Transfer the mixture to jars or other containers.

[(d) Leave the culture at room temperature for 14-21 days, by which time all larvae should have reached the infective stage.](http://www.fao.org/wairdocs/ilri/x5492e/x5492e1d.jpg)

[(e) If an incubator is available, the culture can be placed at 27 °C and left for 7 to 10 days.](http://www.fao.org/wairdocs/ilri/x5492e/x5492e1e.jpg)

(f) Add water to cultures regularly (every 1-2 days).

(g) Larvae are recovered using the Baermann technique.