**Internal Parasites in Alpaca**

Recent work and publications into the effectiveness of Faecal Egg Counting in Alpacas has lead Techion Group Limited to develop a new procedure specifically for Alpaca.

The new procedure is more sensitive than the previously used Sheep method and is tailored to included 2 decision tables, to account for the differences in immune response in animals 0 – 12 months and animals 12 months and older, with host resistance to parasites seeming to take effect from 2 years onwards.

Unlike other FECPAK methods, it is recommended with Alpaca that individual tests are performed as opposed to composite “Mob” tests as the individual tests will demonstrate the FEC range which will show up any variations between the animals tested. A minimum of 15 individual tests per mob is recommended, but preference is to complete a sample from each animal in the mob.

The most significant internal parasites in Alpaca are likely to be Haemonchus, Trichstrongylus and Liver Fluke, with Alpaca being especially highly susceptible to Haemonchus and Liver Fluke.

Alpaca are also thought of as “Universal Hosts” meaning that they can pick up, carry and spread infections of parasites that originated from and that can infect sheep, goats and cattle. The main parasites spread by this method are Trichstrongylus, Ostertagia/Teladorsagia, Cooperia and Nematodirus. Alpaca are also known to be able to maintain a Cooperia infection without the presence of Cattle. Check FEC’s and body condition regularly to ensure these Cooperia infections are not climbing to excessive levels that could impact animal condition.
**Notable Parasites**

*Nematodirus* is of particularly problem in young alpaca (as in sheep) and it is suggested that treatment occur at lower levels if a high number of Nematodirus eggs are found during a Faecal Egg Count.

*Trichuris* (Whipworm) can cause severe diarrhoea in high numbers so animals should be regularly FEC monitored to ensure they are detected (they are easily identified in a FEC test).

*Coccidia* normally are not a problem in adult Alpaca, however one particular species EMac (*Eimeria macusaniensi*) is generally found to cause more of an issue in the UK and can infect both young and adult animals; having its greatest effect on animals less than a year old.

EMac is a form of Coccidia found in Alpaca and other Camelids, and is considered to have higher pathogenicity (is more damaging) than other coccidial species. EMac can be easily differentiated from the oocysts of the other coccidial species, as they are three to four times larger and brown in colour. To detect EMac in a FEC test, a solution with a higher specific gravity (S.G.) than that of the saturated saline (NaCL) used in our general FECPAK method is required; it is recommended that a solution of Zinc Sulphate Heptahydrate (ZnSO$_4$.7H$_2$O) is used at a S.G. of 1.3.

**Reducing Risk of Parasite Infection**

There are several ways that you can reduce the risk of parasite infection:

- Ideally you should avoid rotational grazing with other young ruminants
- Do not over stock
- Avoid grazing younger animals with large numbers of older animals
- If possible remove as much faecal material from latrines as possible at least once a month
- Be sure to provide adequate shelter and feed to animals to maintain a healthy immune response