Helminthiasis in livestock production

Helminthiasis is a disease caused by internal parasites (helminthes or worms). They are commonly known to affect the digestive and respiratory systems reducing the animals' health and production capacity.

What are the different types of helminthes?

- Trematodes e.g. liver flukes,
- Cestodes e.g. the segmented worms and
- Nematodes (known as the round worms e.g. Ascaris

How do animals get infected by these parasites?

Through contaminated pastures, feeds, water and skin penetration when animals stay in a filthy damp environment containing accumulated fecal droppings mixed with their urine

How dangerous are they to the animal's productivity

- They cause digestive disorders leading to diarrhea
- Destroy animal organs such as the liver and lungs leading to condemnation at slaughter
- Reduce nutrient absorption leading to poor utilization of feeds, emaciation in mature animals or stunting in young ones
- Lower milk production in lactating animals
- Some suck blood leading to anaemia
- Lower the quality of skins and hides

What are the common signs of helminthiasis?

- Animal loses appetite
- Constipation sets in followed by stomach enlargement (Pot belly)
- Animal drops loose feces with mucous, white worm segments and round worms (ascarids) in some cases. Some others are even too tiny and can only be detected under the microscope.
- Hunched back (a sign of stomach pain)
- Animal becomes weak and eventually begins to emaciate

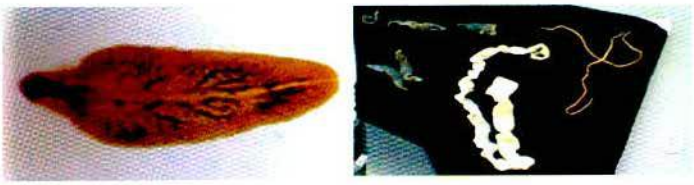


Figure 1 (a): showing Liver flukes & (b) white segmented tape worms and Ascarid worms commonly seen in animal feces

- This is followed by slow growth rate or stunting in young animals
- Swelling of the lower jaws (Submandibullar oedema)
- Animal develops a rough coat with standing hair
- Difficult breathing due to blockage of air passages by mucous discharges in case of lungworms. Coughing and nasal mucous discharges followed by pneumonia when bacterial infections set in.
- Pale mucous membranes due to loss of blood (anaemia)
- 11. Death may occur when no treatment is given to the animal.



Coughing a common sign of Lungworms infestation

How can this disease be controlled?

This can be done in several ways;

1. Use of Anthelmintics (dewormers) to eliminate different parasite stages in the host in order to prevent discharge of parasite eggs or larvae into the environment.

- Best done towards the beginning of dry season so that the parasites deposited in feces are exposed to the heat of the sun
- For small-holder farmers, treatment of clinical cases is more economical than mass treatment.
- Avoid frequent treatment as it promotes drug resistance

Common drugs: albendazole, ivermectin and levamisole

2. Alternate grazing: by different animal host species. This reduces worm load depending on the degree of cross-transmission of parasites between host species being alternated.

3. Hygiene: use of clean raised feed or water troughs and maintaining a cleaning environment minimizes worm infestations.

4. Adequate nutrition: good feeding when pasture grasses are balanced with legumes also reduces the parasite effects due to the high protein content that helps the animals to recover from parasite effects.

For more information:
National Livestock Resources Research Institute (NaLIRRI),
P.O. Box 96, Tororo; Tel: +256-45444830 ;and Email: nalirri@gmail.com