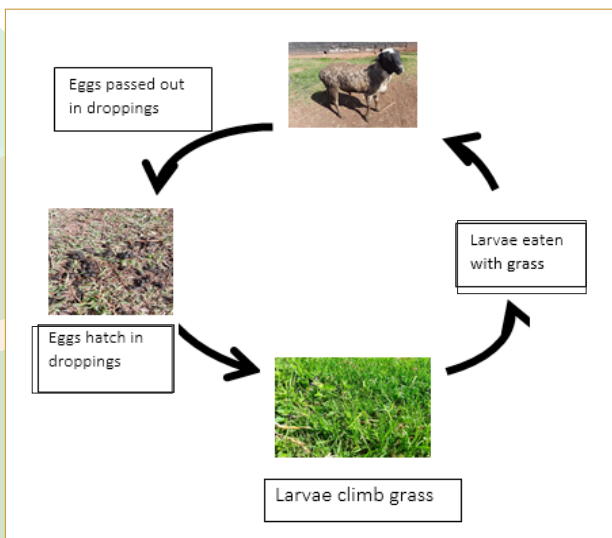




Goats feeding on molasses-urea feed blocks

Semi-arid pastoral areas and semi-arid large-scale ranches may have low stocking rates but poor feed may lead to a chronic state of infestation and supplementation with feed blocks is desirable.

Arid zone pastoralist producers experience uneven rainfall distribution leading to nutritional stress. However, it is advisable to be careful because of heavy contamination around watering points and *bomas* is common.



Life-cycle of roundworms



Compiled by:

Nginyi, J.M., Keshura, R., Biwott, G and Ndung'u, D.

Design and Layout by: *Odipo.S.*

For further information contact:

Veterinary Research Institute, KALRO muguga,

P.O. Box 32-00902 Kikuyu

Email: Directorvsri@kalro.org

Telephone: 020 2020512

Editorial and Publication coordinated by Knowledge, Information and Outreach Unit

KCSAP Brochure No.: 2



**INCREASE PRODUCTION BY MANAGING
ROUNDWORMS OF SHEEP
AND GOATS**





Bottle-jaw in a goat

Effective Treatment:

Treatment is meant to reduce production losses and therefore effective treatment is very important to ensure:

- Healthy animals
- Less pasture contamination
- Slow development of dewormer resistance

How do I achieve effective management?

This is achieved through:

Breaking the life-cycle of the parasites.

- Using correct dose based either on individual weight or on weight of the heaviest animal in the flock
- Drenching over the tongue – a drug deposited at the front of the tongue may go directly into the glandular stomach and this reduces drug availability in the body
- Deworming in the morning before animals go out to graze.

In cases of resistance give two full doses at a 12hr interval. Goats should be dosed at 1.5 times the dose of sheep. Treating with two different drenches at the same time dramatically delays resistance to either drug (*seek advice before doing this*).

What are the draw-backs even if I observe effective treatment?

- Stocking rate – if you have too many animals per unit area, pasture contamination is enhanced and frequent re-infections occur.

- No effective rotation – Pasture rotation is a very effective strategy for worm control if land size allows; it avoids frequent re-infections. Tethering and moving animals to new sites every 3-4 days is a form of rotation.
- Night *bomas* and watering points are constant sources of infective larvae.

What other management practices can I use to minimise worm infestations?

You may use proven indigenous knowledge (e.g. herbal dewormers and herbs with high protein content such as *Acacia* fruits). This may be done on animals within the flock that are known to be resistant to worms

How frequently should I treat my animals?

This depends on the climatic and other factors prevailing in your locality.

General hints:

- During the dry seasons ingested larvae may assume delayed development.
- Once the rains come the larvae resume development and thus may cause an acute parasitic gastro-enteritis.
- Transmission is seasonal and some periods of the year are too dry for larvae to survive on pasture. However, watering points and *bomas* are often areas of high contamination.
- Treat only clinical cases especially when only a few of them in a flock show signs of helminth infection.
- Treat when the grass has browned in the dry season to prevent chronic syndromes which can be caused by relatively few worms and are difficult to diagnose.
- The treatment should also take care of any arrested larvae. Treat all animals a week into the rains.

Specific hints for the various zones

Within small holders in semi-arid zones, the small farms cannot support many animals. Animals often have nutritional stress leading to a chronic worm problem. It is advisable to supplement with molasses-urea feed blocks.

INCREASE PRODUCTION BY MANAGING ROUNDWORMS OF SHEEP AND GOATS

Introduction

The most important roundworms of sheep and goats live in the stomach, small and large intestine. Some roundworm species live in other parts of the body such as the eyes and the lungs but these are rarely of clinical or economic importance in Kenya. Roundworms lay eggs in the gut of their hosts and these eggs pass out in hosts' droppings to develop into infectious stages on pasture.

How do I know that my animals have worms?

Sheep and goats with worm infestation portray dullness, loss of appetite and have scruffy hair coat. They also have pale membranes inside the eyelids rather than the usual pink. The animals may develop a pendulous swelling under the lower jaw, diarrhoea (*May or may not be present depending on the parasite*) and loss of body condition. Death result in severe cases.