SUBJECT: AGRICTURAL SCIENCE

CLASS: S S 3

WEEK: 6

TOPIC: LIVESTOCK PARASITES

A Parasite is an organism where it derives its nourishment without the host gaining anything from the association.

FORMS OF PARASITES

1. Endo parasites: these are parasites which live within the body of animals. Examples are liver fluke, tape worm, roundworm etc.
2. Ectoparasites: these are parasites which live outside or on the host. Examples are ticks, lice, mite, fleas, and bugs.
3. Parasitoid: the larval place in another organism, the host usually dies. In this case, there are characteristics of predation because the host dies.
4. Epiparasites: these are parasites that feed on other parasites, a relationship known as hyper parasitism. A flea which lives on a dog may have a protozoan in its digestive tract, the protozoan is the hyper parasite.

LIFE CYCLE OF ENDOPARASITES

1. TAPEWORM: Tape worm is a hermaphrodite, that is, it has both male and female reproductive organs, so it can fertilize itself. A matured proglottid pulls the body of the adult tapeworm, passed out with human faeces where pigs ingest it during feeding.it goes to the intestine of the pig where enzyme act on the egg and embryo is liberated.it finds way to the blood streams by passing through the intestinal walls and finally deposited in the muscles or heart of the pig. Each embryo encycled itself by cyst to become bladder worms with an inverted head so that the suckers lie on the inside. When not well cooked pork or beef containing the bladder worms and young tape worm with its head turn inside out emerges. They do not affect the health of pigs or cattle.

ECONOMIC IMPORTANCE OF TAPEWORM

1. The effect on man varies. It may have so little effect on some people that they are unaware of its presence.
2. Some may have abdominal pain or discomfort.
3. Increase in appetite
4. Weakness
5. Loss of weight, dizziness and restlessness
6. A poisonous substance produced by the worms may cause convulsion in some people.

CONTROL OF TAPEWORM

1. Sufficient cooking of meat to kill any larvae of the worm
2. Prevention of the deposition of human excreta in such places that cattle and pig will not be able to eat them.
3. Treatment of infected persons by regular deworming.
4. Inspection of an animal before slaughtering
5. Burning of infected pasture
6. Proper meat inspection before selling
7. Rotational grazing.

LIVER FIUKE

THE LIFE CYCLE OF LIVER FLUKE (FASCIOLA HAPATICA)

The adult fluke in the dile duct of the animals where it feeds and reproduce. The adult fluke reproduces eggs in the bile duct of the animal which is passed out with the faeces from the primary host (cattle, sheep, pig etc.). The eggs and faeces are passed out by the ruminant into the water; they develop into a larva called miracidium which later hatches ten days. This larva swims in the water, looks for a snail- its secondary host (limnea trucatula).It penetrates the snails or the pulmonary hole.it develop into a sporocyst within the snails. Through asexual reproduction, the sporocycyst produces a larva called radical. The radical ruptures the sporocyst and migrate to the digestive gland of the snail. There it grows to the final larva called cercaria. After six weeks, the cercaria leaves the snail to the through the pulmonary hole and swim to look for the final host in the water. Then in the animals' stomach, it makes its way to the animals' liver to the bile duct through the liver tissues.

ECONOMIC IMPORTANCE OF LIVER LIVERFLUKE

1. Destroys the liver tissues.
2. Causes general weakness of the animals.
3. Causes obstruction of the bile duct.
4. It inhibits the production of bile from the liver.
5. Lipid digestion is impaired
6. It prevents the flow of bile from the gall.
7. Excessive blood from the liver causes anemia.
8. It leads to death in extreme cases.

CONTROL OF LIVER FLUKE

1. Control snails on pasture using copper sulphate solution.
2. Regular deworming of animals.
3. Rotational deworming of animals.
4. Avoid grazing near streams.

ROUND WORM (Ascaris lumbricoides): It is an elongated, cylindrical, white worm which is pointed at both ends. The body is smooth and covered by thick, tough cuticle of few centimeters long.

LIFE CYCLE OF THE ROUNDWORM.

The eggs are fertilized in the female worm and the larva developed within the eggshell. The eggs are deposited in the intestine of pig from where they are passed out with the host faeces into soil where they can remain for years. When the eggs are picked up by pigs either through feeding or drinking, the eggshells are dissolved by digestive enzymes and the young larvae emerge. The larvae then pierce through the intestinal walls to the lungs. From the liver, to the mouth and the throat of the pig.from the throat, the larva is swallowed through the gullet into the intestine. Here, the larva develops into mature worms and the cycle repeats all over again.

ECONOMIC IMPORTANTANCE OF ROUND WORM

1. Reduce the growth of animals
2. High infestation can affect the respiration of host animals.
3. Indigestion and constipation
4. Loss of appetite and weakness results in death.
5. Destroy many organs during the migration of young worms.

CONTROL OF ROUNDWORM

1. Regular deworming with piperazine drugs.
2. Good sanitation
3. Provide clean and uncontaminated water to the pig.