Fasciolosis, commonly referred to as Liver Fluke disease, is caused by Fasciola hepatica parasite.

Liver Fluke disease may increase as a result of migrating immature flukes to the liver, especially during grazing in contaminated rangelands.

Sheep and goats are highly susceptible to worms because of their close grazing pattern, and goats are more at risk than sheep when grazing, despite being known as keen browsers.

Parasites continue to wave many sheep and goat producers millions of dollars each year in lost production, stock deaths, and costs of treatment and prevention with production losses at the peak, and this hampers significant losses in the sheep industry.

What is a Liver Fluke?

Fasciola Hepatica are parasitic trematodes or flatworms that can survive in a range of hosts such as in sheep, cattle, goats, horses, rabbits, pigs, kangaroos and including humans.

Liver flukes frequently occur in areas with stagnant water, for example springs, irrigation schemes are more suitable for hatching fluke eggs,
which subsequently develop into larvae.

**Fascicola Hepatica Life-cycle**

The entire Liver Fluke life cycle is approximately 18-20 weeks

Below are series of steps of the Liver Fluke cycle.

1. Through faecal matter, Liver flukes lay eggs which are abundant on rangeland pastures.
2. When environmental conditions are most suitable, a miracidium develops within the egg, the eggs in-turn hatch in wet areas of grazing land.
3. Galba truncatula, a snail, is an intermediate host which prefers muddy areas. Upon hatching, they immediately seek for the snail, as they cannot survive longer on the environment.
4. Inside the snail, the miracidium develops through multiplication and eventually becomes a cercariae.
5. Subsequently it abandons the snail and migrates to wet areas or vegetation until it becomes a mature fluke.
6. Grazing sheep ingest the cysts, which release immature flukes in the intestines, upon penetrating intestinal wall, flukes migrate into the liver.
7. Mature flukes in the liver start to produce eggs, after few weeks of infection, and cause tissue damage which takes approximately 6-7 weeks.
8. The eggs flow in the bile to the intestines and are passed out as defecation.
Liver Fluke disease occurs in three clinical forms

**Acute**: Results in sudden death, without any abdominal pain, anemia and jaundice.

**Sub-acute**: Causes jaundice, ill thrift, anemia and subsequent death after several weeks.

**Chronic**: A common form which subsequently gives rise to anemia, loss in appetite and bottle jaw an oedema.

Economic losses associated with Liver Fluke disease

- Reduced milk yield
- Deterioration in growth rate due to low feed intake
- Condemnation of parts of the carcass, such as the liver, in abattoirs
- Increased cost of production during treatment of Liver fluke disease in a herd
- Increased costs for replacement stock

Treatment and prevention

- Use of recommended anthelmintics from the veterinary services
- Routine monitoring of liver fluke egg counts through fecal sampling
- Changing grazing lands through rotational grazing regimes

To sum it all up, liver flukes hamper sheep production around the world and is associated with increased cost of production.

References

LIVER FLUKE CONTROL
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