

production and drought power; increased costs of anthelmintics, drenches, lobar; losses due to condemned liver at slaughter, and

on older cattle. There was statistically significant difference ($p < 0.05$) in prevalence between the two age groups.

Abstract

During the study period, 450 cattle were slaughtered at Bonga municipal abattoir, Kafa Zone, South-Western Ethiopia. Based on the 19.78% prevalence of bovine fasciolosis, and an average market price of a healthy liver at 800 ETB, the financial loss from livers condemned due to fasciolosis during the study period was estimated at 71,200 ETB.

Discussion

The prevalence of bovine fasciolosis on cattle slaughtered at Bonga municipal abattoir, Kafa Zone, was 19.78%. The highest prevalence was 25.20% ($n=123$) noted in animals originated from Gesha districts, and the least 12.96% ($n=54$) in cattle from Adiyo. The origin of cattle in the five districts has shown to significantly affect ($p < 0.05$) the prevalence of fasciolosis when slaughtered at the abattoir. Although cattle in this study were traced to the five districts, the slaughter slab is a destination for cattle coming from some 11 districts in Bonga town.

Generally, the use of wetlands for grazing and watering of cattle during dry seasons is a common practice in the study area. This could explain the observed high prevalence of fasciolosis in cattle originating from some of the districts. This situation could be exacerbated by absence of proper cattle deworming program and the movement of cattle by trading. Factors that favor occurrence of fasciolosis are moisture and temperature that allows persistent surface wetness on pasture for the snail and free living stages of the parasite to thrive. Grazing cattle in wetlands during dry season promote infestation of cattle with fasciolosis (Ekwenife and Eneanya [2]). In cattle, similarly high prevalence of 35% had been reported at Hawassa municipal abattoir in Ethiopia (Abebe et al. [3]), 32% at Arusha abattoir in Tanzania (Mwaabonimana et al. [8]) and 43.7% at slopes of Mount Elgon (Howell et al. [11]). However, the fasciolosis prevalence found in this study was found to be lower than what had been reported for most areas in Ethiopia. For example, a prevalence of 80% has been reported in Debre Berhan (Dagne, 1994 [12]) and Western Shoa. Also a prevalence of 50 - 63% has been reported in Ethiopia from Gonder (Bahiru and Ephrem [13]), around Lake-Tana. More generally, a prevalence ranging from 30 to 90% has been recorded for fasciolosis in tropical countries, the disease being considered as the single most important helminth infection of cattle Spithill et al. [14]. The current study also found that Bovine fasciolosis was more prevalent and more severe in poor body condition than good.

This may be due to the fact that animals with poor body condition are generally more susceptible. Based on a 19.78% prevalence of bovine fasciolosis in the current study, the financial loss from livers condemned due to fasciolosis during the study period was estimated at 71200 ETB.

The financial losses estimated could be much higher if all the direct and indirect losses associated with the disease, including that caused by weight loss, were included. A study done at Assela Municipal abattoir in Ethiopia by Mulugeta et al. [6] Found that losses associated with fasciolosis weight loss were 17.5 times more than losses caused by liver condemnation. These projections were based on the fact that fasciolosis

causes 10% weight loss. Condemnation of a large quantity of liver due to fasciolosis reduces its market availability (supply) and increases its market price (Ibrironke and Fasine, [15]) thus making it unaffordable by the vulnerable people who need it most. Liver tissue is a very rich source of nutrients including proteins, some important vitamins (A, D, E and K) and minerals. Liver is often recommended for pregnant mothers, children and for prevention and treatment of anemia and deficiencies of mineral and vitamins (Ibrironke and Fasina, [15]). Liver rejection at the abattoir tends to increase the level of aggregation by butchers who sometimes bear the complete financial burden of such condemnation (Wamae et al. Ibrironke and Fasina, [15-20]). Fasciolosis also has public health significance and it has been shown that fasciolosis can cause human fasciolosis (Molime [9]).

Conclusion and Recommendation

Fasciolosis is a serious health problem of cattle which causes liver condemnation in the slaughter slab, and reduction in the production of the animals. In the current study, the prevalence of fasciolosis showed that the infection is common in most parts of the woreda as most of the animals were originated from the different districts. The parasite (*Fasciola*) mostly affects animals which were originated from marshy areas. Thus, the infection is common in the region due to marshy grazing areas and different ponds which merits

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