Irrigated Pastures May Be Favorable to Livestock Parasites

M. A. Stewart

Certain internal parasites inhabit and multiply in the bacteria of sheep and cattle. The young, underdeveloped parasites are carried in the faeces of the animal. Under varying conditions, differing species of parasites are carried in the faeces of livestock. Irrigated pastures provide moist conditions and even temperatures at the base of plants where parasites thrive.

The plant growth protects the immature parasites from the drying effects of direct sunlight. More animals per acre can be carried on irrigated pastures than on non-irrigated lands, so the parasite population is perhaps greater. Irrigated pastures are commonly used for young animals, which are more likely to be infected than are older ones, and consequently are greater carriers.

Control Measures

In spite of the high level of parasites that can be carried on irrigated pastures, they can be controlled if the operator takes certain routine measures to prevent and prevent infection. Preventive measures are based on determining the type of parasite that is present, the most common symptom is called "bloody scours." Certain other conditions, such as certain types of sooty mold, cause similar symptoms, but when such symptoms occur, corrective measures should be taken immediately and a definite diagnosis should be made by a competent person.

Sheep should be quarantined for at least three weeks before being placed with other stock. Prevention is best assured by determining, as far as possible, that animals purchased come from "clean" flocks. If this is not the case, the new animals, especially the young ones, should be quarantined for at least three weeks before being placed with other stock. Under feed-yard conditions, infections may develop and mixing groups of sheep can result in serious disease problems.

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Seek Answers to Nitrogen Needs of Orchards in State

A high percentage of the peach orchards in California need nitrogen; a low percentage of the pears and prunes need it, and the other fruits and nuts fail in intermediate positions. Properly used, a pound of actual nitrogen will also account for a response whether from manure or commercial fertilizer, and especially if it is available when the plant is ready to use it. The use of nitrogen fertilizers in any crop is not a substitute for a balanced feeding program. Several instances of stunted growth and leaf discoloration have been noticed in orchards where nitrogen has been used in a manner suggested by growers without regard to the actual amounts needed by the plants.

Rate of Application

In general, a 5- to 10-inch layer of water should be applied to the soil just before the fertilizer is applied to allow the nitrogen to penetrate for maximum use. Under feed-yard conditions, infections may develop and mixing groups of sheep can result in serious disease problems.

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Poisonous Plants on the Range Hold Important Place Among Causes of Stock Fatalities

George H. Hart

Micron losses of livestock are constantly occurring while grazing over the long, hot, dry summers and the long, hot, dry winters. This is true of the large area of the state to the west and of the larger part of the eastern slope. These losses are not related to the occurrence of certain species of plants or to any one cause.

When great insecticidal plagues were raging, their way was sought out and eradicated or controlled, often by spaying off the whole range. Now, however, the losses are not so clearcut, not so matter-of-fact, and not so easily eradicated. They are due to a variety of causes in which the plants hold an important place.

There are hundreds of thousands of livestock operators, and their feeding relations are flexible depending on degree of stock and variety of plants present.

Types of Toxicity

It has been facetiously remarked that any plant is poisonous to livestock provided the animal is fed enough of it, if not by a true poison then by mechanical disturbances. It is true, of course, that recognized that all plants do not cause harm in the same way. This is why we have well-known powerful plants present from which drugs are made for use as medicines such as strychnine, morphine, atropine, cocaine, nicotine, and so forth.

In some plants the poisonous substance is all through the plant, but in many cases it is concentrated in the fruits, seeds, or leaves. The plant may have a deleterious action in one species and be simply of interest or relatively harmless to another. Oftentimes the poisonous substance is that produced by photosynthetic plants. In these species the plant development of the plant was not listed among species toxic to the animals.

It has been said that liver fluke infections are much more extensive in cattle than in sheep. Many times cattle are infected heavily enough for their lives to be condemned in the slaughterhouse but not sufficiently to produce obvious symptoms. Liver fluke infections in sheep and cattle may be caused by differing varieties of flukes, including those of the liver, bile ducts, and biliary systems. This is due to species differences in the parasites and the degree of infection. Acute cases of liver fluke infection may result in a loss of appetite, weakness, and death in a few days. Chronic cases may last for months or even years. In severe infections, the liver may be greatly enlarged, and the bile ducts may be obstructed, leading to jaundice and ultimately to death. Prevention is difficult because of the complexity of the lifecycle of the liver fluke. Treatment is mainly supportive and may involve the use of broad-spectrum anthelmintics. In some cases, surgery may be necessary to remove the infected tissue. The most effective control measures are vaccination, which is not possible in the case of liver fluke, and the use of anthelmintics to reduce the incidence of infection. In some cases, liver fluke infections can be prevented by the use of pre-parasitic stages.