

Livestock Notes

BEEF: PINKEYE INFECTIONS

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Every few years, beef cattle producers report a large number of pinkeye cases in their herds. This year appears to be one of those years. Pinkeye can infect any size or color of cow, but younger cattle appear to be more susceptible. There are no easy answers to why it happens or what can be done to prevent it.

Pinkeye is an infection of the cornea, the transparent, protective cover over the eyeball. The bacterium most often associated with pinkeye in beef cattle is *Moraxella bovis* (*M. bovis*), but Infectious bovine rhinotracheitis (IBR) has been implicated in some cases. Although pinkeye infections occur in most mammals, each species is affected by different strains, so the variety that affects cattle is not necessarily spread to humans, sheep, horses, or other animals.

Tearing and redness are among the first signs of pinkeye, but the eye can become completely ulcerated overnight. Scar tissue results from ulcers which form between the layers of the cornea, causing loss of vision in severe infections. In extreme cases, the cornea may even burst.

Factors that contribute to pinkeye infection include flies, dust, grass seed heads, sunlight, and windy conditions. In fact, anything that irritates the eye could be a cause. This seems to be especially true during dry, hot weather

such as has occurred across the commonwealth this year. Sunlight is implicated because it is thought that ultraviolet light loosens the cellular junctions in the cornea, allowing a path for the germ to invade. *M. bovis* is already present in the eyes of most cattle, but flies may be the likeliest source of cross-contamination.

An alarming number of herds have been infected this year, even after having been vaccinated for the disease. Veterinarians and technical representatives with whom I recently spoke reported that pinkeye vaccines are about 70 percent effective. This implies that up to 15 head in a 50-cow herd could reasonably be expected to be infected under conditions optimal for the disease. Secondly, there may be a time lapse between the onset of an infection and control from the vaccine. Although some early symptoms may be seen in cattle, the infection will often subside when the vaccine "kicks in." In pinkeye infections, the disease must already be present and at work before the vaccine starts working. However, infections are often much worse in animals not protected by vaccines.

Treatment for pinkeye includes covering the eye and using intramuscular injections of tetracycline's or ocular injections of antibiotics. Long-acting tetracycline should be given in the neck.

To prevent occurrence or spread of infection:

- Control flies with insecticide ear tags. If the tags were put in last

Zeneca To Market Surpass Formulations

WHITE PLAINS, N.Y. — Zeneca Ag Products (formerly ICI) has announced that it plans to offer two formulations of new Surpass corn herbicide for 1994, and additional formulations in following years.

Surpass EC and Surpass 100 will be the first two formulations to become available, according to Steve Miller, product manager at Zeneca. The company anticipates commercial registration of both formulations in advance of the 1994 use season.

Surpass EC

Surpass EC is primarily a grass herbicide, but it also gives effective control of several small-seeded broadleaf weed species, Miller said.

The product controls foxtails, fall panicum, crabgrass, barnyardgrass, woolly cupgrass, lambsquarters, redroot pigweed, common ragweed, black nightshade, and additional grasses and broadleaf weeds. It also suppresses wild proso millet, shattercane, and seedling johnsongrass.

Surpass EC contains 6.4 pounds per gallon of the active ingredient, acetochlor, plus 1.1 pounds per gallon of the corn safener dichloromid. It's applied at a rate of 1 to 3 pints per acre, according to Miller.

spring, put in new ones.

- Provide plenty of shade for the herd.
- Separate infected animals from the rest of the herd if possible.
- Watch for early signs of the disease and treat it early.
- Clip off seed heads in pastures.
- Continue using vaccines.

"Rates depend on soil texture," Miller said. "For a medium soil, such as a silt loam, a typical use rate would be 2 pints per acre."

The safener provides a wide margin of crop tolerance. Miller says Surpass has been applied at four times the labeled rate in university trials, with no signs of crop injury.

Atrazine Premix

Surpass 100 is a premix of Surpass and atrazine, again with the corn safener included. Each gallon contains 3 pounds acetochlor, 2 pounds atrazine, and 0.5 pound dichloromid.

Because acetochlor helps control broadleaf weeds, Surpass 100 provides broad-spectrum control with lower atrazine rates than other premixes. Use rates for Surpass 100 are 1.6 to 3.3 quarts per acre, which provides 0.8 to 1.65

pounds atrazine per acre.

"At typical use rates, Surpass 100 contains about 25 percent less atrazine per acre than Bicep," Miller said. "This may be helpful to farmers as atrazine rates become increasingly restricted."

Both formulations of Surpass are applied preemergence or shallow-incorporated, up to 30 days prior to planting. They may be sprayed with water or liquid fertilizer as a carrier, or impregnated on dry bulk fertilizer, and they may be tank mixed with other herbicides for corn.

Future Formulations

Zeneca is evaluating additional formulations of Surpass for the future, including liquid and dry encapsulated products, dry granules, and a premix of Surpass and Eradicane herbicides.

Sheep Association Sets Meeting

LANCASTER (Lancaster Co.) — The Lancaster County Sheep and Wool Grower's Association will hold their 8th annual meeting on Monday, November 1, at 7 p.m. at the Lancaster Farm and Home Center.

Highlighting the evening will be a presentation on "Making Your Small Flock Profitable" by David L. Greene, Carroll County extension agent in Maryland, who has written a sheep management guide that provides information aimed primarily at the small sheep

flock operator. Greene is also a successful sheep producer, judge, shearing instructor, and is annually involved in the Maryland Sheep and Wool Festival.

A brief business meeting will be conducted by President Ed Donough.

Anyone interested in sheep, curious about profit making, or yearning to become involved with the association should feel free to attend. For more information, contact Chester D. Hughes at the Lancaster County Cooperative Extension Office (717) 394-6851.

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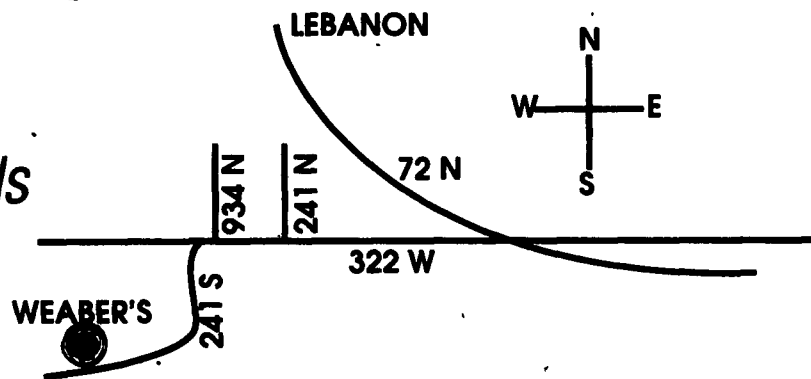
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