"Skin Diseases of Dairy Cattle"

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Skin diseases of cattle are a common problem. This handout will discuss some of the more common skin diseases in cattle, how to recognize them, whether they need treatment, and how to prevent them.

Infectious skin diseases (Germs):

**Ringworm:** This appears as grey hairless circles (that is why it is called “ring”worm) of varying size. It is typically found on the face and neck of the animal, but can be anywhere on the body. It is usually not itchy and has little effect on the animal, although it looks bad. It is an infectious skin disease that is caused by a fungus, not a worm. It can affect all animals, but especially young ones because they have no immunity against it. It is worse in animals with poor nutrition, another disease, or a damp environment. It is spread by contact with infected animals or equipment.

There is no good cost-effective treatment, and the animal usually develops immunity in 2-3 months, if fed well, and then the rings go away. Ringworm can affect humans too. Prevention: good nutrition and a roof protecting from the rain, isolation from affected animals.

**Rain scald:** This appears as lumps or lines of swollen skin that may have pus coming out of them. It often causes patches of hair to become crusted and matted together, resembling a paintbrush. The swollen skin is usually located along the back but can be found on the udder and limbs as well. Active infections may be painful and itchy but non-active infections cause no effect on the animal. This is an infectious skin disease that is caused by bacteria, not “hot rain”. It can affect all animals, but especially those with poor nutrition, poor hygiene and stress. It often infects animals which have inadequate shelter from the rain, allowing their skin to become moist and susceptible to bacterial infections.

Treatment with antibiotics from a veterinarian will enhance healing, although most antibiotics have a milk withdrawal. Prevention is through good nutrition and a roof providing protection from the rain.

**Cowpox:** Parts of the teat become red and swollen, and then, within 48 hours, there is a dark red scab that takes time to heal. This is caused by a very contagious virus affecting the teats of cattle, especially young naïve cattle.

Mastitis can occur if the scab is close to the teat end, and should be treated with antibiotics. Milking technique should be changed to reduce physical stress on the teat to allow it to heal faster – squeeze the teat rather than pulling on the teat. Preventing the spread of cowpox is by milking affected cows last. Cowpox can also affect humans, causing a disease known as milkers’ nodules.
Abscess: These are lumps with thick walls (usually), and pus and bacteria in the center. They can occur at any age and are common following injury or use of contaminated or dull needles, leading to infection under the skin. They can occur anywhere on the body, and grow in size until they burst and release some pus. They can recur if they do not drain properly.

Treatment is by ensuring proper drainage and flushing; this should be done by a veterinarian or an animal health technician. Antibiotics are usually not required. Prevent by avoiding the use of dull or contaminated needles.

Lumpy Jaw: This appears as a large firm mass on the jaw or cheek that continues to grow in size. It can be painful and often interferes with the cows ability to eat. It is a bacterial infection seen in cattle fed a very coarse, dry forage that can cause puncture wounds on the inside of the mouth. The bacteria live in the mouth normally and only cause problems when the puncture allows them to become seeded within the bone and muscle of the jaw.

Treatment may include antibiotics. This should be done by a veterinarian. Prevention includes feeding soft forages, like short napier grass.

Skin parasites: Many parasites can cause skin problems in cattle of all ages. These include mange, lice, ticks, fleas, flies and worms. Mange is often dry, scaly and consistently very itchy, whereas fly bites are usually small lumps within the skin and are only temporarily itchy. These can be a nuisance to cattle, can transmit disease, and can result in decreased milk production.

Powders, sprays and dips can be used for treatment. Prevention is through zero-grazing, good manure management, and weekly spraying. Please refer to the handout on ectoparasite control for more information on these.

Foot and Mouth Disease: This virus causes skin blisters and ulcers in the mouth, and on the feet and teats. Cattle of all ages can be affected, as well as goats, sheep and pigs. Contact a veterinarian for confirmation and treatment, especially if the animal is not eating or develops mastitis due to an ulcer affecting the teat opening. Prevention is with effective government quarantining of animals/farms infected, and vaccines.

Lumpy skin disease: This appears as a rapid onset of multiple lumps that can develop ulcers in the middle. Infected animals can have a fever. The nodules can be anywhere on the body, and more likely affect young naïve animals. The animals usually get better on their own after 3 – 6 months. Prevention is with a vaccine and insect control.

Warts: This can look like a mild case of lumpy skin disease, except with fewer and smaller lumps, and without the fever. They frequently appear on the teats, and in this case look like raised pale nodules. They are caused by a virus and usually go away on their own in 1-6 months when immunity is developed. If a wart is interfering with milking or is in a bad location (like the eye), a veterinarian or an animal health technician can remove the wart. Preventing the spread of warts is by milking affected cows last.
Non-Infectious skin diseases (Other causes):

**Sunburn:** This appears as reddening of the skin, and even scaling, crusting and scabbing. It is usually found on light-colored skin along the back of the animal and on the udder and teats. This can affect any animal that has excess exposure to the sun, not enough shade, or is not using the shade/stalls provided. Also, some weed toxins can make animals more sensitive to the sun. Treatment includes providing shade, and antibiotics may be needed.

**Cancer:** Any growing mass or lump affecting the skin of a cow, especially ones which feel hard, could potentially be cancer and should be examined by a veterinarian. Cancer of the eye can be prevented by providing adequate shade for your animals.

**Hair loss or fading:** Deficiency or imbalance of various minerals can lead to hair loss or fading. These include zinc, copper and selenium. Treatment and prevention is through provision of the recommended amounts of mineral through feeds and licks. Read the labels.

Prevention of skin conditions:

- Provide adequate shelter from the sun and rain – a comfortable stall to lay in.
- If they are not using the stall, change it so they will (size, comfort, hygiene, etc.)
- Provide good nutrition and proper mineral supplementation, especially selenium.
- Avoid feeding overly mature, coarse forage.
- Avoid feeding or letting your cows graze toxic plants.
- Provide proper worm, fly and tick control. Read the label and/or consult your veterinarian about proper products to use for de-wormers, fly and tick sprays. Make sure you use the right product at the right amount for the size of your animal (Animals can be weighed with a weight tape or a rope and chart).
- Milk cows with lumps on their teats last and clean them with a separate towel
- Protect yourself as many of these conditions also affect humans! Contact a doctor if you think you may have been exposed to a disease from your cattle.

FOR MORE INFORMATION, contact the following Wakulima Dairy animal health personnel:

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