

**HILL FARM RESEARCH STATION  
OCTOBER 14, 2004  
FIELD DAY SUMMARY REPORT**

**COMMODITY:** Dairy

**TITLE:** Coccidiosis in Dairy Calves

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**TAKE HOME MESSAGE:** Scours are a major cause of death in neonatal dairy calves. Of the many causes of scours, coccidiosis has a high incidence of occurrence in young dairy calves and is a very costly disease. Nutrition and management are very important in disease prevention, and the use of coccidiostats has been proven to be very effective in controlling coccidiosis in young dairy calves.

**PROBLEM / TOPIC:** The first and most important step in a heifer rearing program is the development of the young calf, with the greatest expenses usually occurring during the first three months of life. The most prevalent causes of death in calves from birth through weaning are diarrhea (scours) and respiratory problems. Of these two major factors responsible for calf mortality, diarrhea has been reported to be the primary cause of death. There are many causes of scours in calves, including bacteria, viruses, protozoa, and improper nutrition. Coccidiosis, caused by a protozoan parasite, has proven to be a costly disease in calves up to two years of age. Treatment of coccidiosis is difficult, and therefore prevention is the best method of controlling this disease in neonatal calves.

**ACTION:** Coccidial infections are difficult to treat because clinical signs appear after the life cycle of the organism is almost complete. Anticoccidial drugs are only effective during the early stages of the life cycle of coccidia, and therefore by the time symptoms are present the disease has already passed the stage at which treatment would be most effective. Prevention is the best method of controlling coccidiosis in calves. Feeding adequate amounts of high quality colostrum as soon as possible after birth is the best method of disease prevention, as this management practice provides the calf with passive immunity. Housing should be kept clean and dry, and feeding and watering devices must be kept free from fecal contamination to prevent the transfer of coccidial oocysts. Besides the use of recommended calf management procedures, coccidiostats in milk replacer and calf starter have been proven effective for prevention of coccidiosis in young dairy calves. Decoquate (Deccox<sup>®</sup>) prevents coccidia development during days 1 through 15 of the life cycle. Ionophores such as lasalocid (Bovatec<sup>®</sup>) and monensin (Rumensin<sup>®</sup>) kill the coccidia early in the life cycle. Both ionophores are very effective in preventing coccidiosis in dairy calves and have an added benefit of increasing body weight gain and feed efficiency in these young animals.

**IMPACT:** Since it is virtually impossible to stop the spread of coccidia on the farm, use of coccidiostats is an excellent source of insurance against the disease. Providing this protection can minimize the economic losses from coccidiosis. Ionophores may further improve calf performance because of their known effects of increasing weight gain and feed efficiency. While nothing can replace the benefit of providing colostrum, coccidiostats are an added source of protection against this costly disease of young dairy calves.