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LACK OF GOOD PRACTICE IN DAIRY CALVES AND DIARRHEA DIAGNOSTIC: A PROBLEM TO ANIMAL WELFARE MAINTENANCE

FALTA DE BOAS PRÁTICAS DE MANEJO EM BEZERROS LEITEIROS E O DIAGNÓSTICO DE DIARREIA: UM GRANDE PROBLEMA PARA A MANUTENÇÃO DO BEM-ESTAR ANIMAL

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Diarrhea is a major disorder affecting calves in the first three weeks of life in different countries, causing significant economic losses. The main calf diarrheal diseases of bacterial origin are Colibacillosis, caused by *Escherichia coli*, and Paratyphoid or Salmonellosis, caused by strains of *Salmonella* spp. The lack of hygiene of handlers and facilities, contribute to outbreaks of diarrhea among young animals. Calves become infected orally through contaminated food or water, and the contamination by feces on floors, beds and in the feed, which could be avoided if adopted effective and appropriate management measures in animal husbandry. In this study a survey was made of the presence of pathogenic bacteria in feces of calves belonging to three family dairy farms located in Coastal Lowlands, Metropolitan, and Northwest Regions of RJ. A questionnaire on herd management was completed, observing the hygienic conditions of the location, type of feeding, and the physical appearance of the cows and calves (presence of ticks, bristly hair and thinness). A total of 41 stool samples were obtained, collected using sterile swabs (with Cary & Blair medium) for transport to the laboratory. Enrichment culture media were used to obtain initial growth, and dehydrated selective media Compact Dry EC® (for *E. coli*) and Compact Dry SL® (for *Salmonella* spp.) were tested, aiming at the presumptive identification of these microorganisms. As a control for characteristic growth Hektoen and Teague culture media were used. All samples were positive for *E. coli* and other coliforms in the Compact Dry EC® plate (Figure 1 and 2). Although there was growth in all Compact Dry SL® plates (Figure 3), the isolated colonies were typical of Coliforms (Figure 4), and did not grow any typical colony of *Salmonella*. In all properties a deficient management, with total lack of hygiene and accumulation of feces, mostly in the milking parlor was observed. The precarious condition of handling and the lack of good treatment to animals showed a total disregard of keepers with the environment where the animals live, and with their welfare.

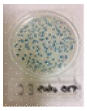

Figure 1. Compact Dry EC® - typical *E.coli* and Coliforms colonies.

Figure 2. Teague medium (Compact Dry EC® control) - bright green colonies typical of *E.coli* growth.

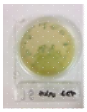

Figure 3. Compact Dry SL® - *Salmonella* spp. colonies growth.

Figure 4. Hektoen medium (Compact Dry SL® control) - salmon colonies typical of Coliforms growth.

Keywords: coliformes, *Escherichia coli*, *Salmonella* spp.

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