

Terramycin

AS A TREATMENT FOR SUCKLING PIGS

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Gastroenteritis of baby pigs characterized by profuse diarrhea has been treated successfully by the intermuscular injection of 1 gm. of terramycin into the dam.¹

This type of diarrhea was observed in nursing pigs 1 to 24 hours after farrowing. The feces were of a gray to yellow color, containing mucus and gas. The baby pigs became dehydrated, weak and often refused to nurse within one hour after the first symptoms of diarrhea were noted.

Further research has indicated that, when terramycin was administered into the ham muscles, the therapeutic levels of the antibiotic were present in the milk for nearly 24 hours.²

In the fall of 1957 a diarrhea characterized by a yellowish color and of a pasty consistency was occurring in a number of droves of swine throughout the Fargo area. In the winter farrowing of 1957, terramycin was tested as a means of controlling this diarrhea. One group containing 25 sows received no treatment. Each of a group of 7 sows was injected with 1 gram of terramycin in 10 ml. of sterile water after diarrhea was detected in the litter. A third group consisting of 12 sows was injected with 1 gram ter-

ramycin in 10 ml. sterile water 12 hours after farrowing.

Diarrhea was observed in 30 percent of the litters within 3 to 7 days following farrowing of the sows which did not receive a terramycin injection. Injections of terramycin (1 gram per sow) ended the diarrhea in from 1 to 2 days following administration. Baby pigs from sows injected with terramycin 12 hours after farrowing did not exhibit diarrhea and the number alive at weaning was 10 percent greater than Group I whose dams did not receive terramycin.

No difference in weaning weights existed between the treatments.

Summary

Injection of 1 gram of terramycin in 10 ml. of sterile water to sows 12 hours after farrowing prevented the described diarrhea in baby pigs. This treatment resulted in a 10 percent increase in baby pigs saved to weaning in this experiment. The injection of terramycin after diarrhea was contracted in the baby pigs ended the diarrhea in 1 to 3 days following the treatment.

The results of the experiment are presented in the following table:

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Group	Treatment	No. of Sows	Alive at Birth	Alive at Weaning (35 da.)	Pct. Alive at Birth	Pct. Alive at Weaning (35 da.)
I	No terramycin	15	8.7	7.3	94.9	84.0
II	Terramycin after onset of diarrhea	7	9.9	9.0	97.2	91.3
III	Terramycin 12 hr. after farrowing	12	8.5	8.0	97.1	94.1

*Number alive at weaning as a percentage of number alive at farrowing.

¹/Schipper, I. A., Buchanan, M. L., and Eveleth, D. F.: Swine Enteritis I, Terramycin in the Treatment of Diarrhea of Suckling Pigs, J.A.V.M.A., 128 (1956): 92-93.

²/Schipper, I. A., and Eveleth, D. F.: Swine Enteritis II, Terramycin Levels in Sows Milk Following Intramuscular and Oral Administration, J.A.V.M.A., 129 (1956) 59-60.

The authors thank Asgar Fog, North Dakota Agricultural College swine herdsman and Charles Pfizer and Co., Inc., Terra Haute, Indiana, for assisting in this investigation. ■ ■ ■

WEATHER REPORTS

• David G. Gosslee

The State Weather Service of North Dakota was organized in 1891. By the end of 1893 there were 37 cooperative weather observing stations successfully operating. (The weekly crop bulletin was also being issued in 1893 and was very popular.)

In 1946 the number of stations increased to 120 and at present there are 207. These stations are operated under the supervision of F. J. Bavendick, Bismarck, the state climatologist employed by the Weather Bureau.

To obtain adequate coverage of the state of North Dakota many observing points are needed due to the variation from place to place. Similarly, many years of records are needed to obtain a reliable average due to the variation in weather from year to year. The stations

are manned by public-spirited citizens who serve without pay. They take daily readings, recording the highest temperature, the lowest temperature, the total precipitation and sky and wind conditions during each 24 hour period.

These records are invaluable. Most of them have been published by the Weather Bureau and have been the source of many studies of North Dakota climate. These studies have been important to agricultural and other interests in North Dakota and could not have been made without these records.

Several of the outstanding observers and their records are F. O. Alin, Fullerton, who began taking daily weather observations Jan. 1, 1898, and did not miss an observation until last year when he broke his hip; S. P. Grane, Marmarth, has had about 50 years of service as a cooperative observer.

David G. Gosslee was Statistician for the Experiment Station.