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## EFFECT OF LINCO-SPECTIN VIA THE IRON DEXTRAN INJECTION ON PERFORMANCES OF SUCKLING PIGS

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**ABSTRACT:** Ninety one piglets, 46 males and 45 females, were treated with Linco-spectin combined with the iron dextran injection as treatment II. Ninety one littermates, 50 males and 41 females, served as treatment I or control receiving only normal iron dextran injection. They were injected at 3 day of life.

It was found that piglets in treatment II had significantly lower mortality rate than piglets in treatment I. No significant differences were observed in birth weight, mortality from 7 to 42 days, weaning weight and average daily gain from birth to weaning between the two groups.

Significant sex x treatment interaction on weaning weight indicated that medicated treatment had more effective to male than female piglets.

### INTRODUCTION

It was claimed by the manufacturer that Linco-Spectin is an antibiotic effected to *Staphilococcus sp.* and *Escherichia coli* and possibly other bacteria caused early piglet losses. Moreover, it has been also suggested that in piggeries when infectious diseases are not significant problem Linco-Spectin might improved weight at weaning.

Since bacteria are significant factors in neonatal piglet mortality in unhygienic piggeries. To increase survival and viability rate of suckling pigs, a comparison of Linco-Spectin in combination with iron dextran injection and iron dextran injection alone was study. The objectives of this study were toasses the performances and mortality rate of suckling pigs.

The study was done at Swine Section, Department of Animal Husbandry Faculty of Agriculture Chiang Mai University from January to April 1983.

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## MATERIALS AND METHOD

The study was done at Swine Section, Department of Animal Husbandry Faculty of Agriculture Chiang Mai University from January to April 1983.

Materials : Linco-Spectin 100 (soluble powder)  
 (Lincomycin base 33.3 gm, Spectinomycin base 66.7 gm)  
 Pigtran 200 (100 mg/ml of iron as ferric hydroxide)

Method : Piglets from each of 20 litters, 182 pigs, farrowed from January to March 1983 at experimental farm of Swine Section, were randomly divided at 3 day of age into two treatments. Treatment I was control and treatment II was medicated treatment.

Each treatment piglets were equally divided into two groups, male and female. Every piglet in treatment I received 2 ml injectable iron dextran at 3 days of age as control. Piglets in treatment II received 2 ml injectable iron dextran mixed with Linco-Spectin to give a dosage of 15-20 mg/kg of combined antibiotic.

All pigs were allowed to suck freely from their dam. Creep feed and drinking water were given *ad libitum*. Birth weight, weaning weight (42 days), mortality from 3 to 7 and 8 to 42 days of age and caused of death where apparent were recorded from all litters.

A 2 x 2 factorial in CRD and group comparison were used to analyse data.

## RESULTS AND DISCUSSION

The average of the various production traits are shown in table 1. The average birth weight of piglets in treatment I and II were 1.53 and 1.51 kg respectively. The weaning weight of both groups at 42 days were 9.78 and 9.61 kg with average daily gain of 196 and 194 gm, respectively. No significant differences were observed in birth weight, weaning weight, weight gain and average daily gain between treatment I and II and male and female. These results were agreed to Henderson (1982). The mortality rate from 3-7 days of age of treatment I (8.79%) had significantly higher than treatment II (2.20%) but significant difference in mortality rate from 8-42 days of age were not found between the two groups.

Similar results in decreasing mortality rate were reported by Kingston and Henderson (1982).

All of 12 piglets losses were diagnosed as weakness and unthriftiness due to scouring but no attempt was made to isolate pathogenic agents. Based on these results, it seems that a mixture of Linco-Spectin and iron dextran increased survival and viability of neonatal piglets.

Significant interaction between sex x treatment were found in weight gain. The data indicated that female had more weight gain than male in treatment I but male had more weight gain than female in treatment II at weaning weight.

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Table 1. Summary of piglet performances.

Traits	Treatment I			Treatment II			Grang
	Male	Female	Total/Ave.	Male	Female	Total/Ave.	
Number of piglets	46	45	91	50	41	91	182
Ave.birth weight (pig alive)	1.54	1.52	1.53	1.51	1.51	1.51	1.50
Mortality from 3-7 days	7	1	8 <sup>**</sup>	1	1	2	10
% mortality from 3-7 days	15.22	2.22	8.79 <sup>**</sup>	2.00	2.44	2.20	5.49
Mortality from 7-42 days	1	-	1	-	1	1	2
% mortality from 7-42 days	2.56	-	1.30	-	2.50	1.12	1.10
Age of weaning (day)	42	42	42	42	42	42	42
Ave. weaning weight (kg)	9.38	10.12	9.87	9.82	9.35	9.61	9.67
Ave. weight gain (kg)	7.84	8.60	8.25	8.31	7.84	8.10	8.15
Ave. daily gain (gm)	187	205	196	198	187	193	124

## REFERENCES

Henderson, R.T. (1982). Administration of Linco-Spectin via the dextran injection to piglets. Upjohn Technical Report. Australia.Kingston, D.J. and Henderson, R.T. (1982) Reducing infectious neonatal mortality. Pig Farmer 16(2) : 8.