FIELD TRIAL RESULTS ON THE USE OF A VACCINE BASED ON LT TOXIN OF L. COLI IN THE IMPROVEMENT OF THE PIGLETS PRODUCTION

P. H. Vajna, A. Obrus, Z. Campos, Z. M. Renagaza
Servicios Técnicos Santa y Saludline
Paseo de la Castellana, 127 - Madrid - España

INTRODUCTION - In order to evaluate the incidence of the use of a vaccine containing LT - toxin (I), controls in 16 farms with colibacillary enteritis diagnosis were carried out, along the country. Parameters such as: Mortality with and without vaccination, evaluation of the survival rate were analyzed in the first week and at weaning.

MATERIAL AND METHODS - The control of the results was performed in the 16 farms, using a total of 997 sows. From then 470 were vaccinated as unvaccinated controls being the unvaccinated 519, according to the following vaccination schedule:

Vaccinated Group: 7 days of age
Control Group: 7 days of age

N' of sows...... 519 479
Dosage........... 5 c.c.
N' of applications: 2 (sub. and intr.)
Supplementation 4 weeks before farrowing.
Extraordinary 3/4 days after farrowing.

PARAMETERS OBSERVED: 1) N' of piglets per litter; 2) N' of piglets dead during the first week of life; 3) N' of weaned piglets; 4) Rate of survival at the end of the first week; 5) Rate of survival at weaning.

RESULTS - In Table 1 and 2 the survival of the piglets at the end of the first week of life and the whole period of the trial is shown, from birth to weaning. The death rate is increased in 3.2% and 3.9%, respectively. It supposes that the number of weaned piglets from vaccinated sows, was 0.5% higher per litter than the one of the control group.

DISCUSSION AND CONCLUSIONS.

1) Safety - The use of the vaccine had not any incidence on the rate of piglets born per sow. The obvious conclusion is that the vaccine was safe and did not have any untoward effect on the litter size.

2) Efficiency - The average number of piglets at weaning from vaccinated sows compared with the control group it shows an increase of 0.34 of weaned pigs from the vaccinated group. Reduction in mortality during the first week as well as in the whole period from birth to weaning - occurred.

This result is evaluated by 31.82% in the deaths - appearing during the first week of life of the piglet in Table 1 - and by 36.4% for the whole period of the trial - 16 farms of the Table 2. From the practical point of view, and under the field conditions used in this study it is concluded that the use of a vaccine containing LT toxin - increased significantly the number of weaned piglets per litter, reducing the mortality rate for piglets during the first week of life as well as the whole period of the piglet.