Anthelmintic treatments in pregnant or lactating sows for control of sow and piglet parasites. Their influence on piglet performances

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A study was carried out on the effectiveness of methods used to prevent piglet parasitism by intervention on the pregnant or lactating sow. This intervention would eliminate any systematic treatment of piglets up to weaning and would assure the prevention of the infection.

In 13 farms including 92 sows from 29 blocks (3.1 sows in each), 850 newborn piglets and 706 weaned piglets were controlled. 186 weaned piglets (2 in each litter) were sacrificed for total worm count. The anthelmintic (Morantel tartrate or Pyrantel tartrate) was given twice in the feed of one meal 8 days and 3 days before farrowing (n° 1) or for 10 days prior to farrowing (n° 2), or twice in the feed of one meal, 2 days before and 10-21 days after farrowing (n° 3).

A very good control of gastrointestinal parasitism in sows, improving also piglet performances by decreasing or suppressing their parasitic contamination was achieved by a continuous administration in the diet of a sufficient amount of Morantel for 10 days before farrowing (above 2.5 mg/kg live weight/day = 25 mg/kg live weight on the whole) or in 2 Pyrantel or Morantel treatments (12.5 mg/kg live weight, 25 mg/kg live weight on the whole) at intervals of 2 weeks before farrowing (treatments n° 1 and n° 2). Equivalent results were obtained with 2 Morantel treatments, one before and the other after farrowing (treatment 3).

V. — Feeding

Influence of protein restriction from 25 kg live weight on the reproductive performances of the gilt

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An experiment was conducted on 70 Large White gilts in order to determine the effects of protein and lysine deficiency during the whole or part of the growing period on the onset of puberty, the ovulation rate at 1st oestrus and the reproductive performances at 30 days of pregnancy on the one hand and at farrowing, on the other.

From 25 kg live weight and until puberty, the animals were distributed into 3 groups fed according to a feeding schedule either a low protein diet (11.5 per cent) supplemented or not with lysine (total content of the diets: group 1: 0.42 per cent; group 2: 0.62 per cent) or a high protein diet (group 3: 17.5 per cent crude protein, 0.86 per cent lysine).

At puberty, the animals which were mated were subjected to the same feeding level (2.2 kg/day) and received the diet of group 1 either during 30 days of pregnancy (one half of the animals) or during whole pregnancy (the other half of the animals).

Protein restriction delayed the growth of the animals (group 1), mainly from 25 to 60 kg live weight. However, L. Lysine supplementation (group 2) improved the daily mean gain. The supplementary supply of protein had only a favourable effect on growth performance during the first part of the period (from 25 to 65 kg live weight). As regards the age at puberty, no