

increased by 60 p. 100 compared to the control value). The noticeable differences between the effects of WB and RB diets on Ca-P metabolism might be attributed to the 16-times higher dietary phytase activity of RB. However, other variables such as trial length or percentage of bran incorporation might explain these differences.

Our results clearly demonstrate that high dietary phytase levels or rich phytase by-products lead to a better P utilization. A reduction of requirements for inorganic P might save money since this P is still one of the most expensive feed ingredient in pig feeding.

Comparative efficiency of four iron dextran injectable solutions

H. BRUGERE

Ecole Nationale Vétérinaire, Chaire de Physiologie, 94700 Maisons-Alfort

A trial was made to compare four iron dextran solutions in 209 piglets belonging to 23 litters of 9 and 10 piglets and randomly allotted to one of the five treatments : A : 10 p. 100 iron dextran (2 ml) ; B : 20 p. 100 gleptoferron (1 ml), C : 20 p. 100 iron dextran (1 ml), D : another 20 p. 100 iron dextran preparation (1 ml), E : control (no iron). Injections were made via the intramuscular route on the first day of life. At the end of the third week blood parameters were measured. Growth and feed conversion ratio were studied up to 10th week.

At three weeks of age, results of blood analyses were as follows : red blood cell count (RBC) = 6.23 - 5.87 - 6.09 - 6.03 and 5.06 millions/ μ l ; hemoglobin = 11.75 - 11.19 - 11.64 - 11.56 and 6.52 g/100 ml ; hematocrit = 40.49 - 38.0 - 39.80 - 39.52 and 25.84 p. 100. Live weights were 6.59 - 6.76 - 6.64 - 6.67 and 4.96 kg. After weaning, growth rate and daily mean gain remained higher in treated animals.

No difference was noted in the efficiency of the four treatments. Iron concentration (10 or 20 p. 100) had no effect on measured parameters. In contrast, blood parameters and performance were higher in treated animals than in controls.

Influence of gestation and lactation food supply on the performance of sows fed a maize-based diet

J. CASTAING ⁽¹⁾, R. COUDURE ⁽¹⁾, D. CAMBEILH ⁽¹⁾, M. LEUILLET ⁽²⁾

⁽¹⁾ *Association Générale des Producteurs de Maïs, 122, boulevard Tourasse, 64000 Pau*

⁽²⁾ *Institut Technique des Céréales et Fourrages, 8, avenue du Président-Wilson, 75116 Paris*

Three gestation and lactation diets based on maize were studied. In treatments I and II the diets consisted of maize, barley, bran and soybean meal. In treatment III they only included maize supplemented with soybean meal. During gestation, treatment I supplied 280 g protein and treatments II and III, 330 g in early gestation and 400 g in late gestation (the last month). Digestible energy supply was respectively 7,700 kcal or 7,700 kcal and 9,300 in late gestation. The dietary supply remained constant whatever the parity or the condition of the sow. During lactation, treatment I supplied 150 g protein/kg of diet, treatments II and III, 180 g.

The experimental herd of 168 Large-White sows was kept in batches with weaning of piglets at 28 days of age and a weaning-mating interval shorter than 6 days, i.e. 2.48 littering/sow/year. Results concerned 350 litters per treatment. Gilts were mated at 220 days of age with a mean live weight of 136 kg.