Évolution de la variabilité du poids chez les groupes de porcs en croissance selon la variabilité initiale et la densité d'élevage

Ludovic BROSSARD (1), Marie-Christine MEUNIER-SALAÜN (1), Jean-Yves DOURMAD (1), Philippe LESCOAT (2), Jean-Noël GARDEUR (3)

(1) INRA-Agrocampus Ouest, UMR 1079 SENAH, F-35590 Saint-Gilles
(2) Nancy-Université INRA, UR340 AFPA, 2 Avenue de la forêt de Haye, B.P. 172, F-54505 Vandœuvre-lès-Nancy Cedex
(3) INRA, UR83 Recherches Avicoles, F-37380 Nouzilly

ludovic.brossard@rennes.inra.fr

Evolution of weight heterogeneity within groups of growing pigs depending on initial weight heterogeneity and pen density

The evolution, during the fattening period, of body weight (BW) coefficient of variation (CV), rank and hierarchy, was studied according to initial BW CV (7% vs 21 %) and the number of pigs per pen (10 vs 20) with a constant pen area. One hundred and twenty pigs were studied from 30 to 105 kg BW in two replicates of 60 pigs. In each replicate, effect of interaction between pen density and initial BW CV was evaluated, with one pen by modality of the interaction. Average daily gain and mean feed intake were influenced by neither pen density nor initial BW heterogeneity. The BW CV decreased significantly during the experiment in pens with a high initial BW CV, while it did not significantly vary in pens with a low initial BW CV. The Spearman correlations for BW decreased during the experiment and tended towards a lower level when the initial CV was low, indicating a gradual reorganization of the ranking of BW during the experiment, especially in low initial CV groups. Social relationships, evaluated by a hierarchy index, were independent of pen size or initial BW CV, and did not influence BW changes.