

— The digestive disorders (diarrhoea) following weaning can be largely limited through the control of the climatic conditions, the utilization of slatted floor and especially a discontinuous batch management allowing the cleaning, disinfection and non-utilization of the rooms between each passage of animals.

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### **Influence of the variations in the main micro-climatic factors of the fattening pig house**

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The experimental building used was a fattening pig house of the Danish type divided into 4 identical rooms with a capacity of 32-40 pigs each. Every room was fitted with a dynamic ventilation system (pressure above atmospheric) with rates ranging between 50 and 740 m<sup>3</sup>/h/pig and a heating system by radiation whose capacity ranged from 100 to 260 millitherms/hour/pig.

By means of an automatic regulator (I.T.P. (\*) patent) it was possible at any moment to obtain different ambient conditions from one room to another.

The climatic data were recorded continuously until the slaughtering of the first group of animals.

Six trials were made from 1976 to 1978 from which the following conclusions can be drawn:

— optimum ambient conditions are obtained at high temperatures (at least 20 p. 100 at the resultant dry temperature),

— association of a low ventilation rate (30 m<sup>3</sup>/hour/pig) and a high air velocity (2.5 m/s) leads to the best growth performance,

— the feeding level should be taken into account when choosing the ambient conditions as *ad libitum* fed pigs are less susceptible to climatic variations than restricted animals.

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### **Deodorization of pig manure in the piggery**

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The aim of this study was to test the efficiency of a treatment of manure deodorization by two air-injectors blowing directly in the dunging gutter of the piggery.

Two fattening periods were observed. In the first one the ventilation times varied from 12.5 p. 100 (5.2 kg. O<sub>2</sub>/day) to 50 p. 100 working (20.9 kg O<sub>2</sub>/day). In the second batch, from 50 p. 100 to 100 p. 100.

(\*) I.T.P. : Institut Technique du Porc.