

## VI. — HOUSING AND ENVIRONMENT

**Pig pathology in relation with the evaluation of pig houses**

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Housing conditions may have an unfavorable effect on animal health, especially in intensive rearing conditions. Some pathological cases may be related to particular aspects of the pig houses and a more precise diagnosis of herd health and housing conditions can be made. Accordingly, improvements or arrangements of the piggery may be much more efficient if they are performed also on account of animal health criteria.

**Modelling of thermal conditions in pig rearing houses**

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A computerized model was developed by C.E.M.A.G.R.E.F. to simulate the inner temperature of a pig house using climatic data and thermophysical parameters from a given piggery. It was based on a theoretical model of thermal conditions within a pig house (WUCHNER, 1983) This model allowed to explain 70 to 75 p. 100 of the total variation in the room temperature and using regional climatic data to define the thermophysical characteristics of the pig house maintaining the optimal temperature.

**Effect of room temperature and feeding level  
on growing finishing pig performance**

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Two trials were made in 36 castrated male pigs to determine the effect of room temperature and feeding level on the growing-finishing performance. Animals were kept in individual pens on concrete slatted floor at a room temperature of either 12 and 20 °C (trial 1) or 20 and 28 °C (trial 2). Three levels of feeding were associated to each tempe-