

Estimates of Water Consumption of Growing Pigs under Practical Conditions Based on Climate and Performance Data

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Data description

General:

The following applies to all files:

There were 4 pens in total. The experiment ran for 7 weeks. Phase 1 covers weeks 1 - 4 and phase 2 weeks 5 - 7.

File "Animal live weight"

The Animal live weight file contains the individual animal weights from the start of the experiment (live weight 1) to the end of the experiment (live weight 8) for all pigs.

File "Assessment data"

The assessment results for each pig can be found in the Assessment file. Tail, ear and skin lesions as well as faecal contamination of the animals were assessed. The score 0 corresponds to a positive evaluation = no abnormality or no faecal contamination. A score of 1 means that there were corresponding abnormalities or faecal contamination.

File "Climate"

The Climate file contains the minutely logged climate parameters temperature and relative humidity for the 4 pens, the central corridor and the outside area. On the central corridor, the barometric pressure was also recorded.

File "Feed consumption"

In the Feed consumption file, the total feed consumption for the 7 experimental weeks is recorded, broken down according to the 4 pens.

File "Pollutant gases"

The pollutant gas concentrations for carbon dioxide (CO₂), ammonia (NH₃) and hydrogen sulphide (H₂S) are recorded in the Pollutant gases file. These were measured in each pen at three defined measuring points. In addition, the surface temperatures for the slatted floor were determined at the same three measuring points.

File "Water consumption"

In the file "Water consumption" there are a total of 4 worksheets with data. In the table sheet data measured water consumption, the daily water consumption calculated on l/pig*d for the 4 pens is shown. Day 0 corresponds to the day of stall-in.

The other 3 worksheets contain the data for the respective experimental weeks. The water consumption is given in the units l/pig*d, l/kg feed consumption and ml/kg body weight. The evaluation variant denotes different water consumptions. They are coded as follows:

1 = measured water consumption

2 = calculated water consumption according to body weight with the equation from SCHIAVON and EMMANS (2000)

3 = calculated water consumption according to feed consumption with the equation from SCHIAVON and EMMANS (2000)

4 = calculated water consumption according to temperature with the equation from SCHIAVON and EMMANS (2000)

5 = calculated water consumption according to body weight with the equation from GILL (1989)

6 = calculated water consumption according to feed consumption with the equation from GILL (1989)

A detailed description of how the data was calculated can be found in the original article.