

## **INFLUENCE OF THE MICROCLIMATE FACTORS ON THE MAINTENANCE SYSTEMS OF THE SOWS**

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### **Abstract**

*Maternity represents the sector in which a constant number of weaned piglets necessary for the nursery sector. That's why the maternity compartments must provide constant environmental conditions both in summer and in winter.*

**Key words:** microclimate, piglets, maintenance

### **INTRODUCTION**

Maternity sector is a new step in the process flow, representing the area which produces a constant number of piglets weaned needed for the nursery. Therefore, maternity departments, especially in winter as in summer have to ensure constant environmental conditions.

In this paper we proposed to track the influence of microclimate lactating sows.

### **MATERIAL AND METHODS**

Observations were made in an increase in the pigs complex using lots of sows of Large White breed boars fitted with the same race. The control group (M) - with a total of 10 sows were maintained in cages with free maintenance, an experimental group (L 1) with a total of 10 sows kept in cages with heating from the floor, the experimental group (L2) with a total of 10 sows from farrowing cages kept in total grill and electric heating the concrete slab.

## RESULTS AND DISCUSSION

Maintenance free sows in farrowing cages, provides comfort for lactating sows and piglets. Local heating area piglets are done with infrared lamps and an attached rubber mat on the floor.

For the LI group maintained in pens with under floor heating, ensuring good conditions for raising piglets, and L2 of the consignment was found to ensure a high degree of preservation of cleanliness especially in the feeding area and in the rest of the piglets.

Microclimate factors values obtained are shown in Table 1.

Table no. 1 Microclimate parameters

Microclimate factors	Name	Groups		
		M	LI	L2
Temperature ° C	Speakers sows with free maintenance	20-22°C	-	-
	Cages with under floor heating	-	22-26°C	-
	Total cages grill and electric heating in concrete slab	-	-	28-33°C
Humidity%	Lactating sows	56-60%	60-62%	62-64%

The temperature in the nursery has a decisive role both in maintaining the health and achieving a higher average daily gain. Based on investigations it was found that lactating sows maintained at a temperature higher than 32 ° C had a feed consumption by 37% less feed, but also had greater weight loss compared with those who were between kept at temperatures between 16-26 ° C.

Humidity plays an important role in maternity especially piglets

## CONCLUSIONS

Failure to optimize the temperatures for piglets, may lead to losses through mortality in the first days of life, which may amount to 60% of the total losses from birth to sacrifice. It is very important for piglets ensure optimal air temperature in the compartment, the optimum temperature of the floor.

The temperature of the sow primarily benefiting, not to exceed 24 ° C, and piglets must be provided with a well heated area separated from the dam area.

High humidity adversely affect, in that it promotes increased microbial load in the shelter, animal sensitivity, increased morbidity and mortality in piglets.

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