

Motorial activity of piglets

T. S. Tokarchuk

ttocarchuk@gmail.com

Podilskyi State Agrarian Technical University,
Kamianets-Podilskyi, Khmelnytsky region, Ukraine

The body of young pigs differs from an adult in a number of the body structure features, functions of the circulatory, respiratory, digestive systems, metabolism, nonspecific resistance and immune response. In young pigs, constant intensive morphological and physiological changes are observed. Direct observation of animals is the main criterion for assessing their physiological state from the point of view of the owner, the technical worker of the farm. The direct visual observation method makes it possible to respond quickly to the occurrence of pathologies in animals and most often becomes the main criterion by which a veterinarian is called.

When everything is automated, there is a minimum of human intervention, and animals get sick the same way, and maybe more often. There are problems associated with the intensification of livestock production, here and technological stress; violation of herd reproduction, diseases of the gastrointestinal tract, locomotor system, metabolism, skin and others. Thus, the factor of visual observation goes into the background and the question of early diagnosis of pathologies arises.

One of the methodological approaches while solving this problem can be the use of video recorders. However, the video recordings analysis of physical activity requires methodical processing. Based on the above, the use of the methodology for studying animal behavior proposed by V. I. Velikzhaninov (1979) deserves attention.

According to his method, the behavior of animals is displayed using a system of symbols that reflect the nature of the animal's behavior: C — drinks G — gives voice; D — moves; E — consumes food; F — chewing gum; Om — defecation; Om — urination; C — sleep. The system itself is quite complex and suitable only for scientific research, and, moreover, it requires a large number of researchers for round-the-clock duty. However, the very principle of holding is quite successful.

Our goal was to develop a simplified and accessible method for recording animal motor activity. To fulfill this goal, we use classical methodological approaches to determine the motor activity of piglets, and we have simplified the registration system. Therefore, we use only three criteria for assessing the behavior of piglets: physical activity; feed consumption; recreation.

Results In order to reduce the costs of accompanying workers, researchers in animals and technical errors in the process of filling out the research protocols, we used the CR6324SR video recorder. For the effects of stresses of various etiologies, a decrease in performance, resistance and a change in the parameters of motor activity are quite often observed. Recording exclusively the motor activity of animals during the day (intake of water, food, aggressive interactions, forced and not forced movements, etc., moreover, the recording of sounds is carried out exclusively with manifestations of physical activity. The motor activity was analyzed every hour and generally per day.

These experiments will help us understand the physiological changes in piglet behavior before and after weaning. We will conduct video surveillance data when the piglets reach age of 28 days.