

RESEARCH ON USING THE PG 600 IN GILTS

G. Nacu*, Șt. Ciornei, R. Donosă, M. Ivancia, F. Nechifor

Iasi University of Life Sciences, Romania

*e-mail: gherasim.nacu@iuls.ro

Abstract

Hormonotherapy is frequently used in swine to induce fertile oestrus in both sows and gilts. The research was conducted over a year on a total of 953 Camborough sows, at least 210 days old at the beginning of the observations, divided into two groups: a control group (642 sows) and an experimental group (311 sows). In the control group were monitored the dynamics of oestrus for 27 days after transfer to the pre-breeding barn, the fertility, and the prolificacy. The appearance of oestrus was analysed in the experimental group for 21 days after transfer. 106 gilts that did not show oestrus during this period were treated with a 5 ml dose of PG 600, administered intramuscularly behind the ear. The oestrus dynamic was analysed for 6 days, along with fertility and prolificacy. After gonadotropin administration, 75.47% of the swine came into heat, compared to 38.73% in the control group. The best response to treatment was in spring (81.81%) and winter (82.60%), and the largest difference between the groups was recorded in summer (45.62%). The average fecundity rate of the gilts in the experimental group was 82.50%, being 1.22% lower compared to those in the control group. The average litter size was 10.32 ± 0.11 piglets/litter in the control group and larger in the experimental group (10.83 ± 0.12 piglets/litter). The results obtained demonstrated the effectiveness of gonadotropin treatment for optimising reproduction in gilts, particularly in those with seasonal anoestrus, oestrus synchronisation, and increased prolificacy.

Key words: gilts, PG 600, oestrus, fecundity, prolificacy