

- Adequate supply of healthy food from sustainable production systems

- Research into interfaces between crop, livestock and food sciences

To supplement the theoretical lessons in the vocational school, the stables in Lindau and in Wülflingen are regularly visited by the teachers of the Strickhof as well as other agricultural schools from Switzerland and abroad with the learners. In this framework, more than 500 students in 2020 have carried out exercises on various topics such as linear description, milking, hygiene and animal observations or correctly measuring a stable.

Under the approach "From Feed to Food", questions from the fields of farm animal science, animal health, digitalisation and smart farming are addressed in an interdisciplinary, practical and holistic manner. More than 40 scientific articles in different world known journals have been published annually and the research results have been presented at numerous national and international conferences. At the same time, numerous training and further education courses have been offered and carried out at the locations of the competence centre. The cooperation between Strickhof, ETH Zurich and the University of Zurich has grown stronger over the past four years and is setting new standards in research and education.

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**FATTING AND MEAT QUALITIES OF YOUNG PIGS OF LARGE
WHITE BREED OF DIFFERENT GENEALOGICAL LINES AND
THE ECONOMIC EFFICIENCY OF THEIR USE**

Khalak V. I.

State Institution «Institute of Grain Crops NAAS»

Dnipro, Ukraine

The purpose of the work is to study the fattening and meat qualities of young Large White pigs of different genealogical lines, as well as to calculate the economic efficiency of their use.

The studies were carried out in agricultural formations and processing enterprises of the Dnepropetrovsk region and the animal husbandry laboratory of the State Institution «Institute of Grain Crops of the National Academy of Agrarian Sciences». The object of the study was young large white pigs of the genealogical lines Azuro (hungarian selection), C 61203 Tafftus (english selection).

The control fattening of young pigs was carried out under farm conditions according to the «Methodology for assessing boars and sows for the quality of the offspring ...» [1]. Evaluation of the animals of the specified production group for fattening and meat qualities was carried out taking into account the following indicators: average daily gain in live weight for the control period from feed, g; age of reaching a live weight of 100 kg, days; back fat thickness at the level of 6-7 thoracic vertebrae, mm; chilled carcass length, cm; length of bacon half of chilled carcass, cm.

An integrated assessment of young pigs for fattening and meat qualities was carried out according to the B. Tyler index (quoted from [2]):

$$I_{\theta} = 100 + (242 \times K) - (4,13 \times L)$$

where I_{θ} – B. Tyler index, points, K – average daily gain, kg; L – fat thickness at the level of 6-7 thoracic vertebrae, mm; 242; 4.13 – constant coefficients.

The economic efficiency of the research results was calculated according to the «Methodology for determining economic efficiency ...» [3].

Biometric processing of the research results was carried out according to the methods of Lakin G. F. [4].

The research results show that young pigs of the controlled herd reach a live weight of 100 kg in $176,5 \pm 0,87$ days ($Cv = 3,27\%$), the average daily gain in live weight for the period of control fattening is $782,5 \pm 6,25$ g ($Cv = 5,30\%$), back fat thickness at the level of 6-7 thoracic vertebrae – $20,8 \pm 0,32$ mm ($Cv = 10,37\%$), the length of the chilled carcass is $96,5 \pm 0,31$ cm ($Cv = 1,68\%$), the length of the bacon half of the chilled carcass is $85,5 \pm 0,58$ cm ($Cv = 3,50\%$). The B. Tyler index ranges from 178,89 to 242,85 points.

Taking into account interbreed differentiation by lines, it was found that young pigs of the C 61203 Tafftus line were superior to their peers of the Azuro line in terms of the average daily gain in live weight for the control fattening period by 36,1 g ($td = 2,74$; $P < 0,01$), the age of achieving live weight of 100 kg – 7,2 days ($td = 4,23$; $P < 0,001$), fat thickness at the level of 6-7 thoracic vertebrae – 0,8 mm ($td = 0,70$; $P > 0,05$), length of chilled carcasses – 1,1 cm ($td = 1,50$; $P > 0,05$), the length of the bacon half of the chilled carcass – 1,7 cm ($td = 1,44$; $P > 0,05$). The difference between the groups in terms of the B. Tyler index was 8,64 points ($td = 2,94$; $P < 0,01$).

The calculation of the economic efficiency of the research results showed that the maximum increase in additional production was obtained from young pigs of the genealogical line C 61203 Tafftus. It is +3,62 %, and its cost is +171,90 hryvnia or +6,25 dollars.

Thus, the conducted studies indicate that under the conditions of the industrial complex, young pigs of Hungarian and English origin are charac-

terized by fairly high rates of fattening and meat qualities. Taking into account the linear affiliation of animals, we recommend intensive use of boars of line C 61203 Tafftus in the process of reproduction and obtaining young animals for fattening.

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