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The Effectiveness of Growing Different Hybrids Turkeys.

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ABSTRACT

Turkeys hybrid "Victoria" in all age periods outperform peers hybrid "Universal" on live weight, average daily absolute, relative growth, preservation and feed conversion.Over the entire rearing period (from 1 to 140 days) turkeys hybrid "Victoria" excelled peers hybrid "Universal" on feed costs, increase live weight by 0.71 kg and 8.61 MJ of metabolizable energy. Domestic hybrid "Victoria" has a low cost of feed and high weight gain.

Keywords: turkeys, hybrid "Universal" hybrid "Victoria", height, body weight, cost of feed.

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INTRODUCTION

The economic efficiency of breeding turkeys is to receive a maximum number of products at the lowest cost of labor and on this basis to get the maximum profit.

The experience of domestic and foreign selection turkeys showing the need for continuous work on the improvement and creation of species and hybrids to meet the requirements of time [1, 2]. New methods of selection poultry as egg and meat direction, based on the decoding of the genome and selection based on this [4, 5].

It is now deciphered the genome of the main part of the turkeys, which allows for their selection (as well as chickens) on the basis of the genome [3].For countries with a hot climate matters poultry breeding for resistance to heat stress [6].

The specialists of Federal State Unitary Enterprise Tribal Poultry Factory "North-Caucasian Zonal Experimental Station of Poultry" constantly works on the improvement of existing and creation of new highly productive genotypes turkeys.The result of this work was the creation of two lines of turkeys, which are combined with each other, providing the resulting hybrid "Victoria".

An important component in the production efficiency of meat livestock and poultry is a payment of feed [3].

The aim of our research was to study the dynamics of the payment of feed weight gain in turkeys hybrid "Victoria" in comparison with the hybrid "Universal".

MATERIALS AND METHODS

The experiment was conducted in 2014 in the North-Caucasian Zonal Experimental Station of Poultry.

After incubation, the eggs were selected on 100 daily turkey poults hybrids "Universal" and "Victoria".All turkey-poults were grown in the same conditions and feed, content from daily to 8 weeks of age in R-15 cells, and then kept in irremovable litter.

Feeding diet by experimental turkeys has been completely balanced for all nutrients.

Palatability of feed for the entire period taken into account on every week basis according to the difference between the target amount of food eaten and leftovers.

Consumption of feed per unit of growth was determined by dividing the amount of feed units contained in the feed intake, on absolute weight gain of the growing period.

RESULTS AND DISCUSSION

Our results showed that for the same technology of feeding and maintenance, change of live weight experimental turkeys occurred differently.

In the day-old live weight of turkey poults hybrid "Victoria" was 55.92 g, which is larger than that of turkey poults hybrid "Universal" at 5.92 g or 11.84% (R≤0,001).

At the age of 91 days females and males hybrid "Victoria" excelled peer hybrid "Universal" on live weight, respectively, to 1428 g, or 40.53%, and 2310 g, or 49.73% (R≤0,001).

hybrid "Victoria" was greater than that of the hybrid "Universal", respectively on 1,836 g or 38.67%, and 2,704 g, or 41.91% (R≤0,001).

At the age of 140 days of live weight of female and male hybrid "Victoria" was greater than that of a hybrid "Universal", respectively 2251 g, or 38.41% (R≤0,001) and 3473 g, or 42.15% (R≤0,001).

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On average, females and males hybrid "Victoria" superior analogs hybrid "Universal" on live weight at the age of 91 days to 1869 (45.76%) (R≤0,001); aged 112 days - 2270 g (40.53%) (R≤0,001); at 140 days of age - at 2,862 g (40.59%) (R≤0,001).

The most important technical and economic indicator is the cost of feed and nutritional substances by ration unit of final product.

During the eight weeks of cultivation per head turkeys hybrid "Victoria" has been spent on more than 846 grams of feed than the turkeys hybrid "Universal".Despite the large consumption of feed, hybrid "Victoria" had the best payment feed and weight gain. They spent per 1 kg of live weight gain is less on 0.78 kg of feed and 9.33 MJ of metabolizable energy than their peers hybrid "Universal" (Table 1).

Table 1: Dynamics by payment feed depending on growth live weight of turkeys of different hybrids (average of males and females)

Index	Hybrid	
	"Universal"	«Victoria»
Growing period from 1 to 56 days		
Consumption per 1 head: feed, g	4795	5341
metabolizable energy, MJ	57,156	63,665
The absolute weight gain, g	1757	2744,08
The cost of 1 kg of gain: feed, kg	2,73	1,95
metabolizable energy, MJ	32,53	23,20
Growing period from 57 to 91 days		
Consumption per 1 head: feed, g	7063	8022
metabolizable energy, MJ	87,157	98,991
The absolute weight gain, g	2277	3153
The cost of 1 kg of gain: feed, kg	3,10	2,54
metabolizable energy, MJ	38,28	31,39
Growing period from 92 to 112 days		
Consumption per 1 head: feed, g	5929	6545
metabolizable energy, MJ	71,919	79,391
The absolute weight gain, g	1516	1917
The cost of 1 kg of gain: feed, kg	3,91	3,41
metabolizable energy, MJ	47,44	41,41
Growing period from 113 to 140 days		
Consumption per 1 head: feed, g	9058	10801
metabolizable energy, MJ	104,258	124,319
The absolute weight gain, g	1450	2042
The cost of 1 kg of gain: feed, kg	6,24	5,29
metabolizable energy, MJ	71,90	60,88
Growing period from 1 to 140 days		
Consumption per 1 head: feed, g	26845	30709
metabolizable energy, MJ	320,490	366,367
The absolute weight gain, g	7000,00	9856,08
The cost of 1 kg of gain: feed, kg	3,83	3,12
metabolizable energy, MJ	45,78	37,17

During the period of growth from 57 to 91 days of turkey hybrid "Victoria" spent per 1 kg of live weight gain of 0.56 kg less fodder and 6.89 MJ of metabolizable energy in comparison with hybrid turkeys "Universal".

An analogous pattern was observed in the subsequent periods of growing and fattening.Thus, over the growth period from 92 to 112 days from 113 to 140 days of turkeys hybrid "Victoria" excelled peer hybrid "Universal" to recoupment for feed by increase live weight by 0.5 and 0.95 kg. On 1 kg of live weight gain spent less, respectively, 6.03 and 11.02 MJ metabolizable energy.It should be noted that in all experimental groups, with age comes an increase in the feed consumption per unit of live weight gain.The highest feed consumption

have been in the period of growth from 113 to 140 days, for turkeys hybrid "Universal" 6.24 kg, and the hybrid "Victoria" 5.29 kg.

Over the entire rearing period (from 1 to 140 days) of turkeys hybrid "Victoria" excelled peer hybrid "Universal" to recoupment for feed by increase live weight at 0.71 kg and 8.61 MJ of metabolizable energy.

According to the data of experimental research by us has been calculated economic efficiency of growing and fattening turkey hybrids "Universal" and "Victoria" (Table 2).

Table 2: Economic efficiency growing turkeys of different hybrids

Index	Hybrid	
	"Universal"	"Victoria"
Number of experimental turkeys	100	100
The live weight of 1 poultry at the age of one day, g	50,00	55,92
The live weight of 1 poultry in 140 days old, g	7050	9912
Number of turkeys in 140 days	93	95
Feed consumption per 1 kg of live weight gain, kg	3,83	3,12
Consumption of feed for rearing period, g / head	26810,00	30750,97
The absolute increase in live weight over a period of growing, g / head	7000,00	9856,08
Total weight gain from all the livestock, kg	651,00	936,33
The total costs of growing turkeys, rub.	74760,84	91001,91
The cost price of 1 kg of live weight gain, rub.	114,84	97,19
The selling price, rub. / kg	155,00	155,00
Profit, rub. / kg	40,16	57,81
Profit on all production, rub.	26144,16	54129,24
The level of profitability %	34,97	59,48

The cost price 1 kg of live weight in hybrid "Victoria" was less than the hybrid "Universal" at 17.65 rub.

Low cost live weight of turkeys hybrid "Victoria" (by the same selling price of 155 rubles per 1 kg of live weight) contributed to making bigger profits from the sale of all products at 279,885.08 rub, than from the "Universal" hybrid turkeys.As a result, the growing turkeys hybrid "Victoria" profitability is 59.48%, which is more than a group of hybrid "Universal", to 24.51%.

CONCLUSION

As a result of research it was found that hybrid turkeys "Victoria" in all age periods outperform peers hybrid "Universal" on live weight, average daily and absolute relative growth, preservation and feed conversion. Growing turkeys hybrid "Victoria" is economically sound.

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