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GROWTH RATE AND SLAUGHTERING TRAITS OF MUSCOVY-DUCK*GAME-FARM-MALLARD HYBRIDS

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Introduction:

The Muscovy duck,MD, is characterized by a high quality of meat and for this reason is used to improve, by hybridization, the slaughtering traits and the meat quality of Peckin duck,PD; in fact MD greatly differs from PD (5,6). Since also Game farm mallard,GFM, is characterized by an high carcass quality (3), we crossbred MD*GFM to determine the growth and slaughtering traits of this hybrid.

Materials and methods:

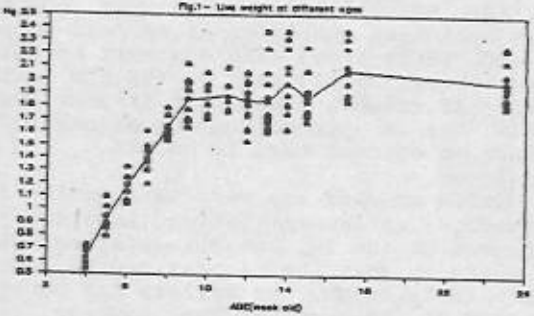
To obtain hybrids between MD and GFM, 4 mixed-gender families (ratio males/females= 3,33) were formed one month before the onset of egg production. 134 crossed ducklings, artificially hatched, were bred inside a poultry house till 4 weeks of age then they were transferred outside in small pens (2-2,5subject/mq). They were weighed weekly from 4 weeks of age to 25 weeks of age and a sample was slaughtered. The ducks were electrically stunned (200 V per 5") then bled and dryplucked. The birds were immediately dissected and the following traits were weighed: deplucked and bled carcass, neck and head, legs, giblets, gizzard, liver, ready to cook carcass,RCC, abdominal fat,AF, skin with subcutaneous fat,SKIN, breast muscles,BM, thigh and leg muscles,TLM, and thigh and leg bones,TLB.

Results and discussion:

Similarly to the cross between MD and PD, no sexual dimorfism was evident (5). For this reason we reported, in

fig.1, the mixed live weights,LW, observed from 4 to 25 weeks and, in tab.1, the evolution of the mixed slaughtering traits.

As can be observed in tab.1, the absolute LW of adult hybrids is lower than MD and is very similar to the GFM adult weight. The growth-rate however is very rapid and the birds reach 80% of their adult weight on the 8th week and 90% on the 9th week.Even if in the carcass of adult birds the BM represent over 30% of the RCC, the BM development takes place slowly while the TLM development takes place quickly as in MD (4). On the 6th-7th week, when RCC represents 50-60% of the adult RCC, the TLM represent 75-90% of adult TLM weight ; on the 9th week, when the RCC reaches 97% of



Tab. 1- Slaughtering-traits evolution.

AGE (weeks)	6	7	8	9	10	11	17
	perc. of 17w.o.-weight						g
LW	57	68	79	89	91	90	2077
RCC	47	59	71	97	96	96	1293
BM	11	14	28	60	87	97	353.6
TLM	73	87	97	97	94	96	242.3
TLB	97	101	98	105	104	100	38.99
SKIN	76	90	98	103	100	103	167.2
AF	133	133	194	215	76	57	6.00

adult RCC weight and the TLM reach the same weight as in the adult, the BM still represent only 60% of adult BM weight. The low absolute quantity of AF, 12 grams on the 8th - 9th week, and their trend with age must be noted. In fact the AF reaches its max development on the 8th - 9th week (c.a 200% of adult AF weight) after that it decreases. Similarly to MD the SKIN has a precocious development but has a lower incidence on carcass than in MD (1).

Conclusions:

The MD*GFM crosses are very interesting in order to produce high quality carcasses. Taking into consideration the late development of the BM, the slaughtering age may be delayed to 10-11 weeks so that the carcass may be conveniently sectioned and, similarly to MD, the fillets can be sold separately. The production of this cross has, however, a low efficiency (2) which must be improved to be able to furnish at a competitive price on the market this new high quality meat product.

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