



The effect of the age on the 60-days performance test of young mares in Poland

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photo Paulina Peckiel

The aim of the work was to explain if the penalty on performance tests connected with the age of tested horses is supported by results obtained by mares and what is the difference between ages groups.

Material and methods

The material consists from results of 160 mares taking part in 60-days performance tests in the year 2007, in three training centres during the period from March to November. The data included results of following traits: ability to be trained, temperament, rideability, free jumping, walk, trot and gallop evaluated under rider. The analysis of variance (procedure GLM of SAS program) was used to evaluate the effects of test and age of horses expressed by the year of the horse birth.

Results

Table 2. The least squares means for different ages groups

TRAIT	3-years LSM(SE) N=84	4-years LSM(SE) N=44	5-years LSM(SE) N=10	6-years LSM(SE) N=17	7-years LSM(SE) N=5
Character	8.1 (.10) ^a	8.1 (.13)	8.6 (.29) ^a	8.5 (.22)	8.6 (.41)
Temperament	7.5 (.08) ^a	7.3 (.11) ^a	7.6 (.24)	7.5 (.18)	7.1 (.33)
Trainability	6.7 (.10)	6.6 (.13) ^b	7.1 (.28) ^{ab}	6.7 (.21)	6.2 (.40) ^a
Rideability	6.4 (.16)	6.1 (.22)	6.5 (.47)	6.4 (.37)	5.8 (.67)
Walk	6.7 (.07) ^{dg}	6.7 (.10) ^{cf}	7.2 (.21) ^{Befg}	6.7 (.16) ^{ae}	6.1 (.30) ^{aBcd}
Trot	6.9 (.08) ^d	6.9 (.11) ^c	7.3 (.23) ^B	6.9 (.18) ^a	6.0 (.33) ^{aBcd}
Gallop	6.9 (.07) ^{Dg}	6.8 (.10) ^{cf}	7.4 (.21) ^{BEfg}	6.7 (.17) ^{aE}	6.0 (.31) ^{aBcd}
Free jumping	6.9 (.10) ^b	6.8 (.14)	7.1 (.29) ^a	6.9 (.22)	6.6 (.41) ^{ab}
TOTAL RESULT	56.2 (.50) ^b	55.3 (.68)	57.8 (1.42) ^a	55.7 (1.11)	51.8 (2.03) ^{ab}

^{Ab} statistically significant differences in rows for small letters for p<0.05; capitals for p<0.01

Table 1. The basis statistic of data

TRAIT	Mean	SD	Range
Character	8.2	0.97	5.0 - 9.5
Temperament	7.4	0.78	5.0 - 9.0
Trainability	6.6	0.93	4.0 - 8.5
Rideability	6.3	1.47	2.0 - 10.0
Walk	6.7	0.69	4.5 - 8.3
Trot	6.9	0.77	4.3 - 9.0
Gallop	6.9	0.72	4.5 - 8.8
Free jumping	6.9	0.90	4.5 - 9.0
TOTAL RESULTS	55.8	4.45	41.5 - 69.9

Table 3. The highest differences between ages groups

TRAIT	points	% of mean	% of max
Character	0.5	6	6
Temperament	0.2	3	3
Trainability	0.9	14	13
Rideability	-	-	-
Walk	1.1	16	15
Trot	1.3	19	18
Gallop	1.4	20	19
Free jumping	0.5	7	7
TOTAL RESULTS	6.0	10	10

Received results showed that penalty (if any) should be put on the individual traits affected by the age group not on the total results of performance test. The highest values for all investigated traits were achieved for 5 years old mares.