

STUDIES REGARDING THE SPEED PERFORMANCES IN FRENCH TROTTER

STUDII PRIVIND PERFORMANȚELE DE VITEZĂ LA TRĂPAȘUL FRANCEZ

MUREȘAN GHEORGHE, LUDU IOANA CAMELIA

Faculty of Animal Sciences and Biotechnologies, Cluj-Napoca, România

The paper presents the analysis of speed aptitudes in French Trotter, breed which due to its performances, can be used in time as infusion material for Romanian Trotter breed. The studies were carried on 279 heads, data being processed through usual statistic methods, on age categories, depending on parental performances and depending on the stallion which the animal taken in study comes from. As a result of studies, it was found that the variability of speed aptitudes for trot is influenced by the age of individuals, origin and genetic line which they come from, by technological factors of exploitation (feeding, maintenance, training and dressage, the young stock of breeding conditions), as also the good practical of management in studs.

Key words: French Trotter, speed performance, trot.

Introduction

The French Trotter is a breed with valuable aptitudes for trot, which also is running with real success in horse races, being superior to others totter breeds.

French Trotter has contributed to the formation of Romanian Trotter breed only in ratio of 5%, but due to its performances can be used in time as infusion material.

Trot races are considered the scientific support of animal grading of Trotter breed horses with public at large (I. Dulușeag, 2005). Due to this activity, reproduction can be easily conducted by mating arrangement between champion families, this leading to clear superior performance given the parents.

Materials and Methods

French Trotter breed, recording and doing the speed aptitudes, based on pedigree data. Data were processed by usual statistic methods, on age categories, function of parents' performances and function of stallion which animal taken in study comes from.

Results and Discussions

The analysis of data regarding the average values and the variability of performances depending on animal age taken in study, shows that the Trotter population existed in France, is characterized by performances of 73.7 seconds, that is about 1'13'', on total population, this varying function of animal age. So, from Table 1 one can see that the productive potential at the age of 4 years is 73.5 seconds, about 1'13'', value which is maintained relatively constant, with small variations between 74.18 seconds at the age of 5 years to the age of 14 years, when, the individuals' performance is on average of 74.11 seconds. It can be observed that at the age of 15 years, the speed performance of individuals grows to 75.29 seconds (1'15''), close values maintaining also at the age of 17 years and above.

Table 1
Mean values and the variability of speed performances in French Trotter function of age

| No. | Age | n | Speed performance (seconds) | | |
|-----|--------------|-----|-----------------------------|------|------|
| | | | X±SEM | SD | v% |
| 1 | 4 | 2 | 73.50±0.71 | 0.71 | 0.96 |
| 2 | 5 | 11 | 74.18±0.33 | 1.08 | 1.45 |
| 3 | 6 | 10 | 73.8±0.25 | 0.79 | 1.07 |
| 4 | 7 | 15 | 74.33±0.23 | 0.90 | 1.21 |
| 5 | 8 | 30 | 73.53±0.32 | 1.74 | 2.36 |
| 6 | 9 | 25 | 74.16±0.29 | 1.46 | 1.97 |
| 7 | 10 | 36 | 74.11±0.22 | 1.33 | 1.79 |
| 8 | 11 | 32 | 74.41±0.24 | 1.36 | 1.83 |
| 9 | 12 | 31 | 74.10±0.31 | 1.72 | 2.32 |
| 10 | 13 | 19 | 74.21±0.37 | 1.62 | 0.37 |
| 11 | 14 | 19 | 74.11±0.30 | 1.29 | 1.74 |
| 12 | 15 | 14 | 75.29±0.42 | 1.59 | 2.11 |
| 13 | 16 | 10 | 73.7±0.37 | 1.16 | 1.57 |
| 14 | 17 | 9 | 75.44±0.65 | 0.65 | 2.58 |
| 15 | 18 | 5 | 74.6±0.68 | 1.52 | 2.03 |
| 16 | 19 and above | 11 | 75.09±0.61 | 2.02 | 2.69 |
| | TOTAL | 279 | 73.70±0.38 | 6.43 | 8.73 |

From Table 2 the estimate of variability for speed aptitudes of the analyzed biological material put in evidence adequate homogeneity of the Trotter population, although that regarding parents performances it is shown differences concerning speed aptitudes, in stallion performances vary from 1'10'' to 1'20'', while that of the mare mothers is 79.15 seconds, about 1'19''. The mean value of descendant performances is 73.7 seconds, about 1'13''. This is due to the training to which the modern French Trotter was submitted and to selection realized in time.

Table 2
Mean values and the variability of speed performances in French Trotter, function of parents' performances

| No. | No. ind. | Speed performance of Vater (seconds) | Speed performance of Mother (seconds) | | | | | Speed performance of descendent (seconds) | | | | |
|-------|----------|--------------------------------------|---------------------------------------|------|------------|------|------|---|------|------------|------|------|
| | | | Min. | Max. | X±sx | s | V% | Min. | Max. | X±sx | s | V% |
| 1 | 6 | 70 | 74 | 75 | 74.6±0.22 | 0.55 | 0.73 | 73 | 76 | 73.83±0.54 | 1.33 | 1.80 |
| 2 | 26 | 71 | 74 | 82 | 78.23±0.39 | 2 | 2.55 | 71 | 79 | 74.54±0.33 | 1.77 | 2.28 |
| 3 | 14 | 72 | 77 | 82 | 79.95±0.51 | 1.92 | 2.41 | 71 | 77 | 73.79±0.39 | 0.39 | 2.00 |
| 4 | 32 | 73 | 73 | 84 | 79.59±0.57 | 3.23 | 4.06 | 71 | 79 | 74.34±0.31 | 1.73 | 2.33 |
| 5 | 67 | 74 | 73 | 86 | 79.79±0.37 | 2.54 | 3.18 | 70 | 77 | 73.96±0.18 | 1.45 | 1.96 |
| 6 | 53 | 75 | 73 | 86 | 79.88±0.47 | 3.00 | 3.75 | 72 | 77 | 74.28±0.17 | 1.21 | 1.64 |
| 7 | 34 | 76 | 74 | 84 | 79.89±0.7 | 3.05 | 3.82 | 71 | 78 | 74.12±0.30 | 1.74 | 2.34 |
| 8 | 19 | 77 | 75 | 87 | 81.00±0.97 | 3.49 | 4.31 | 71 | 78 | 74.26±0.37 | 1.63 | 2.19 |
| 9 | 15 | 78 | 74 | 81 | 76.83±1.19 | 2.93 | 3.81 | 72 | 77 | 75±0.31 | 1.2 | 1.59 |
| 10 | 4 | 79 | 82 | 87 | 84±1.53 | 2.65 | 3.15 | 73 | 75 | 74±0.41 | 0.82 | 1.1 |
| 11 | 9 | 80 | 78 | 86 | 81.4±1.4 | 3.13 | 3.85 | 72 | 78 | 74.67±0.62 | 1.87 | 2.51 |
| total | 279 | 74.59±0.13 | 73 | 87 | 79.15±0.46 | 6.44 | 8.14 | 70 | 79 | 73.70±0.38 | 6.43 | 8.73 |

Conclusions

1. The variability of speed aptitudes in trot is influenced by individuals age, origin and genetic line which they come from by technological factors of exploitation (feeding, maintenance, dressage and training, the young stock growing conditions), and also by the management applied in studs farms.
2. The analysis of speed performances in horse population of French Trotter breed puts in evidence an adequate homogeneity of biologic material taken in study.

Bibliography

1. **Duluceag, I.** (2005) – *Caii de sport*, Edit. Arena, București
2. **Mureșan Gh., O. Pentelescu, Ioana Ludu** (2005) – *Creșterea ecvinelor*, Edit. Casa Cărții de Știință, Cluj Napoca

STUDII PRIVIND PERFORMANȚELE DE VITEZĂ LA TRĂPAȘUL FRANCEZ

MUREȘAN GHEORGHE, LUDU IOANA CAMELIA
Faculty of Animal Sciences and Biotechnologies, Cluj-Napoca,, România

În lucrare se prezintă analiza aptitudinilor de viteză la rasa Trăpașul francez, rasă care datorită performanțelor sale, poate fi folosită în timp ca material de infuzie pentru rasa Trăpașul românesc. Studiile s-au efectuat pe 279 capete, datele fiind prelucrate prin metode statistice uzuale, pe categorii de vârstă, în funcție de performanțele părinților și în funcție de armăsarul de la care provine animalul luat în studiu. În urma studiilor efectuate se constată că variabilitatea aptitudinilor de viteză la trap este influențată de vârsta indivizilor, originea și linia genetică din care provin, de factorii tehnologici de exploatare (hrănire, întreținere, dresaj și antrenament, regimul de creștere a tineretului), cât și de managementul practicat în herghelii.

Cuvinte cheie: Trăpașul francez, performanțe de viteză, trap.