

T. Y. Ilnytska. Evaluation of performance of eventing horses

Introduction. The article analyses results of sport horses competing in eventing. During recent years, the Ukrainian Warmblood horses have not exhibited the desired qualities and were generally much inferior in quality than European Warmblood horses. To ensure effective selection for breeding of future sport horses, it is necessary to introduce a more objective assessment of those qualities which impact on the economic efficiency of the horse breeding industry most. In countries with developed equestrian industries, the performance evaluation of horses is a two-level rating system: first - by own sport performance of the horse and second - by sport results of the progeny.

The absence of a similar systematic evaluation in today's Ukraine significantly affects not only the quality of the produced horses, but also the desirability of the Ukrainian-bred horses among sportsmen and other potential buyers.

Breeding programs focused on sport performance will help to preserve and improve the Ukrainian Warmblood breed of horses.

The purpose of the work was to analyze and evaluate sport performance of eventing horses of various breeds. Analysis of pedigrees of the horses was made as well with recommendations for horse breeders.

Materials and methods for the research. The article uses results of eventing competitions and the pedigree of the competing horses. Results of the national eventing competitions held in Ukraine and international competitions held abroad during the period from 2012 to 2015 were used. The generally accepted method for evaluation of performance of the horses on the 20-point scale was employed. This method does not account for the number of starts of a horse during the period, but takes into account only the best result of the horse in the entire sports career. The academic method does not show the dynamics of the high-level sport performance.

For the complex evaluation of performance of the horses, a new methodological approach was applied. This method is based on summation of the scores for each successfully completed start. Competitions were stratified by difficulty level based on the classifications used by the Ukrainian Equestrian Federation and the Ukrainian Ministry of sports, as well as by the event organizers. This approach allowed identifying the horses that have consistently exhibited the best performance. This outcome emphasizes the need to employ this methodology for choosing the best quality horses (those that have shown good performance most consistently).

Conclusions. The article provides a detailed analysis of sport performance and of the pedigrees of eventing horses. It is shown that the number of the Ukrainian Warmblood horses participating in eventing competitions has decreased over the last 4 years. The number of the European Warmblood horses has increased (many of those horses were born in Ukrainian stud farms). The number of the horses bred in Ukraine, but not registered in any studbook, has also significantly increased. The study shows that the highest scores have been achieved by the horses registered in the leading European Warmblood studbooks. The Ukrainian Warmblood horses, on aver-

age, occupy the third place among stud books. The lowest scores have been achieved by horse not registered in any studbook and by horses of unknown origin.

According to the analysis using the new method, the best results in eventing have been achieved by English Thoroughbred horses. They were leading in all eventing competitions of all levels. Two rankings show that: by individual highest score and by total results of all competitions at all levels for the entire researched period. The best eventing sport horses have pedigrees with the sire being an English Thoroughbred or a Trakehner. The most successful Ukrainian Warmblood horses had the combination of the Thoroughbred lines of Faktotum and Khrustalin their pedigrees and the Thoroughbred ancestors were in the 3rd and/or 4th generation.

Recommendations are made for breeders of Ukrainian Warmblood horses.

Originality. The new method allows for the assessment of the complex of traits of sport horses for eventing. The ranking by achievements in sport provides valuable information for evaluation of the horses and of their parents.

Practical value. Recommendations are made to breeders aiming at breeding horses with high potential for performance in eventing. The new methodology can be used for statistics analysis of the genetic potential and determination of the breeding value of the parents. The results of the research will be used for developing the Selection and Breeding Program for the Ukrainian Warmblood Breed for the Period until 2020.

Keywords: horse, evaluation of performance of horses, sport performance, equestrian sport, eventing, breeding of sport horses, Ukrainian Riding Breed, ranking of sport horses