

Conformation evaluation, performance test and estimating of breeding value of the Furioso-North Star and some foreign horse breeds (Review)

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SUMMARY

In the last four years we studied the development of conformation of the Furioso-North Star, which is a traditional Hungarian horse breed. Continuing the research we are trying to answer the following question: is the current conformation and breeding value evaluation system the best for assessing the Furioso-North Star? This question is important because in recent years horses have been used mainly for competitive sports. In the breeding of the Furioso-North Star the progress in this direction is more difficult as it is not specifically a sport horse breed and the number of individuals is also quite low. Therefore it is hard to compete with the significant European sport horse breeding countries (e.g. Germany, the Netherlands, and Belgium). They have a much greater horse population and their research and support system as well as financial resources are much stronger. Nevertheless, they should act as an example to us in our horse breeding. In the following review, we are presenting the Furioso-North Star and the conformation and breeding value evaluation systems which are used in our country and some European countries as well, so we can see the similarities and the differences between the various systems and methods.

Keywords: Furioso-North Star, conformation evaluation, breeding value estimation, performance test

INTRODUCTION

After the World War II the use of horses in the military and agriculture lost its importance and nowadays we use horses for sports. In almost all countries the breeding value evaluation – and the conformation evaluation – lay the foundation of the sporting use of horses (*Mihók et al.* 2009). The Furioso-North Star is not specifically a sport horse but it can succeed in many equestrian sports, and our other saddle-horse breeds are capable of impressive performances, e.g. in show jumping. With their breeding direction and mare population it is hard to stay competitive against the more significant

international sport horse breeding countries. Therefore we have to decide whether we want to retain the original form of an old breed by using selection methods which were used when this breed was established, or do we want to collect and preserve the ancient genetic base and to breed by using the most modern methods of selection and keeping in mind the needs of the modern age. It seems easier to preserve it by developing the old breed, because the new breeding purpose fits better the requirements of the present, but we have to be careful not to lose the unique character of the breed (*Németh* 2000). It is almost impossible to breed for some equine sports with such a small number of horses using purebred breeding methods, because they will be in competition with world-breeds. These breeds have a much greater population, better material supply, results of research, supported and organized professional and developed infrastructure, and last but not least a significant representation of interests (Mihók et al. 2009). Another common problem of the traditional horse breeds is that their selection criteria was not adequate (Mihók and Jónás 2005). It would be important to eliminate this because our traditional Hungarian horse breeds are cope in a competitive system which is contrived for sport horses, but only if we use a mature and correctly executed breeding program (Németh 2000). Although the Furioso-North Star is primarily not a sport horse, we could take example about the successful European sport horse breeding countries. Their successful breeding work is confirmed by the results they achieved in different equine sports. "The national horse breeding industry, the Hungarian horse breeding culture needs information that is generated in the world to develop them further according to its talent" (Mihók et al. 2009).

THE FURIOSO-NORTH STAR

The Furioso-North Star breed is named after the two founding stallions. The bay thoroughbred called Furioso was transferred to Mezőhegyes in 1841, and in 1852 the black thoroughbred North Star arrived. Line-breeding was made for the two stallions. Four lines have been distinguished. In the meantime these lines were mixed and two new Thoroughbreds had a great influence on the breed: *Przedswit* and *Catalin*. Later on *Blokád* and *The Bart* founded stallion lines in Hungary.

After 1867 the Furioso-North Star was an envied horse breed in Europe. They were successfully used for military.

In 1920 the Romanian occupation forces took the Furioso-North Star's leading stud from Mezőhegyes and during the World War II many valuable individuals of the breed were lost again. After 1945 the breed was regenerated, but the originally military breeding purpose has changed towards the agricultural use and the carriage driving. Since the 1980's Romanian and Slovakian stallions have been used in breeding, which caused a significant improvement in the quality of the breed (*Mihók et al.* 2001, *Mihók and Bodó* 2012, *Bodó and Hecker* 2013). In 1989 the National Association of the Furioso-North Star Horse Breeders was established.

The current population of the breed is about 500 mares and 85 stallions. The Furioso-North Star is an endangered species and also an important gene reserve. Outside of Hungary, Romania, Slovakia and Bavaria have studs and a small number of pure-bred stock (*Breeding Program of the Association of Furioso-North Star Horse Breeders* 2008)!

The Furioso is a noble, massive English half-breed, medium heavy cart and saddle-horse. Despite their strong bones they have lively temperament; their movements are impulsive; their walk is loose and flexible. Their gallop should be round, flexible and impulsive. Their colours are most often black or bay, chestnut and gray are accepted, but undesirable (*Mihók et al.* 2001, *Pongrácz* 2006, *Breeding Program of the Association of Furioso-North Star Horse Breeders* 2008).

Despite their lively temperament, they have a balanced nervous system, so at work and in sports they are reliable companions for man. They are successful dressage horses, they are cope in eventing and driving competition, but more sought as saddle-, hobby- and tour-horse. Because of their calmness they are also liked in jumping (*Mihók et al.* 2001). In addition they are used as coach and carriage horses, in show jumping and for therapy riding (*Breeding Program of the Association of Furioso-North Star Horse Breeders* 2008).

CONFORMATION AND MOVEMENT EVALUATION

By "exterior" we mean the appearance of the animal. The phenotype is the expression of individual marks, which can be measured, weighted, estimated and judged (*Brem* 2003).

The conformation evaluation is an important part of the breeding programs' assessment process, not only in horses but also in other commercial animals (e.g.: sheeps, pigs, cattles) (*Breen* 2009).

The purpose of the conformation evaluation is to determine which individuals are closest to the ideal type and to make a hierarchy among horses. It also excludes those individuals which have serious hereditary conformation defects.

Every animal shows what qualities it has inherited, but its appearance is influenced by various environmental factors like feeding, season, location and rearing. The exterior is also related to the horse's age. A young foal has different rates than an adult. Therefore horses are not evaluated for registration in the first three years. During aging, positive changes turn into negative. A stallion's neck becomes heavy. Its hind legs wear out, its hocks become at an open angle and its pasterns weaken. Mares become saddle-backed, their loins sink and their bellies spread.

A horse's nutrition also influences its exterior. If the young foal doesn't get the required quantity and quality of food, it won't be possible to replace it later and the horse will remain stunted. Neither obese, nor thin horses are acceptable, because it causes health problems. Constitutional problems appear strongly in thin horses.

The use of a horse affects changes in the exterior. The neck of a horse that has been correctly ridden will be muscular upwards and hollow below, being beautifully curved. The long back muscles become stronger and the croup is well muscled (*Mihók* 2004, *Novotni* 2009).

The evaluation is carried out when the horse begins to be use in breeding. Before the evaluation we have to measure the body size of the horse. In practice the height (at the withers), the size of the girth and cannon are the most frequently measured body size (*Mihók* 2004, *Bodó and Hecker* 2013). It is important, because it refers to the development rate, the proportions and the condition of the horse. The measurements of the horse define its effort, speed and the horse's ability to work (*Tátray* 1918, *Döhrmann* 1922, *Hámori* 1946, *Schandl* 1955, *Ócsag and Fehér* 1976, *Bene et al.* 2009). The devices used to measure the body size are the measuring stick and tape, and in some cases different protractors (e.g. *Schmalz's joint protractor*) (*Schandl* 1955, *Bene et al.* 2009).

Then comes the evaluation. In Hungary the following evaluation methods are distinguished: evolving order, scoring, linear evaluation and other methods (e.g.: descriptive evaluation) (Mihók 2004, Novotni 2009, Bodó and Hecker 2013). At first the judges developing an overall impression on the horse and then comparing it with the breed standard, the type, the proposed use, its temperament and character (Brem 2003). After that they perform the detailed evaluation. The evaluation can be helped by various devices. Mészáros (1977) put a known calibrated square grid behind the animals. Then he estimated their body size by photos. As computer technology developed, we also had the opportunity to use video technology and image processing programs (Kmet et al. 2000, Tőzsér et al. 2000, Kühn et al. 2002, Mihók 2004, Maróti-Agóts et al. 2005). Drawing the shape and the descriptive coding system can also be helpful. On the shape-drawing we mark the defects of the conformation and the beneficial body development with conventional signs. Unfortunately the diagram is less frequently used. It is useful for making and explaining the evaluation (Bodó and Hecker 1998, Mihók 2004, Novotni 2009). Besides the exterior the movement of the horses should be evaluate. The quality of movement depends on the inherited nerve, muscle and movement coordination. The centre of gravity of a horse changes during movement. Therefore the natural balance of the constitution of horses is of decisive importance. If the horse's movement is in balance, it rises easily and freely above the ground in every gait. In the ideal moving horse, the impetus which starts with the hind legs is utilized without a break, rhythmically, easily and efficiently (Bokor et al. 2007).

To evaluate the movement, the regularity, dynamism, flexibility and length are judged. During handling we evaluate the walk and the trot. The canter is evaluated in free movement or with a rider. The correct movement is important because carrying forward the foot incorrectly wastes energy. The force applied is not utilized efficiently and wears away excessively the joints and tendons (*Novotni* 2009).

The importance of physical development and evaluation in horse breeding

The evaluation and selection based on appearance and the external forms are important in the judgement of horses. Nowadays in Europe the selection is based on the sport performance. However, in Hungary it is based upon the exterior and movement of a horse (*Brem* 1998, *Bodó and Hecker* 2013).

By using a conformation evaluation we can filter out individuals with a bad conformation which could have a negative effect on their future performance (*Zámbori* 2007), as well as the conformation means the relationship between form and function, because the body structure of a horse determines its movement and its resistance against stress effects (*Saastamoinen and Barrey* 2000). Today because of the indirect selection for soundness and performance a greater emphasis is on functional conformation (*Koenen et al.* 1995).

From the conformation we can conclude some traits (e.g.: style of the jumping), but it doesn't refer to other traits (e.g.: cooperative ability). But there are many exterior properties from which we can determine the utility value of the horse (*Brem* 1998, *Mihók* 2004, *Novotni* 2009). If the proportions of a horse are not good, it will influence the horse's equilibrium position. The exterior has an effect on the life expectancy. The physical development influences the way a horse can be ridden, the freedom of its shoulder, and stepping under its centre of gravity. An adverse leg structure causes the tendons and joints to wear out earlier and causes movement coordination problems. Thus it is important to try out a horse and then to evaluate it together with the results of the conformation evaluation. Its breeding value can be judged only after the progeny's evaluation (*Holmström and Philipsson* 1993, *Novotni* 2009).

Conformation and movement evaluation of the Furioso-North Star

To evaluate this breed the traditional scoring method is used. In the course of this horses are scored in detail (compared to the ideal conformation of a breed), then a hierarchy is established on the basis of their scores. The parts of the body and the other aspects are scored separately compared with a maximum score, and we get the final score after summing up (*Mihók* 2004, *Bodó and Hecker* 2013). In case of the conformation evaluation 20 traits are assessed and each of them can be given 5 point, so horses can get a maximum of 100 point and in the movement evaluation 8 traits are evaluated. For 6 aspects judges can give 20 point and for 2 aspects 5 point, so at last horses can get a maximum of 130 point. Walk and trot are evaluated in handling, canter is evaluated in free movement or with a rider. Jumping abilities are evaluated only during performance testing.

Conformation evaluation in abroad

As we will see in abroad the linear conformation evaluation is widely spread. This method is routinely used mainly in cattle (Pearson et al. 1987, Vostry et al. 2012), but for exaple by the assessment of Dutch sport horse (KWPN) it is used for more than twenty years (*Posta* 2012a, 2012b, *URL*¹). It is also known and used in Hungary but we use it mostly also in cattle breeding. In this evaluation the numbers express how different the individual properties are from the average, (locating the traits between the possible two biological extremes) (Breen 2009). With the linear evaluation we compare the physical developments and statistically evaluate the prepotency which refers to the conformation. Linear evaluation uses a scale of 1 to 9 value (*Posta* 2012a, 2012b, URL¹). It allows the numerical description of the conformation properties which are essential for computer rating or their display on a linear scale between the extreme biological values (Posta 2012a, 2012b). In a linear scale, the ideal conformation appearance of a certain part of the body is rated with 5 (e.g.: the middle set on neck is ideal for sport horses). For other aspects 9 means the desirable conformation development (e.g.: length of neck) (Novotni 2009). With this method the conformation can be described more accurately, but these scores can't be added together, so we have to use a particular evaluation system (Bodó and Hecker 1998, Mihók 2004, Novotni 2009). The advantage of the linear evaluation system against scoring system is, that it provides descriptive informations about traits considered important to the breed (Breen 2009). Besides Breen (2009) highlighted in her study, that the judges using the 78-100% of the linear scale during the evaluation, while in case of the traditional method it was only 70-92%. During linear evaluation the consistency between judges was also better. This can be improved further with judge trainings and with better experience. The disadvantges, that we can not establish an order among evaluated horses.

In the light of the received evaluation, people who are interested in sport horse breeding can conclude about the appearance of the horse, while the traditional evaluation reveals how much an individual differs from the ideal, but there is no reference to the direction of the difference. So we can say that linear scoring system is giving more reliable informations about transmitting abilities of sires and a more useful and accurate evaluation of the breeding stock. Against traditional evaluation, the breeding value based on linear scoring system provides better description of a stallion progeny for individual traits. The collected information can help breeders in their breeding decisions and how can they correct the faults in their mares (*Breen* 2009, *URL*¹). It is important that the evaluation should be repeatable and reproducible. The reliability of the evaluation is improving from the criticism at several locations and the average 25 progeny per year per stallion. Since 2003 the Belgians and since 2009 the Irish have done their linear evaluation based on the Dutch method. The exterior of the mares is judged when they are 3-4 years old, and the performance on both genders is judged in the free jumping corridor when they are 3 years old. Not only in the case of sport horses imply the linear evaluation system progress in breeding, but in the case of traditional breeds (e.g.: *Old Kladrub horse, Andalusian*

horse) (Jakubec et al. 1999, Molina et al. 1999, Jakubec et al. 2007), ponies (e.g.: Haflinger horse, Shetland pony) (Van Bergen and Van Arendonk 1993, Samore et al. 1997), massive warmblood breeds (e.g.: Friesian horse, Irish Draught horse) (Pretorius et al. 2004, Breen 2009) and coldblood breeds (Belgian horse, Noriker, Croatian Coldblooded) (Ivankovic et al. 2005, Vostrỳ et al. 2009). Ivankovic et al. (2005) highlighted in their study that the systematic and routinley using of the linear evaluation system can help to gain more knowledge about our autochthonous horse breeds. Besides these in Denmark and Sweden the installation of the linear evaluation is planned in addition to the current judging system.

A Swedish research team advocated developing a linear judging system to describe temperament and behaviour. During their research, they found that good tempered horses perform better. The calm, attentive and cooperative horses got higher scores. Their research also shows that muscular and skeletal problems are the most common reason to dispose of saddle-horses. Therefore, when judging horses, increased attention is paid to hooves and other medical components. Low heritability values were estimated for different properties (*Posta* 2012a, 2012b).

PERFORMANCE TEST AND ESTIMATION OF BREEDING VALUE

Besides the conformation evaluation, breeding value is also an important part of breeding. If we would like to breed an animal, we must know what values are represented and what kind of offspring will be produced. In breeding we use the most valuable individuals according to the traits which were defined in the section on breeding purpose. It is a relative value, because it refers to the traits that marked in the breeding purpose. We always compare the individuals of a population, so if the composition of a population changes, then the value of the individual will change too. Therefore it is important to emphasize, that the breeding value is true only in the terms of the group that is being studied. The breeding value is the individual's genetic value compared to the average of the population, which express the breeding animal's hereditary ability (*Tőzsér and Komlósi* 2004, *URL*²).

The estimation of a horse's breeding value is mostly based upon the performance test. The purpose of a performance test is to determine the genetic value of the population. A performance test done by professionals ensures the progression of the breed.

The estimation of the breeding value is made in two parts:

- first step: determine the competence for production capacity during the conformation evaluation and the performance test,
- second step: determine the real breeding value and the heredity qualities by the investigation of the progeny's performance and conformation evaluation.

In Hungary the tasks of the performance test (STV) show differences by breed (e.g.: Lipizzan, Gidran, Furioso-North Star), by use (e.g.: jumper, dressage or carriage horse), and there is differences in case of race horses. At first, horses take part on conformation evaluation, then during the movement

evaluation judges are rating the regularity of walk and trot, the length of stride, the ability of stepping under its centre of gravity. In a free-jumping course they rate the walk, trot and gallop without a rider, and on a smaller track with rider. Then follow the assessment of the jumping (freely and with rider). In Hungary the performance test has three levels (STV I, STV II, STV III) so the height of the obstacles have to evolve and raise gradually taking into account the horse's age, preparedness, facility and ability. In major performance test (STV II and III) the movement evaluation includes dressage and show jumping tasks. The performance test also includes the criticism of behaviour, and the examination of the strength of the horse's body (Zámbori 2007, Bene 2013).

Performance test and estimation of breeding value of the Furioso-North Star

The three year old colt of this breed has to be shown at the centre or regional breeding inspection and stallion test organised by the Association. The suitable horses go to a central performance test station where they take the STV I test. The privately owned stallions which complete it get a temporary breeding permission, but the state stallions have to take the STV II test. A stallion which passes this exam gets a public breeding classification. The stallions have to take an STV III test or they can take part in public equestrian sport competitions with proper results.

The purpose of the evaluation of mares is to develop their rank which is registered in the Stud Book of the Association. The estimation of the breeding value of the mares consists of five main parts:

- rating of the origin: based on the ancestors in the fourth row,
- conformation evaluation: the evaluation is done on a 100-point-scale evaluation form,
- movement evaluation: it judged in walk and trot gait. A maximum of 130 points can be given, which includes the preparedness of the horse and also the classification of its behaviour.
- rating of the performance:
- use and sports performance: performance evaluation, county competition, regional competitions, national competition, international competition, international championship,
 - breeding results:
 - number of foals
 - involving the mare and stallion progeny for breeding.
- evaluations based on a progeny's performance: the progeny's performance calculated on the basis of the above and 50% of the amount is added to the individual's number.

These qualifying criteria which may change and the best results will be counted in all cases (e.g.: the points of the conformation evaluation). The mares are also ranked within the sub-units, but the final ranking is reached using the total scores of the sub-units, (the so-called breeding value score) (*Breeding Program of the Association of Furioso-North Star Horse Breeders* 2008).

Performance test and estimation of breeding value abroad

It is really important to define breeding values more accurately. Breeding organizations are leading the way, recognising that accurate breeding values have a positive effect on the horses' market value.

We use three types of performance test systems to define breeding values: a central test, an on-farm test, and racing-results. The French and the Irish use the racing results, the Danes use the results of the performance test, Germans and the Dutch combine those two methods.

Germany is at the forefront in the estimation of breeding values. Lately they eliminated the systematic error of their system (horses' preselection for sport and take into consideration the results of the rated horses). A two-step selection was introduced. This is based on the stallions' central performance test and on the results of the examination of the progeny of the mares. Stallions are selected on their performance on the stallion test. Then they are tried for breeding for a year. The second selection step is the examination of the progeny of the mares.

In Germany the current breeding valuation method is based on a repeatable individual model, which takes into consideration 15 traits derived from 4 main sources:

stallions' performance test (walk, trot, gallop, ability of the way the horse can be ridden, jumping freely and jumping with a rider),

mares' performance test (walk, trot, gallop, ability of the way the horse can be ridden, jumping freely), young (4-6 years old) horses' show jump and dressage competition results, including the horses not yet rated,

results of the dressage and show jumping competitions (including horses not yet rated).

The system has two major advantages: all contestants are included in the study, and almost all information about the horses' performance-data is taken into consideration. Its accuracy is increasing and the distortion of the breeding values is being reduced.

In the Netherlands the results of the tests and the competitions are combined, but for them the stallion test is more important than the performance test because the features that are rated in the stallion test have a favourable genetic connection with the features which are described for breeding purposes. The correlation between the Show jumping features of the stallion test and the performance in show jumping competition was more than 0.80, so it is suitable for selection purposes. The stallion test examines 7 features: walk, trot, gallop, balance, arriving to the ground, techniques, and power. These features are rated by a three member committee, (with an unchanging composition) to reduce the distortion of the breeding values. In the stallion test, the estimated heritability value of the gallop was 0.25, and the trot was 0.5 (*Mihók et al.* 2009).

In the KWPN breed mares and sires have separate performance test. In case of the mares there are two types of tests: the IBOP (Individual Suitability Test for Horses) and the EPTM (Mare Performance Test). The IBOP is a one-day test where not only mares, but geldings and unapproved stallions age 32 months and older can take part. During IBOP there are separate tasks for jumpers, dressage horses,

harness horses and geldings and they are also evaluated differently. The EPTM is an ability test for young horses on which geldings may also attend. Breeders can choose between two options according to the horse's level of training: a two-week test or a five-week test.

Sires must go through a three step selection process first. Then follows the preformance test during which their natural sport talent and temperament are assessed. Breeders can choose between three options: a 70-day spring performance test immediately follows the KWPN Stallion Selection, a 50-day fall test and a following 50-day spring test. The latter two are preceded by two evaluation on which the stallions are presented under their own riders (URL¹).

Since 2005 in Sweden the estimation of breeding values has been based on the Exam of Young Horses, the Saddle Horse Classifying Exam and the results of competitions. This system is suitable to choose the mares which are capable of breeding and it is an efficient device for the early progeny test of stallions. In the stallion test, the genetic correlation of jumping features was estimated to be around 0.87. In Sweden horses could be used for breeding with only the results of the competitions and without the central stallion test. They are searching for a performance level over which a stallion could improve the population despite its lack of qualification in the stallion test. It works here for some talented stallions, but it is not precise enough to select stallions for breeding only from their competition results (*Mihók et al.* 2009). Since 1986 they have estimated breeding values from the results of show jumping and dressage. The results of the horse trials have not yet been taken into account in scientific analysis. Low heritability was estimated for the lifetime performance in the horse trials, and research found a moderate genetic connection between performance in Show jumping and horse trials. There is no genetic correlation between the performance in horse trials and efficiency in dressage. Researchers suggested the estimation of breeding value in the horse trials (*Posta* 2012c).

In the Scandinavian countries (Denmark, Finland, Norway and Sweden) an "Interstallion Project" is now being developed (Philippson and Pedersen 2001, Posta 2012a). It means horses from these countries have an integrated genetic evaluation and definition of the breeding value of stallions. Their purpose is to develop an evaluation system which reliably predicts real genetic values. In this consolidated system the number of progeny of stallions that used in several countries could increase. With the increasing number of progeny that have sport results we can estimate breeding values more accurately. In the Swedish sport horse population, 190 progeny were estimated per stallion. Although the sizes of the horse populations of the four countries have significant differences and there are also differences in their breeding value systems, the development of an aggregate breeding value among all four countries is still possible, because there are genetic correlations between the features that were examined. Since they use the same stallions, there are genetic connections between the populations (Bruns et al. 2004, Posta 2012a).

In France and Belgium the estimation of breeding value is also based on competitions. The breeding competitions in France are organized for 4 year old horses and in Belgium for 7 year old horses. Stallions, mares and geldings are take part on it. The system is based on the value of more than 0.9

genetic correlation that was found between the results of the two consecutive years of show jumping, and on a genetic correlation above 0.9 between the results of the 4 and 7 year old horses. If we put horses into breeding after their performance at a young age, it will shorten the generation interval (*Mihók et al.* 2009). Posta's (2012c) information about what was said in the Horse breeding Committee of the 63rd EAAP Congress held in 2012, reports that in the future Belgian researchers and breeders would like to increase the precision of the evaluation of Belgian bred horses that is based on their performance. They would like to take into account the international sport results. They think that the estimation of breeding value that is based on performance shows a high degree of uncertainty, so it is important to take into account the international show jumping results in addition to the national results in the genetic evaluation of show jumping performances. Taking into account of international data has increased the genetic variance of the population and changed the sequence of the stallions on the leader boards. However in this context negatives are revealed. Since the progeny usually take part in international competitions from the age of 8 to 10, the generation interval could increase in the selection, in contrast with the methods described above.

CONCLUSION

As described above, we can see that there are some differences between the methods that used in Furioso-North Star and abroad. In terms of conformation and movement evaluation linear scoring system is more popular than in Hungary, although this method is usable in any of the horse breeds. In case of performance testing we could determine, that in abroad (e.g. in the Netherlands) the system is much more serious than in Hungary. They filter their horses much better, the horses must perform a multistage selection process before performance testing and they undergo a strict veterinary control. In process of estimation of breeding value sometimes competition results get greater emphasis than the results of performance testing. They even try to send them to compete as soon as possible about the early estimation of breeding value. Naturally in case of the Furioso-North Star competing is an integral part of estimation of breeding value, but much smaller percentage of the horses are competing.

Küllemi bírálat, tenyészértékbecslés és teljesítményvizsgálat a furioso-north star és néhány külföldi lófajta esetében (szemlecikk)

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ÖSSZEFOGLALÁS

Az elmúlt négy év során egy tradicionális magyar lófajta, a furioso-north star (mezőhegyesi félvér) küllemi alakulását tanulmányoztuk. Az eddigi vizsgálatokat tovább folytatva többek között arra is keressük a választ, hogy valóban a jelenlegi küllemi bírálati és tenyészértékbecslési rendszer a legmegfelelőbb a furioso-north star értékelésére? Ez a kérdés azért fontos, mert néhány évtizede a lovak legfőbb hasznosítási irányává a sport vált. A furioso-north star tenyésztése esetében az ilyen irányú előrehaladást nehezíti, hogy a fajta nem kifejezetten sportló és az egyedszáma is viszonylag alacsony. Így nehéz felvenni a versenyt a sportlovak tenyésztésében élenjáró európai országokkal (pl. Németország, Hollandia, Belgium, stb.), hiszen sokkal nagyobb lóállománnyal rendelkeznek, a kutatási és támogatási rendszerük, valamint az anyagi hátterük is sokkal erősebb. Ennek ellenére – vagy éppen ezért – lótenyésztésünkben példaként járhatnak előttünk. Ezt megalapozva, az alábbi szemlecikkben röviden bemutatjuk a furioso-north star fajtát, valamint a hazánkban és az említett európai országokban alkalmazott küllemi bírálati és tenyészértékbecslési rendszereket. Így láthatjuk, hogy milyen hasonlóságok, illetve eltérések vannak az egyes rendszerek, módszerek között.

Kulcsszavak: furioso-north star, küllemi bírálat, tenyészértékbecslés, teljesítmény-vizsgálat

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