

Identification system of horses in Hungary

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SUMMARY

There are several methods for the identification of horses

Advantages and disadvantages of chips, hot branding, deep frozen figures, use of blood groups, other polymorphic blood systems or DNA, branded marks on hoof, the use of description of colour and marks are discussed.

Presently the hot branding is obligatory in Hungary. It can be considered as very useful in the practice, however disliked by animal protectionists. The problem of stress is disputed.

The everyday practice, the marks and figures with some examples are presented.

An interesting by-product of hot branding is the not everywhere known distinction between the grey and roan horse colour.

The role of Horse –Inform system is presented as modern electronic way of registration of identified horses.

INTRODUCTION

There are several methods of identification of horses. The most important ones, which are used – either separately or together with other methods. – are as follows:

- description of colour, markings and whorls
 - hot branding
 - blood groups and other polymorphisms
 - DNA
 - chips,
 - branded marks in hoof,
 - deep frozen figures on neck or body,
 - Tattoos, etc.
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- In Hungary the traditional hot branding is used besides the obligatory description of colour and marking. The blood groups, polymorphic blood systems and DNA are more and more used also in identification of horses.

DESCRIPTION OF COLOUR AND MARKING FOR IDENTIFICATION

- The description of colours and markings is used everywhere and obligatory in horse passports and pedigrees and stud books. In hypology, however, there are two ways of investigation: the inheritance of different colours and the usefulness in everyday practice. There are many practical problems of identification, because sometimes it is not easy to make distinction between the different terms and names of colours, first of all in international level considering several languages.
 - It was the reason for creation of the following system using the colours for identification.
 - **Principal colour**: simple determination on the basis of the colour of coat, mane, and tail, after shedding of the foal's coat. Characteristic for the whole life of the horse can be determined for the first glimpses without doubt.
 - Examples in logical order
 - Chestnut – yellow dun – chestnut roan – chestnut leopard – chestnut paint
 - Bay-brown – red dun - red roan - red leopard - red paint
 - Black – blue dun – blue roan – black leopard – black paint
 - Grey (greying with age)
 - White or cremello
 - **Variety** Within the principal colours there are some varieties, which are also permanent for the adults (e.g. flaxen mane and tail).
 - All the other terms like palomino or appaloosa can be considered as synonyms.
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- The other two terms for differentiation between colours, – shade and state, – are not suitable for identification of horses, because they are too subjective and not permanent for the whole life of horses.
 - **Shade** : There are some shades within principal colours. The innumerable nuances are too subjective and therefore unusable in identification (e.g. light, middle, dark, very dark, red, hazel-nut, chestnut, summer, sour cherry, etc bay-brown).
 - **State** : there are different states of the colours of horses which change according to the nutrition, season, sun shine, age etc. (e.g. dappled, golden, flea bitten)
 - The description of colours, markings and whorls is running on international way also in Hungary.
 - There are, however, some problems in unambiguous use of terms. Some examples
 - .It is not easy to distinguish between the young dark grey and the roan horses, but it is easy by the invention of S. Patay: the hairs on hot brandings of greys are white (if any) and that of roans are dark In English bay, bay brown and brown terms are used. For unambiguous use only one is possible, may be, the bay-brown could be used in international passports.
 - The Schimmel, and Fuchsschimmel for roan colour is a special problem for German nomenclature
 - ///It would be interesting once at another EAAP session, to discuss about the colour systems and nomenclature of different nations and languages and for international use///

HOT BRANDING

- Hot branding marks are traditional in Hungary like in other countries. They are useful in identification if properly implemented.
- The hot branding is applied at the time of weaning of the foals i.e. about 5 -8 month of age. The procedure is carried out by the supervisor of the Horse Breeders' Society. The protocol of the procedure should be sent to the Horse Information Centre.
- The Breeders' Associations have the right to decide the acceptance of a given foal to the stud book of the breed and at the same time to get the special branding mark of the breed (Figure 1.). Horses belonging to the accepted breeds get the branding on the back (saddle place) and other horses on the neck side (Figure 2.).
- The hot branding of animals as a cruel or brutal method is attacked everywhere by animal protectionists.
- In the practice, however, the whole procedure i.e. many foreign people, a table with white papers, the smell, the voices and its strong catching etc are more stress factors for the young foal than the pain by hot iron itself.

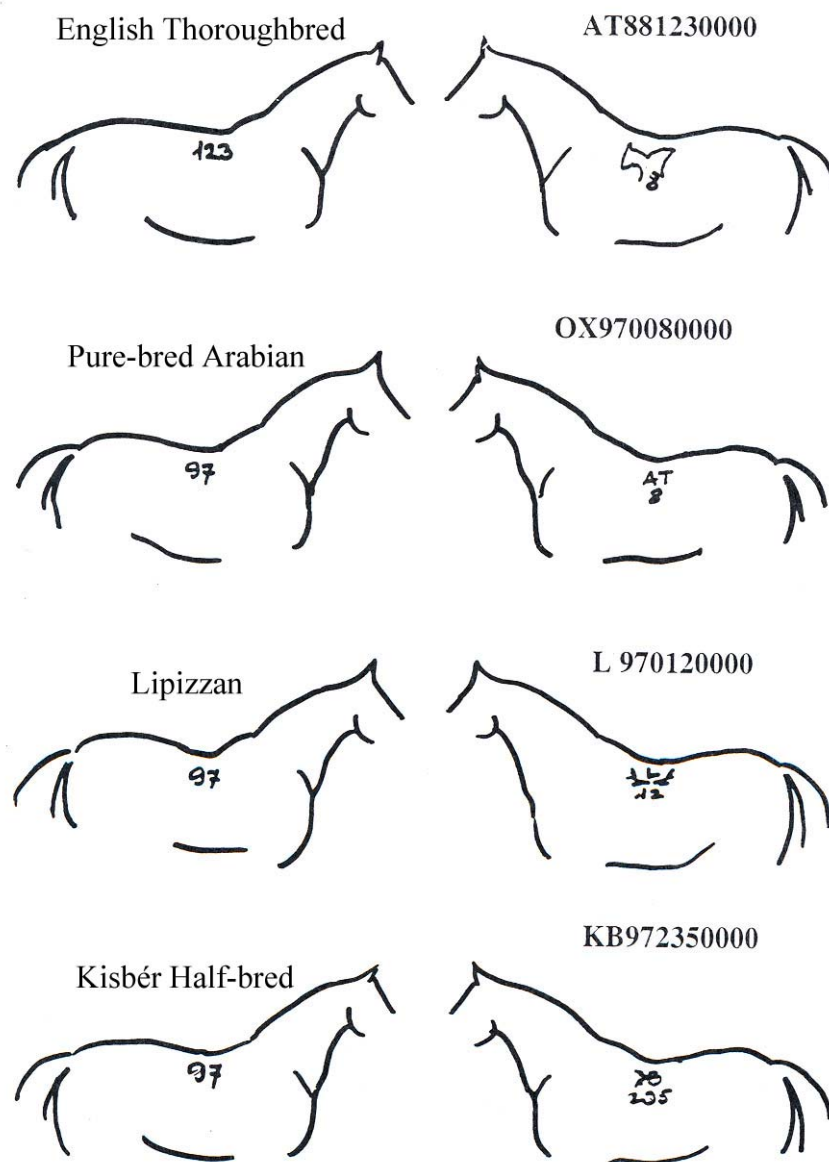


Figure 1.: Hot branding of some breeds

Horse from Zala county (born in 1997)

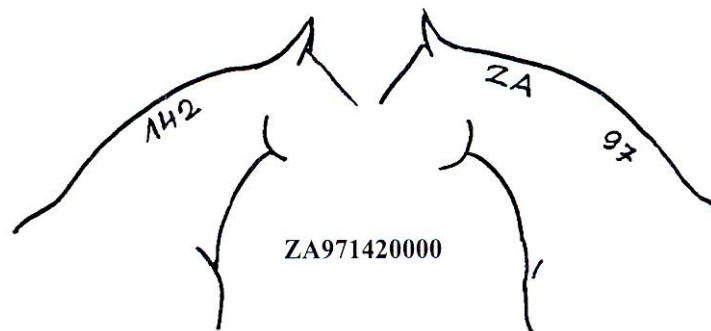


Figure 2.: Hot branding on the neck side

PARENTAGE CONTROL, THE ROLE OF HORSE INFORMATION CENTRE

- The registration of horses starts with a conference at the beginning of the year. A list of licensed living stallions (the deep frozen sperm incl.) is registered and controlled for all the counties of the country.
- The next step for registration of foals is the protocol of mating, to be sent to the Centre. The next certificate will be the foaling register.
- In the case of some breeds the parentage control is obligatory. Earlier blood groups and polymorphic blood systems were in practice, now the DNA microsatellite investigation is used. The laboratory of OMMI (Institute for Agricultural Quality Control) is responsible for the control of parentage.
- Blood groups, polymorphic systems and DNA data can always be used for the identification of horses and for the parentage control. There are some breeds, and the breeding stallions, where the use of them is obligatory and optional for others.
- All the data are stored by electronic way and useful for everyday practice, pedigrees and establishing of stud books included.

REFERENCES

- Bodó I. Patay S (1989): The international nomenclature of horse colours 40th Annual Meeting of EAAP Dublin. Abstr. 344.p.
- Bodó I. Patay S (1990): The international nomenclature of horse colours 41st Annual Meeting of EAAP Dublin. Abstr. 453-454.p
- Bodó I., Hecker W. (1992): Lótenyésztők kézikönyve Manual for horse breeders. Mezőgazda Kiadó. Budapest p. 429.
- Országos Mezőgazdasági Minősítő Intézet (2001) : LÓ ENAR (Guidelines for functioning of uniform individual identification system of horses OMMI Budapest p.44.
- Pacher D.E., Talib M..Ali (2002): Te colours and Markings of Horses. P. 70.
- Patay S. (1974): Personal information.
- Royal College of Veterinary Surgeons (1984): Colours and markings of horses London p.10.
- Sponenberg D.P. and B. Beaver (1983): Horse colour Texas University Press p.124
- Service des Haras (1986): Signalement des chevaux et poneys Paris p.44.
- Tóth Zs., Bodó I., Sölkner J., Curik I. (2004): Genetic diversity of the hair colour in horses. 55th Annual Meeting of EAAP Bled, Abstr. p.316.