

**ANALYSIS OF THE PERFORMANCE AND BREEDING VALUE OF HORSES
REGISTERED IN THE TRAKEHNER ASSOCIATION IN POLAND CONSIDERING THEIR
AFFILIATION TO FAMILIES OF MARES**

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Abstract

This study involved a population of Trakehner Horses and horses of Eastern-Trakehner-Prussian origin registered in the Trakehner Association in Poland. A qualitative analysis was carried out for horses belonging to 33 selected mare families. The selected families were characterized in terms of performance and breeding value of the horses belonging to them. The analysis included results of: performance test for stallions and mares, shows and breeding championships, and sports competitions. The highest quality assessment was noted for horses belonging to families of the following mares: O - Diana, E – Agresja xx, E – Balanda xx, and E – Avesta xx. In terms of gait quality, of high quality were also horses from the families: T – Chwała, E - Chiazza xx, and E – Iglawa xx. The analyses carried out within the study indicated a high performance and breeding value of horses belonging to the families examined.

INTRODUCTION

An analysis of conformation and motor traits of a horse constitutes a basic criterion of the selection process in its initial phase. In the later stages of selection, a significant role is attributed to an evaluation, carried out with various methods, of the performance and breeding value of animals subjected to the selection process as well as their relatives (NOWICKA - POSŁUSZNA AND LISZKOWSKI. 2001a NOWICKA-POSŁUSZNA AND LISZKOWSKI. 2001b, GERINGER AND KIELBASIEWICZ 2004). Knowledge of the performance and breeding values of individuals belonging to sire's lines and dam families is of key significance in horse breeding in the selection process of pairs for reproduction. The success of the Polish breeding of pure bred Arabs and foreign breeds, in which practical use is made of the results of analyses of the performance and breeding value of individuals belonging to dam families and sire strains (TAVERNIER 1990, SCHWARK ET AL. 1993, SPRENGER ET AL. 1993), point to the indispensability of conducting such analyses without which the selection of individuals for mating is burdened with a higher risk of failing to achieve the assumed selection response.

MATERIAL AND METHODS

The experimental material were mares and stallions from Polish and foreign (Lithuania, Belarus, Ukraine) breeding stations, registered in the Trakehner Association in Poland in the years 2000-2006, in a total number of 322 and 125 individuals, respectively, as well as their relatives. The source of data on the horses were: breeding records kept by the Trakehner Association in Poland, stud books of Wielkopolska breed horses (Kwłkp) (volumes I–VI) as well as registers of sports horses by CHACHUŁA AND BUCHOLC-FERENSTEIN (1981) and ŁOJEK (1995).

Based on the data collected, the following analyses were carried out in the study:

1. Pedigree analysis of horses that enabled determination of horses affiliation to mare families. According to the methodology described by SCHILKE (1965), the first mare used in the postwar breeding of Trakehner Horses in Poland was acknowledged as the foundation mare. In front of the name of the family, a letter was added that indicated the origin of mare, i.e.: T – for families established by mares of Trakehner origin, O – for the family in which the foundation mare was of East Prussia origin, E – for the family in which the foundation mare was Thoroughbred, A – for the family in which the foundation mare was Arab, and S – for the family in which the foundation mare originated from other warmblood breeds. In some cases, apart from family name, the name of the mare regarded by some hippologists as the foundation mare was provided in brackets.
2. Qualitative analysis of horses belonging to 33 selected mare families, whose population was not smaller than 5 horses. The conformation and gait of horses were evaluated based on quality classification scale used by international associations of Trakehner Horses Breeders, in which points from 1 to 10 are scored for particular traits (type, conformation, limbs, walk, trot, gallop, general impression). The data collected were elaborated statistically by calculating mean values and standard deviations. The significance of differences between mare families was examined with one-way analysis of variance and Duncan's test using Statistica software (ver. 6.0 model Anova).
3. Analysis of the performance and breeding value of horses belonging to the selected families.

This involved the characteristics of results of performance tests as well as breeding and/or the sports career of selected individuals belonging to the examined families.

RESULTS

Based on the pedigree analysis, 33 mare families were discriminated whose populations counted from 5 to 35 horses. The results of the qualitative evaluation of horses belonging to those families were presented in Table 1.

The mean quality scores of the group of horses selected for analyses (447 animals) accounted for: type – 7.2, conformation – 7.1, limbs – 6.8, walk – 6.9, trot – 7.3, gallop – 7.0, general impression – 7.1, total 49.5 pts.

The highest total quality assessment ($x > 51$ pts.) was noted for horses belonging to the following families: O - Diana, E – Agresja xx, E – Balanda xx, and E – Avesta xx. Horses of these families were characterized by one of the highest mean scores both for the so-called “static” traits (type, conformation and limbs) as well as motor traits, i.e. quality of walk, trot and gallop (tab. 1).

In terms of type, conformation and limb build, high quality scores were also given to individuals from the families: E - Wendy xx (type – 7.7, conformation – 7.4, limbs – 7.2 pts.), and E - Iglawa xx (type – 7.5, conformation – 7.5, limbs – 7.2 pts.). In turn, horses of the following families: O - Rurka NU (type – 7.7, conformation – 7.2, limbs – 6.8 pts.) and E – Jolantina xx (type – 7.8, conformation – 7.5, limbs – 6.4 pts.), with relatively good scores for type and conformation and relatively low rates for limb build.

In the case of gait quality of the horses examined, the highest (statistically significant) mean rates for trot and gallop were reported for the above-mentioned individuals belonging to the families of mares: E - Balanda xx (trot – 7.4, gallop – 7.7 pts.), E - Agresja xx (trot – 7.6, gallop – 7.7 pts.), O – Diana (trot – 7.7, gallop – 7.6 pts.), E – Avesta xx (trot – 7.5, gallop 7.5 pts.), as well as those belonging to the families of mares: T – Chwała (trot – 7.7, gallop – 7.4 pts.) E - Chiazza xx (trot – 7.1, gallop – 7.4 pts.), and E – Iglawa xx (trot – 7.3, gallop – 7.3 pts.).

Good quality trot was reported for horses belonging to the families of East Prussia mares (O): Wisienka, Rurka, Parada and Jagoda. Mean rates for trot quality obtained by individuals from those families accounted for 7.8, 7.6, 7.5 and 7.5 pts., respectively. In turn, the quality of gallop and walk of these horses was evaluated at a level of the mean for the population under scrutiny.

The mean rate for walk quality of all horses ($x=6.9$ pts.) was the lowest amongst the three gaits evaluated. The highest mean score was reported for horses from the family of O – Kraska (7.5 pts.), whereas the lowest was for those from the families of O – Korsyka (6.6 pts.) and O – Najada (6.6 pts.).

From the point of view of extending the period of horse exploitation, of significance is limb build. The high rates for this trait, in respect of the entire population examined ($x= 6.8$ pts.), were noted for horses of the following mare families: E – Damura xx (7.4 pts.), O – Diana (7.3 pts.), E – Iglawa xx (7.2 pts.), E – Wendy xx (7.2 pts.). Some lines were characterized by a low mean rate for limb build and relatively high rates for the quality of trot or gallop (O -Wisienka, E – Agresja xx, O - Loża, T - Chwała, O - Hortensja). Such a situation is likely to exert a negative effect on the length of exploitation of horses from these families and, thus, on their performance value.

In addition, an analysis of quality points found the worst results of the qualitative assessment for representatives of mare families: T - Partie and O – Paniusia. The horses of these families obtained low mean rates for type, conformation and limbs as well as for the quality of gaits. The low quality gaits were also observed for individuals originating from the following families: O – Korsyka, O – Malwa and to a lesser extent for those of O - Arizona (poor rates for gallop). In turn, horses from the families: O - Wenus and O – Wisienka presented an undesired type and faulty limbs.

Performance and breeding value of families

The family of T – Chwała mare foaled in 1944

A significant measure of the performance value of horses is the number of progeny with a high performance and/or breeding value. In this respect, one of the most distinguished families in the breeding of the horses examined is that of the Chwała mare. Two champions of Trakehner stallions originate from that family, i.e.: CEDRUS foaled in 1993 (by Ogar out of Cerkwica by Kondeusz) of 2004 and CZEDAR foaled in 2003 (by Ignam out of Czarella by Akcept xx), the V-Champion of the I International Northeastern Trakehner Championship of 2006. Another stallion originating from this family - CHARLY BOY foaled in 2005, son of Ignam and Czarella's daughter, Czarna Dama (by Aragonit), in 2006 became the V-Champion of two-year-old stallions in the Trakehner Horses Championship in Dąbrówka Mała.

In the past, many horses of this family have participated in the highest national and international equestrian competitions, including CHRENOWSKA foaled in 1958 (by Chryzolit out of Gondola by Guido), CZAPRAK foaled in 1979 (by Poprad out of Cimarosa

by Surmacz xx), CZARDASZ foaled in 1978 (by Kobryń out of Czarnobrewa by Surmacz xx), CZARTER foaled in 1982 (by Poprad out of Cimarosa by Surmacz xx), CHEŁBIA foaled in 1978 (by Kobryń out of Chluba by Kosmos) - the dam of mare CHEŁMŻA foaled in 1983 (by Kerman) sold to the USA (KULISA ET AL. 2001) and of stallion CZERSK foaled in 1977 (by Arrigle Valley xx out of Czesanka by Colombo) - a participant in the international championship in the Three-Day Event, and the European Junior Championship in 1984 (ŁOJEK 1995). Currently, the stallion CZAR foaled in 1998 (by Lwów out of Czantoria by Aragonit) in participates in competitions and is currently used in breeding.

Family of T - Goldenkammer mare foaled in 1943 (Orgeola)

One of the horses registered in the Trakehner Association in Poland, from the mare family Goldenkammer, is the mare OPOKA (by Ignam out of Orka by Huk), a Champion of 3-Year-Old and Older Mares of the Polish Championship of Trakehner Horses in Dąbrówka Mała in 2006 and the winner of the Field Trial of Mares in Wozławki in 2006. In the same year, this mare took IV place at the I International Northeastern Trakehner Championship in Dąbrówka Mała. Worthy of notice are also the very highly evaluated mares (56.5 pts. each): ORAWKA (by Arak out of Orisawa by Aspirant) and her daughter OLIWIA LIVE (by Live and Liberty).

The horses of this family bred in the Horse Stud Liski are characterized by very good performance traits (KULISA ET AL. 2001), and the dam mares have a low index of foal loss as well as by a very high per cent of progeny approved to breeding (WEJER AND TOMCZYŃSKI 2001). Many of them have been exported abroad. This family also includes the sport and breeding stallion OGAR (by Aspirant, out of Orgietka by Cross xx), a sire of five sons who completed a performance test in the training centre (BYSZEWSKI 1996), including stallion Cedrus (out of Cerkwica by Kondeusz) the winner of the title of Stud Champion during the Polish Championship of Trakehner Horses in Liski in 2004.

Family of O – Ara, a mare foaled in 1944

A family numerously represented in the Trakehner Association in Poland is the family of the mare O - Ara. This family includes the mare ALPEJA (by Apogej out of Alga by Dziegiel) foaled in 2005, which has twice has won the title of Champion in its category in the Polish Championship of Trakehner Horses in 2005 and 2006.

This is the family of origin to a number of valuable breeding and sports horses, including ASTRAHAŃ (by Harbin out of Arteria by Akcjonariusz) and ARETIT (by Doliniarz out of Arteria by Akcjonariusz). Both horses were very highly classified in the “Breeding ranking – reproducers and sport” issued by the World Breeding Federation for Sports Horses, respectively placing 311 out of 1400 horses in jumping and 265 in dressage (SCHILAK AND SIEDLANOWSKI 2005).

Another representative of this family is ARIANIN, foaled in 1980 (by Sopran out of Arieta by Bard), a participant in the Polish Championships in Jumping and international CSIO and CSI competition of obstacles up to 150cm (ŁOJEK 1995). This stallion is the sire of such horses as: Dziurawiec (out of Dziecielina by Karkas), Szamyl (out of Szamanka by Karkas), or the mare Gracja (out of Garsonka by Karkas), which have won medals at the Polish Show of Breeding Horses, as well as of the stallion Makart (out of Makia by Karkas) and the mare La Rochelle (out of Libora by Arak), who won the titles of, respectively, Stud Champion in 2002 and Mare V-Champion in 2004 at the Polish Championship of Trakehner Horses.

Arianin has produced a number of top-class sport horses participating in jumping shows in the competition of obstacles up to 150cm in height inclusive, i.e. among others: Posejdon (out of Promocja by Mapnik), Szkopuł (out of Szkuna by Karkas) or Makart (out of Makia by Karkas).

The Ara family has also produced such horses as: ARLEKIN (by Szaser out of Arabeska by Deer Leap), ASZTOR (by Szewron out of Arta by Sambór), who took second place at the Polish Championship of Young Horses in Jumping in the group of five-year-old horses in 2004, as well as ARHUS (by Gordon out of Artemida by Posesor xx) a Champion of the Polish Show of Breeding Horses in Warsaw. This is also the family of origin of ARBÓR (by Sambór out of Ardila by Deer Leap) a valuable stallion, a sire of the mare Chmura (out of Chiazma by Aragonit) who won the title of Mare Champion at the Polish Championship of Trakehner Horses in Liski in 2004 (SCHILAK AND SIEDLANOWSKI 2005).

Family of O – Arizona, a mare foaled in 1935

The family of Arizona has produced 3 horses that have won the titles of V-Champions of Trakehner Horses: ARAGORN, V-Champion of One-Year-Old Stallions

(Olsztyn 2005) and AGITACJA, V-Champion of Two-Year-Old Mares (Liski 2004). Both the horses are by the Hamlet Go stallion out of Agada mare (by Agar). Another V-Champion of One-Year-Old Mares (Polish Championship of Trakehner Horses – Dąbrówka Mała 2006) was ASPERA VENTI, a daughter of Asyria (by Huk out of Agady) and Apogej, whose progeny is characterized by a desired type of good conformation (PIETRZAK ET AL. 2004).

This is also the family of origin of other valuable horses: ARAGONIT (by Kobryń out of Aragonia by Dziegiel xx), for years being a breeding stallion of the Horse Stud Liski, a sire of numerous horses of great beauty, good gait and jumping style (KACZMAREK 1995), his halfbrother ARION (by Poprad) a competitor in many international jumping shows, whose coefficient of success was 6.53 (ŁOJEK 1995), and the mare AKOLADA (by Dziwisz xx out of Aragwa by Haakon) a dam of the breeding stallion AGAR (by Mangan) characterized by very good gait and jumping abilities (CHOMENTOWSKA – FANGRAT 1997).

Family of O- Cyganka, a mare foaled in 1939

Mares of the Cyganka family registered in the Trakehner Association in Poland constitute valuable breeding material. Most of them have participated in horse riding competitions or originate from dams entered in jumping shows. These horses include: CYRANKA II foaled in 1986 (by Arianin out of Cyrenajka by Karkas), CYLLA foaled in 1992 (by Libellus out of Cyranka II by Arianin), CERA foaled in 1984 (by Narwik out of Cecor II by Cekin), CZARKA foaled in 1990 (by Czubaryk xx out of Cyrenajka by Karkas). These mares were mated with proven sport stallions: Ignam (by Akropol out of Inna), Elpar xx (by Parole Board xx out of Elegia xx), Gluosnis xx (by Gerodot xx out of Glorija xx), Arianin (by Sopran out of Arieta), Dłużnik (by Akropol out of Dłużyna), Radiator (by Aragonit out of Regina), Czubaryk xx (by Erotyk xx out of Czeczma xx), Pigmalion (by Arak out of Plejada), and Arak (by Parysów xx out of Arka).

One of more valuable breeding mares belonging to the family of Cyganka is CENTURIA foaled in 1986 (by Arianin out of Cecora II by Cekin), a dam of two approved stallions: CELLO (by Liman) and CENZOR (by Pigmalion), as well as the mare CENTRA (by Elpar xx), the Champion of Three-Year-Old and Older Mares at the Polish Championship of Trakehner Horses in Olsztyn in 2005.

Family of O – Diana, a mare foaled in 1942

In the opinion of PIETRZYK AND WĄSOWSKA (1974), horses of Diana family, bred in the Horse Stud Rzeczna, have been characterized by good health condition, lively temperament, proper conformation, good gait and very good predisposition to jumping.

A number of outstanding sports horses have originated from that family, including: CONDYLUS foaled in 1958 (by Szczecin xx out of Con Amore), which in 1964 when ridden by Michał Siemion took 3rd place in the Polish Dressage Championship, as well as the mare DIGESTA foaled in 1960 (by Dreibund out of Diana), which competed successfully in the years 1968-1969 in international jumping shows (CHACHUŁA AND BUCHOLC-FERENSTEIN 1981). Having finished its sports career, the mare foaled, among others, the excellent stallion DIOGENES foaled in 1967 (by Elew), a winner of the following titles: V-Champion of Poland in 1972 and Champion of Poland in Dressage in 1973 (CHACHUŁA AND BUCHOLC-FERENSTEIN 1981).

Another horse distinguished in sport originating from this family is DAMAZY, foaled in 1969 (by Elew out of Diagola), a participant in the Olympic Games in Moscow in 1980 and a double medalist at the Polish Championship in Dressage in the years 1978-1979 (CHACHUŁA AND BUCHOLC-FERENSTEIN 1981).

Another two stallions belonging to this family are: CELEBES foaled in 1993 (by Kondor out of Cedrówka by Akropol) and CEFAL foaled in 1995 (by Gordon out of Ceduła by Akropol). The first was the champion amongst four-year-old horses in Dressage at the Championship of Young Horses held in 1997. A year later, at another championship of this rank, it repeated the success by taking 2nd place amongst five-year-old horses (TOMASZEWSKI 1999). Ridden by Joanna Włoczewska, it was highly classified in numerous national and international competitions (BEK-KACZKOWSKA 1998). In 2003, this stallion also won the title of Stallion Champion at the Polish Championship of Trakehner Horses in Sułowo. In turn, CEFAL has been a participant in multiple national championships in Jumping.

Family of O – Jagoda, a mare foaled in 1939

The family of the mare Jagoda has been developed mainly in the Horse Stud Rzeczna. In this Stud, it constituted one of the most numerous families, and according to PIETRZYK AND WĄSOWSKA (1974), mares of this family are characterized by high fertility, valuable progeny and very good character.

The family of Jagoda has produced the mare DORYJKA foaled in 1958 (by Dreibund out of Doryda by Sorent), a dam of a few good sports horses exported abroad and of the

breeding stallion DONBAS foaled in 1977 (by Drelink). The latter occupied the box of a breeding stallion in the maternal stud in the years 1981–1985, being a sire of a number of good breeding mares. Out of Doryjka also originates the mare DAGLEZJA foaled in 1977 (by Bard), a dam of the gelding DAMOKLES foaled in 1994 (by Kaliniec), entered successfully in the national championship in the competition of Jumping (WITKOWSKA 2005).

A daughter of DAGNA (by Akcjonariusz) and Oltis xx was DANUBIA foaled in 1981, a Champion of the Polish Show of Livestock in Olsztyn in 1984 (GAĞOROWSKI 1984). This mare was characterized by exceptional beauty, mild character, and excellent jumping predispositions. Her grand-daughter, DURRA foaled in 1994 (by Kaliniec out of Dubla by Kondor), was awarded the title of V-Champion of Wielkopolska breed mares at the XIV National Show of Livestock in Warsaw at Służewiec (CZEŚNIK 1998).

In turn, JASTARNIA, foaled in 1992 (by Makart out of Jamajka by Jen), is a dam of JOWISZ (by Aragonit), competing in Dressage and presenting outstanding gaits and a high level of training, as well as of the mares JURATA, (by Gluosnis xx) the V-Champion of Foals at the Polish Championship of Trakenher Horse in Dąbrówka Mała in 2006, and JOVITA, the winner of the Championship of Foals in Galiny in 2004 (SCHILAK AND SIEDLANOWSKI 2005).

Family of O – Kontuzja, a mare foaled in 1942

One of the most numerous families in the Trakehner Association in Poland is the family of the mare Kontuzja. It is the family of origin to a number of excellent sports horses, including: the mare KOSA foaled in 1966 (by Dorwid xx out of Komosa by Ditto), that in 1973 took 3rd place at the Polish Championship in Three-Day Event (CHACHUŁA AND BUCHOLC-FERENSTEIN 1981), as well as the mare KOPRA foaled in 1969 (by Eliop out of Konchita by Hidalgo), in the years of 1975-1976 entered for a Dressage competition (ridden by Wanda Wąsowska).

Worthy of mention is also the mare KLIWIA foaled in 1977 (by Bard out of Kielcza by Dyskobol), which foaled with stallion Ignam (by Akropol out of Inna by Sobiepan) two stallions talented in jumping and used in breeding. The first of them – KALINIEC, foaled in 1988 with an impressive sports career, has left in progeny in the Rzeczna Horse Stud with jumping predispositions. The second son of Kliwia – the stallion KLEON, foaled in 1989, ridden by Anna Małkowska was 6 times a medalist of the Polish Junior Jumping Championship, and in 1999 it won the Cup of Nations in Hamburg and 4th place at the CSIO in Poznań. This pair represented Poland five times at the European Junior and Young Riders Jumping Championship (DESZCZYŃSKA 2005).

The family of Kontuzja, represented by a number of horses in the Horse Stud Rzeczna, have also produced very good mares that have been exported abroad (WITKOWSKA 2005). This is also the family of origin of the mare KLAUDYNA, foaled in 1985 (by Akropol out of Kliwia by Bard), the winner of the Champion title at the Polish Championship of Trakehner Horses in Sułowo in 2003 (CHOMENTOWSKA-FANGRAT 2004) and the mare Kalia (by Winword xx, out of Kadencja by Wiadukt), the V-Champion of Three-Year-Old and Older Mares at the Polish Championship of Trakehner Horses in Dąbrówka Mała in 2006, and in the same year the winner of 7th place at the I International Northeastern Trakehner Championship in Dąbrówka Mała.

Family of O – Korsyka, a mare foaled in 1940

In the past, the most valuable horses originating from the family of Korsyka included two stallions: KOSMOS foaled in 1961 (by Belizar out of Komonica by Celsius) and KONDEUSZ foaled in 1969 (by Colombo out of Korsarka by Dreibund) that for many years have been occupying boxes of breeding stallions and have produced a number of very good horses (CHACHUŁA AND BUCHOLC-FERENSTEIN, 1981).

Several mares have also had sports careers: KAPUA, foaled in 1957 (by Dreibund out of Apuila by Cyklamen), which after finishing its sports career in Poland was exported to Germany, and KODEINA, foaled in 1985 (by Dziwisz xx out of Kutyna by Poprad). The latter, apart from winning the titles of Champion and V-Champion of Poland in Jumping (ridden by Grzegorz Kubiak), also participated in the European Championship of Young Riders and in a number of international competitions (ŁOJEK 1995).

This family also included the gelding KUŁAN (by Mangan xx out of Kutykuła by Kerman), who in 1996 participated in the final of the Championship of Young Horses in Jumping held in Sielinek in the category of five-year-old horses (KRZYŻANOWSKI 1996). In turn, KORYNTIA (by Czak out of Korga by Akcept xx) won the title of V-Champion of Two-Year-Old mares at the International Northeastern Trakehner Championship in 2006.

Most of mare dams originating from the family of Korsyka, registered in the Trakehner Association in Poland, have been subjected to performance tests for mares and completed them with very good and good final scores (PIETRZAK 2001).

Family of O – Loza mare foaled in 1936

The family of Loża includes the recognized stallion LORD ODER, foaled in 2002 (by Oder out of Lebioda by Ogar), a Champion of Three-Year-Old and Older Stallions at the Polish Championship of Trakehner Horses in Olsztyn in 2005. Foaled in 1987 LAVABO (by Aragonit out of Lawenda by Cynik xx) became the V-Champion of Wielkopolska Breed Horses at the VIII National Show of Livestock in 1992 (KULISA ET AL. 2001).

The group of award-winning sport horses in the past originating from this family and was characterized by a high coefficient of success and presenting outstanding sports achievements (mainly in jumping) includes such horses as: stallion LAMPART (by Poprad out of Lama by Ciecieruk) – 6.98 as well as the geldings LIBAN (by Kobryń out of Laba by Kondeusz) – 2.06; LORD (by Kondeusz out of Lamówka by Bułat) – 2.21; and LOTAR (by Kondeusz out of Lotaryngia by Pietuszok oo) – 3.44 (ŁOJEK 1995).

In 1994, TURBUD LWIE SERCE, a son of Lwica (by Harbin out of Lama I by Ciecieruk) and the stallion Czynel xx, took the second place at the Championship of Four-Year-Old Horses in Jumping (CZEŚNIK 1994).

Family of O – Malwa mare foaled in 1944

One of the best-known horses of the family of Malwa is MAKART, foaled in 1987 (by Arianin out of Makia by Karkas), a Champion of Three-Year-Old and Older Stallions at the Polish Championship of Trakehner Horses in Płekity in 2002. This gold medalist of the Training Centre, a breeding stallion of the Horse Stud Rzeczna and Racot, has been successful in a number of Grand Prix competitions in Jumping. Its brother MIDAS, a participant of the Championship of Young Horses in Jumping in the age category of six-year-old horses (SCHILAK AND SIEDLANOWSKI 2005) was also successful in that competition.

The family of Malwa also includes the stallion MARKUS (by Perkoz xx out of Malsza by Schwertbruder), entering a number of CSI and CSIO in the Jumping competition and in a Three-Day Event (classified 36 times in places 1-4), as well as a mare competing in Jumping: MACEDONIA (by Orkisz xx out of Mapa by Priz xx – 34 times in places 1-4) and MODA (by Perkoz xx, out of Modystka by Dekander xx – classified 51 times in places 1-4) (Łojek 1995).

During their sports or breeding career, a number of horses from this family have been sold abroad, including: MALAJKA (by Sopran out of Makia by Karkas), MAGA (by Gawot out of Makia by Karkas) and two sons of MALADETTA (by Arianin): the stallion MAKLER (by Gosler) and MALERIN (by Arak) (SCHILAK AND SIEDLANOWSKI 2005).

Family of O – Rurka mare foaled in 1939

The family of Rurka include two winners of the Polish Championship of Trakehner Horses. The mare R- LADY (by Ignam out of Regina by Elpar) which became a V-Championship of Two-Year-Old Mares (Liski 2004). In turn, out of this mare and by the internationally-recognized stallion Abdullah there originated a Champion of Foals – the mare RAFIA (Dąbrówka Mała 2006).

Mare RADNA (by Bard) is a dam of RAL foaled in 1992 (by Dziegiel), that twice (in 1996 and 1997) completed the Championship of Young Horses in Jumping in the final tenth. In 2002, it took 3rd place in a Grand Prix Zbrasławice (the All-Polish Competition). In turn, ROSANA, foaled in 1999 (by Jantar xx out of Rata I by Karkas) completed the performance test with a very good result (mean score of 7.7 pts.), and was distinguished by free jumps (9 pts.) and the result of the test of an independent rider (8 pts.).

Family of O – Stokrotka mare foaled in 1944

Horses from the family of Stokrotka registered in the Trakehner Association in Poland in most cases have been bred in the Plękity Horse Stud. Originating from this stud, the stallion SŁOWAK foaled in 1996 (by Pigmalion out of Sida by Dziegiel) in 1999 passed the performance test of the Training Centre Kwidzyn. In 2005, the mare SAKSONIA foaled in 2004 (by Elpar xx out of Salwa by Libellus) also completed the performance test with a very good result.

Other mares originating from this family and currently used in breeding: SELIA foaled in 1992 (by Libellus out of Sewilla by Arianin); SVENA foaled in 1990 (by Arak out of Sylva by Splendor), and SIKORKA foaled in 1995 (by Pigmalion out of Sida by Dziegiel) also participated in jumping shows in the competition of obstacles up to 130cm in height. In addition, the later is a dam of SENIORITA foaled in 2004 (by Radiator out of Sikorka by Pigmalion) the V-Champion of One-Year-Old Mares at the Polish Championship of Trakehner Horses in Olsztyn in 2005.

Family of E -Agresja xx, a mare foaled in 1947

The family of E - Agresja xx includes ASPIRACJA, foaled in 2005 (by Safran out of Alana by Cedrus) - the V-Champion of Foals at the Polish Championship of Trakehner Horses in Olsztyn 2005, a mare with a very good type and conformation as well as very good basic gaits. The mare ANARCHIA (by Kerman) is a dam of stallion ARMATIC foaled in 2005, the V-Champion of the Championship of Trakehner Horses in Dąbrówka Mała in 2006. A sire of the latter is the stallion Gluosnis xx – a six-time medalist of the Championship of Lithuania (including, double winner of gold medal in 2002 and 2003), Indoor Champion of Lithuania in 2004, and a participant of multiple CSI competitions (<http://ogiery.romanowski.pl/gluosnis.htm>).

This is also the family of origin of AGRIN (by Akcept xx out of Agenda by Aspirant), a stallion which in 1996 completed the Training Centre with an outstanding score (BYSZEWSKI 1996).

Family of E – Avesta xx, a mare foaled in 1966

Horses of the Awesta xx mare family, mostly originating from the Horse Stud Plekity, are the progeny of stallions talented in jumping, including: Ignam (by Akropol out of Inna), Arianin (by Sopran out of Arieta), Sopran (by Perkoz xx out of Sobietaka), Burgund xo (by Juriste xxoo out of Blanka xo), Karkas (by Elew out of Komosa), Hades xx (by Lincoln xx out of Harpia xx) or Elpar xx (by Parole Board xx out of Elegia xx).

The mares registered in the Trakehner Association in Poland include three champion mares in the national Trahehner Championships: ALIZE (by Ignam out of Adina by Pan Franek,) which in 2004 won the title of the V-Champion of Foals, AVRIL (by Elpar xx out of Avka by Wiec) in 2005 and 2006 awarded the title of the V-Champion of Mares, and AMANDA (by Radiator out of Avola by Arianin) which in 2005 won the title of Champion of One-Year-Old Mares. A dam of the latter, AVOLA foaled in 1985 (by Arianin out of Avra by Karkas), participating in jumping shows, and is also a dam of 5 mares approved for breeding in the Horse Stud Plekity and two stallions that completed the performance test for stallions: ASTOR (by Liman) and ALL (by Libellus).

Other horses of this family have had sports career or completed performance tests. A daughter of Arianin, ANORTA foaled in 1989 (out of AVRA by Karkas), as well as the mare ALLA foaled in 1993 (by Libellus out of Ava by Sopran) and the stallion AL PARI foaled in

1994 (by Elpar xx out of Avra by Karkas), have entered jumping shows in the competition of obstacles up to 130cm. In turn, the stallion AHMED foaled in 1998 (by Alkierz out of Avaha by Hades xx) in 2004 took I place at the Polish Championship of Young Horses in the Three-Day Event (SCHILAK AND SIEDLANOWSKI 2005), whereas the mare AUKCJA foaled in 2002 (by ELpar xx out of Avola by Arianin) in 2006 completed the performance test with a good result.

Family of E – Balanda xx, a mare foaled in 1961

The family of Balanda xx is another family whose horses are characterized by a high utility value, as indicated by results of performance tests. This is the family of origin of the gelding SILVANT - BORSALINO 1991 (by Kerman out of Blenda by Aragonit) which in 1996, when ridden by Mieczysław Zagor, took seventh place in the final classification of 5-year-old horses of the Championship of Young Horses in Jumping in Bielinek (KRZYŻANOWSKI 1996). A very valuable mare seems to be BITWA, foaled in 1993 (by Jaguar xx, out of Blenda by Aragonit), with a qualitative score of 53.0 pts. a dam of Two-Year-Old Stallions Champion BELLO NEMO (by Burgund xo) as well as BIGNAM and the mare BELLA IKA (both horses by an outstanding sports horse Ignam). In 2004, at the Polish Championship of Trakenher Horses in Liski, these siblings became the Champion and V-Champion, respectively, in their age categories. Two years later, the stallion BIGNAM took the second place in the group of three-year-old and older stallions at the Polish Championship of Trakehner Horses and the sixth place at the International Northeastern Trakehner Championship in Dąbrówka Mała in 2006. Out of that mare there originate also highly evaluated daughters of stallion Aragonit: BELLA DONNA (57 quality pts.) and BELLA LANCASTRA (54.5 quality pts.). Both mares were subjected to a performance test and completed it with very good result.

Family of E - Igława xx, a mare foaled in 1957

A number of horses from the family of Igława xx have demonstrated high jumping predispositions. This is the family of origin of numerous sports horses. One of them was the mare IGARKA, foaled in 1970 (by Etymolog out of Igława xx by Pilade xx) which ended its sports career as one of the best sports horses entered for the Three-Day Event in Poland, and the stallion IGREK foaled in 1975 (by Colombo). It participated many times in the Polish Championship in the Three-Day Event, winning the gold medal in that competition in 1988.

This pair participated in also, among others: The Olympic Games in Barcelona in 1992, The World Championship in Stockholm in 1990, and in The European Championship in the years 1987 and 1990 (ŁOJEK 1995).

A daughter of Iglawa xx, the mare INNA foaled in 1972 (by Sobiepan), was very successful in racing. By winning 3 x I, 4 x II, 1 x III and 1 x IV, it reached a coefficient of success of 2.80 (ŁOJEK 1995). This mare was a dam of the stallion IGNAM foaled in 1980 (by Akropol), that took high places in Grand Prix-level international championships in the years 1985-1990, and participated in the final of World Cup in Goeteborg. Its coefficient of success was as high as 10.71, whereas in the classification of horses entered for the competition of Jumping, it took the 6th place out of 2204 horses under evaluation (ŁOJEK 1995). In addition, IGNAM was a sire of a number of outstanding breeding horses demonstrating high jumping abilities, including: Kaliniec, Kleon, Bignam, Czedar, or IGNAC. The latter originating from the mare IGA of the Iglawa xx family, foaled in 1988 (by Gordon out of Ifigenia by Cerber) and sold to Lebanon. Out of the same dam originated the stallion IMPULS foaled in 1993 (by Agat), which is currently entered for the competition of Jumping.

A former sports champion, currently used in breeding, is the mare MODELKA (by Midas, out of Ilona by Gordon I) the winner of I place in the class of 11-Year-Old and Older Mares at the Polish Championship of Trakehner Horses in Olsztyn in 2005.

SUMMARY AND CONCLUSIONS

Summing up the analyses it can be concluded that:

1. The highest qualitative evaluation was reported for horses belonging to the families of the mares: O - Diana, E – Agresja xx, E – Balanda xx, and E – Avesta xx. They obtained high scores for type and conformation as well as for the quality of presented basic gaits. In terms of gait quality, high quality scores were also given to horses of the families of: T – Chwała, E - Chiazza xx, and E – Iglawa xx. Horses of the families of: O -Wisienka, E – Agresja xx, O - Loża, T - Chwała, and O – Hortensja obtained relatively low mean scores for limb build which, despite their motor values, may negatively affect the length of their exploitation, and thus their performance value.
2. Results of the analysis of conformation and gait of horses belonging to the families examined may constitute crucial information to breeders, enabling the proper selection of pairs for mating in order to obtain a selection response.

3. The analysis carried out based on sports results points to the high performance and breeding value of horses belonging to the examined families of mares. The population of Trakehner Horses and those of Trakehner-East Prussia origin bred in Poland constitutes valuable genetic material that may be used in improving other half-breeds.

Translated by Joanna Jensen

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