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# Breeding and Typological Analysis of Old Kladruby Horses in the Czech Republic

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Old Kladruby Horse (OKH) is one of the oldest horse breed in the world and is only one original Czech autochtonous horse breed. OKH is bred in one of the oldest Breeding Stud in Europe at Kladruby nad Labem which was established in the year 1579 by Roman Emperor Rudolf II Habsburk. This type of mighty horses with refined mechanics of the movement were used in ceremonial services by the Vienna Court as "Galakarosiers". They were yaked in heavy state carriages. There was in Vienna all the time prepare two eight-teams of grey horses and two eight-teams of black horses. After transformation of Austro-Hungarian monarchy in year 1918 the black horses was almost disappearance. Due to prof. Bílek there was made a unique process of regeneration. This process was based on few last alive individual horses and they relative horse's breeds.

This breed is at this time Genetic Source and National Cultural "Monument" of the Czech Republic. The number of private breedings more than doubled from 1999 to the beginning of 2007 (from 56 to 146). In these breedings the number of mares also quickly increases.

Until this time all investigations and researches has been made by the horses who has been breeding in National Breeding Stud in Kladruby nad Labem (NBSK) uncored-for horses of others private breeders (PB) in country breed. There were compared in investigation NBSK and country private breed individuals who were registration in Stud Book in 2007. It was 58 of stallions and 443 of mares in both color (gray and black).

From this outcomes resulting that black mares NBSK are higher (+ 3 cm SMW) and have + 0,6 cm at bone circumference (BC) compared to PB. NBSK grey mares have against 0,8 cm BC against PB. At stallions there are major difference only at grey stallions NBSK + 1,5 cm SMW and + 0,5 cm BC against private country studs of OKH. All White OKH who are registered at the studbook are not to be higher and stronger as compared with the registered Black Old Kladruby Horses.

#### **Acknowledgements:**

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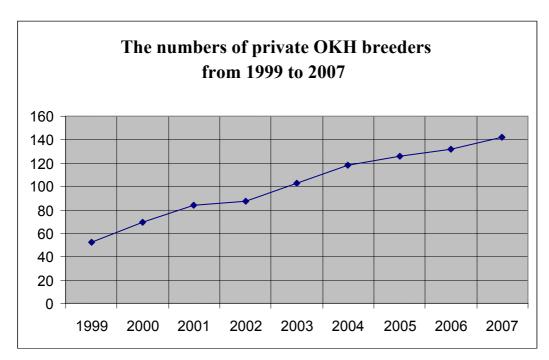
The number of the Old Kladruby Horses (OKH) in CZ from 1990 to 2007:

Year	Stallions	Breeding	Others	Total
		Mares		
1990	24	123	463	610
1991	21	155	493	669
1992	23	181	535	739
1993	29	216	559	804
1994	31	238	600	869
1995	33	247	571	851
1996	36	253	597	886
1997	33	272	638	943
1998	36	288	652	976

1999	34	298	686	1018
2000	38	217	717	1072
2001	40	331	725	1096
2002	38	351	737	1126
2003	43	392	724	1159
2004	43	417	767	1227
2005	52	434	801	1287
2006	52	434	862	1348
2007	58	443	933	1434

The numbers of the OKH in private breedings:

	Stallions		Breeding Mares		Others		Total	
Year	grey	black	grey	black	grey	black	grey	black
2002	9	8	90	111	184	205	283	324
2003	9	9	121	116	230	227	360	352
2004	7	9	138	122	245	229	390	360
2005	8	10	145	137	252	235	405	382
2006	7	11	137	138	284	248	428	397
2007	10	10	138	149	320	280	468	439



The means and ranges of study characteristics and qualities:

	n	Min.	Max.	Mean
Age (years)	521	4	28	12,3
In breeding (years)	521	1	24	7,74
Original genes (%)	521	14,84	89,06	62,01
Class (points)	512	5,1	8,8	7,35

Type (points)	485	4	9,23	7,13
Exterior (points)	500	4,79	8,63	6,97
Performance (points)	438	5,97	9,25	7,99
SMW (cm)	517	162	192	176,4
TMW (cm)	498	153	181	165,9
TC (cm)	517	175	230	198,1
BC (cm)	517	19,3	25	21,6

SMW – stick measure at withers, TMW - measure at withers by tape, TC – thorax circumference, BC – bone circumference (metacarpus)

The basic body measurment of grey stallions in year 2007:

	n	SMW	TMW	TC	BC
		(cm)	(cm)	(cm)	(cm)
NBSK	21	168,4	177,9	197,6	22,5
PB	11	166,9	177,1	196,2	22,0
Total CZ	32	167,9	177,6	197,1	22,3

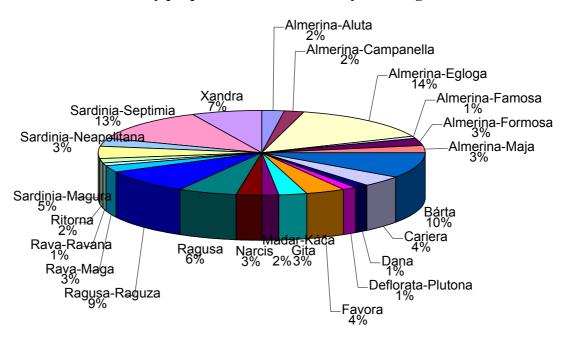
NBSK – National Breeding Stud Kladruby nad Labem, PB – private breeding

The basic body measurment of black stallions in year 2007:

	n	SMW	TMW	TC	BC
		(cm)	(cm)	(cm)	(cm)
NBSK	17	168,7	180,6	196,9	22,7
PB	11	168,8	179,8	198,2	22,8
Total CZ	28	168,8	180,3	197,4	22,7

NBSK – National Breeding Stud Kladruby nad Labem, PB – private breeding

## Basic family proportion of Old Kladruby breeding horses



### Basic stallions lines proportion of Old Kladruby breeding horses

