



noise, responsiveness to commands, ease of gate entrance were positively correlated with learning ability (0.27, 0.25, 0.35, 0.30, respectively). Concentration was positively correlated with responsiveness to commands (0.36), friendliness towards people (0.28), trainability (0.29), learning ability (0.42) and consistent emotionality (0.40). The high heritability values observed in this study suggest that temperamental traits could be used as selection targets to specialize the animals according to different breeding purposes.

P-034

Genetic variability of the Braque Français type Pyrénées dog breed assessed by pedigree data

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The Braques français are hunting dogs, from a very old type of gun dog used for pointing the location of game birds for a hunter. There are two breeds of Braque français, both from the South of France, the Braque français type Gascogne (larger size) and the Braque français type Pyrénées (smaller size). The original Braque français type of pointing dog has existed since the fifteenth century. The first breed club was formed in 1850, and the standards for both breeds were written in 1880. Both types belong to group 7 of ENCI classification. The complete electronic record of the Braque français type Pyrénées was downloaded from the ENCI database with the aim to estimate the genetic variability of the breed. In Italy 921 puppies (479 males and 442 females) were registered from 2003 to 2014 (average value: 76.6 ± 40.24 dogs per year). Pedigree records of all registered animals (Reference Population=RP) were considered. The whole population (WP=RP and its genealogy) included 1,250 dogs (826 males and 622 females). 783 dogs were inbred. Up to 89% of the individuals had registered parents and 83% registered grandparents. To explain 50% of the genetic variability, a total of 9 and 7 ancestors were enough, respectively in the WP and RP. The average inbreeding coefficient in the RP resulted 4.3%, while the average inbreeding of the inbred was 5.19%. The inbreeding coefficient was <0.05 in 511 dogs (65.3% of inbred) whereas it was >0.20 in only 13 dogs (1.66% of inbred). Inbreeding coefficient per year ranged from 0.98% for dogs born in 2003 (27 dogs) to 7.05% in 204 dogs born in 2009. Puppies born in 2014 had an average inbreeding coefficient of 1.78%. Ten traced generations were highlighted; the maximum average inbreeding value (6.62%) was observed in the dogs with 10 traced generations (inbred: 93.15% with an inbreeding average value of 7.11%) while N_e for RP computed via individual increase in

inbreeding was 42.42. A regular monitoring of genetic variability of the breed is important and must be adopted, in order to avoid the danger of an excessive increase of inbreeding in the future, which would result in significant inbreeding depression and in significant loss of genetic variation.

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P-035

Genetic structure and admixture in Western Balkans and Central European sheep: preliminary results from 50K SNP genotypic data

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The availability of affordable genome-wide SNP genotyping technologies prompted in the last years a wide collaborative study, which provided unprecedented insights into the phylogeographic structure of the world-wide sheep population. However, the original sheep sample collection did not include Western Balkans and Central European sheep populations, which may represent a valuable resource to understand historical pattern of migrations from the domestication centre and to fully reconstruct global sheep genetic structure patterns. We genotyped 96 animals from 19 different sheep populations, mainly belonging to the Pramenka group, from Slovenia (Bovec sheep, Jezersko-Solcava sheep, Bela Krajina Pramenka), Croatia (Cres Island sheep, Krk Island sheep, Lika