Furnishings

Applicable breeds: Brussels Griffon, Chinese Crested*, Dachshund, German Wirehaired Pointer, Havanese, Portuguese Water Dog, Soft-coated Wheaten Terrier, Tibetan Terrier

"Furnishings" is the term given to the longer facial hair seen on wire-haired breeds and some others. Some breeds have examples both with and without furnishings, and breeders may want to identify which of their breeding stock carry each variant.

This test will identify those dogs with furnishings which carry the gene for "not-furnished". These carriers can produce offspring without furnishings when mated with other carriers. The gene for furnishings is denoted F, and the gene for not-furnished is denoted N.

Particularly in the Portuguese Water Dog, the phenomenon of "Improper Coat", which is characterised by short hair on the head, face and lower legs is due to the inheritance of two not-furnished genes (NN) resulting from the mating of two carriers.

***NB This test does not test for hairless in the Chinese Crested**

This test is particularly useful for breeders:

- To identify dogs with furnishings which carry the not-furnished gene, and could therefore produce not-furnished offspring when mated with other carriers
- To identify breeding stock likely to give rise to puppies with Improper Coat in the Portuguese Water Dog

This test will be reported as:

FF : dog has furnishings and does not carry the not-furnished gene
FN : dog has furnishings but carries the not-furnished gene
NN : dog has no furnishings and carries two not-furnished genes

The genetic status of dogs can be used to predict breeding outcomes when different combinations are mated:

FF X FF = 100% FF
FF X FN = 50% FF, 50% FN
FN X FN = 25% FF, 50% FN, 25% NN
FN X NN = 50% FN, 50% NN
NN X NN = 100% NN

References

Cadieu E, Neff MW, Quignon P, Walsh K, Chase K, Parker HG, VonHoldt BM, Rhue A, Boyko A, Byers A, Wong A, Mosher DS, Elkahloun AG, Spady TC, Andre C, Lark KG, Cargill M, Bustamante CD, Wayne RK, Ostrander EA (2009) Coat variation in the domestic dog is governed by variants in three genes. Science 326(5949): 150-153

Parker HG, Chase K, Cadieu E, Lark KG, Ostrander EA (2010) An insertion in the RSPO2 gene correlates with Improper Coat in the Portuguese Water Dog. Journal of Heredity 101(5): 612-617