

## About intervariety mating usefulness

The Belgian Shepherd is one breed with several varieties. In order to make phenotype and genotype stay the same among the varieties, we will have to perform inter-variety mating. The absence of these matings would move the varieties away, ones from others, with the evident danger of creating individuals of very different types that can bring characteristics so distinct that the varieties will be differentiated only by hair texture.

It is harmful to the uniqueness of the breed to be made left aside from a global formulation of the limits of colours as it was in the standard of 1956. What was the interest to exclude the small varieties? None on genetic level. By the same occasion, we eliminate the more or less 50.000 chromosomes "trip companions" in the dog's genetic patrimony. We know that recessive genes cannot be eliminated and the breeders would not feel obliged to eliminate the puppies that are not conform.

Let us quote Charles Hüge (Useful Breeding and Dangerous Breeding):

No, a variety has never going downhill because there were at the same time other colour and hair varieties, with of course, the same general characters. That is a concept that the facts have proven wrong after forty years that I examine with attention their evolutions; but the opposite proof has been fatal for all breed in which one has been too exclusive for the coat. Provided that the colour is tolerated, do not hesitate to take it.

Let us also quote F.-E. Verbanck ("Several varieties but ONLY ONE BREED" published in the magazine La Vie Canine in June 1964) that advertises the following:

Breeding between different varieties has to be carefully thought trials, performed with a specific aim whose positive results will be obtained after several generations. Our opinion has not changed, on the contrary, breeding between different varieties, performed by serious breeders, have proved to be right. Each time that a retempering is necessary in one of the varieties of our Belgian Shepherds, it is only in the other varieties where we have to find the elements."

The arguments to justify the interdiction for inter-variety mating are not absent. At the hair texture level, mixing long hair, short hair, rough hair gives a quite big variety of patterns due to a phenomenon of incomplete dominance. At colour level we can equally find arguments. As heterozygotes are often less nice than homozygotes, breeders, on behalf of quality, are interested in selecting the varieties for themselves and to avoid intervariété-mating. That leads to genetic isolation, morphological and/or temperament differentiation ('working dog' on one side, 'companion dog' on the other, for example).

We still have to answer the question to know what is the place of the varieties in the genetic planning of a breed? The reasons in favour of a competent genetic variability in the Belgian shepherd are innumerable. Let us name some of them:

☐ keep good breeding qualities for the Belgian Shepherd (fertility, strength, etc.). As many anomalies were recessive, the reduction of the genetic variability increased the outcome frequency.

☒ keep for the Belgian Shepherd a certain homogeneity among the different varieties. It is necessary to avoid too evident morphological and temperament differences between the different varieties.

☒ keep for the Belgian shepherds possibilities of evolution or modification which imply maintaining a certain variation. The model researched at a certain time will not necessarily be the model 30 years later.

As conclusion, I do not find any inconvenience to define well precise varieties, nor to prefer them, but I do find many problems that impoverish the breed by depriving it of valuable elements whose only defect is a question of colour, estimated according to changing opinions through the years. Let us use our energy to force out hereditary illnesses like epilepsy or sterility, defects of structure like hypertype (light structure, head too long, no stop), teeth defects like prognatism and character defects like shyness, the timids which can not look after property or are incapable of defending her owner. Belgian Shepherd, before all colour consideration, is or should be a Shepherd dog with all that means such as construction type, about aspect and character. All that seems to me more important than excluding certain colours which historically and genetically belong to our native breed.

#### References

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on internet: <http://homepage.usask.ca/~schmutz/dogcolors.html>

Colour testing services: [www.healthgene.com](http://www.healthgene.com) & [www.vetgen.com/canine.htm](http://www.vetgen.com/canine.htm)