



The Double Merle dog

What is a Merle dog?

You may have come across the term “Merle” (also referred to as Dapple/Harlequin/Marbled), a coat colour pattern characterised by irregularly shaped patches of diluted pigmentation. The Merle coat pattern is very popular due to the unique and unusual colourings, and people tend to pay more money because of this.

What dog breeds have the Merle gene?

Typical breeds with Merle include, but are not limited to, Border Collie, Collie, Dachshund, Great Dane and Australian Shepherd.

What is a Double Merle?

Dogs that carry two copies of the Merle Gene are referred to as “Double Merle” and are primarily white.

Double Merle health concerns

Unfortunately, there are health problems associated with Double Merle’s, including reproductive, cardiac, skeletal, auditory and/or ophthalmic abnormalities. Therefore, the breeding of two Merle dogs should be discouraged to help prevent any Double Merle offspring.

Vision and hearing problems appear to be more common - there may be microphthalmia (small eyes), anophthalmia (born with no eyes), unilateral deafness (deaf in one ear) or bilateral deafness (deaf in both ears). It is important to note that not all Double Merle dogs are blind and/or deaf, but they will likely have some sort of hearing or vision impairment.



Left: Two heterozygous merle Border Collie puppies, having only one merle gene (Mm).

Right: A homozygous merle Border Collie, having two copies of the merle gene (MM), otherwise referred to as Double Merle. This puppy has smaller eyes and lack of pigment both in his coat, nose and eyes. He has some vision impairment but his hearing is okay at this stage.

Photo credit: M. Nixon

How can I check if my dog is a Double Merle?

If you have any concerns regarding a Merle dog, please speak to your veterinarian, as there is a simple DNA test that can be performed to confirm whether a dog is homozygous for the merle gene (genotype MM) and further testing can be performed to check for vision and hearing loss in suspected dogs.

Are there any support groups for Double Merles?

Double Merle Awareness Day is the Third Saturday in May Internationally. There are many facebook groups that provide a support network for owners with a Double Merle breed and also to educate the public.

References

<https://vgl.ucdavis.edu/test/merle>

<https://deafdogrescue.com.au/2018/07/double-merle-awareness/>