Merle Genetics: An Introduction

Lauren Trathen & Diana Densmore

Unlike many other well-established breeds that have genetic markers and recommended genetic testing to be completed, very little testing is done or encouraged for the Beauceron. A lot of topics of discussion over the years have surrounded our “harlequin” Beaucerons, their white marks, the tweed (oddly brownish spots), and their fading aspect. First and foremost, you must understand that when we use the term harlequin it is only because of its French origin and not because their color is due to the harlequin gene; harlequin Beaucerons are **merle** genetically speaking. The merle genetics in dogs are still being studied and researched by passionate leaders in the field, one of which is Mary Langevin. She is a well-known Catahoula breeder who quite literally wrote “the book” on merle, and is backed by the testing results she discovered in partnership with Tilia Labs in the Czech Republic.

Merle testing is one way that both owners and breeders can use genetic data to make better informed decisions and be able to educate others who come into our breed after us. Tilia Labs is the only analyst, currently, to identify and report on all seven alleles associated with merle. While it may seem that merle testing for black and rust dogs is not applicable, that is not the case. Most of us who have brushed the surface of merle genetics are aware there is M (Merle Dominant allele) and m (non-merle allele), but there are many more variations which can be more readily seen in other breed such as Australian Shepherds and Catahoulas. Beaucerons do NOT exclusively carry regular merle and non-merle; that is not how this works. Mc, Mh, Ma, Mc+, etc., are all variations of the merle alleles that can come with having merle in our breed.

Diana Densmore obtained permission from Mary Langevin to share (reprint) this article on understanding merle genetics that was originally written for the Australian Shepherd breed and to encourage all Beauceron owners, particularly those with “harlequins” but also black and rust dogs to be tested through Tilia Labs and to share those results with the breed community.

Mary Langevin – *Unraveling the Mysteries of Merle*

Unraveling-the-Mysteries-of-MerleDownload