

Bloodred (aka: blood)

Note: Expect DIFFUSED and BLOODRED to be incorrectly but synonymously used

Most Commonly used Name: Bloodred

Mode of Genetic Inheritance: Selective Variation + Recessive

Morph Type: Single recessive mutation & selective variation

Eye Color: Black pupil & *body ground colored* iris

A few years ago, due to confusion regarding the heritability of the Bloodred's base mutation (specifically that the namesake snakes were not red and/or diffused), the base mutation name was changed away from Bloodred - to *Diffused*. The mechanics of this gene mutation barely diffuse the F<sup>1</sup> homozygotes through maturity (if at all), so do not expect Diffused corns to look like Bloodreds. It is currently believed that Bloodred corns are the product of enhancing the base mutation, Diffused via polygenetic trait modification (selective breeding) to render a red and almost pattern-less (highly diffused) corn snake. That is not the opinion of this author, but in the absence of empirical evidence to the contrary, the best hobby and market interests are not served by published opposition to popular opinion. In other words, I'm not in favor of changing the morph name away from the original Bloodred since the new name Diffused is equally inaccurate. Without polygenetic modification, Diffused corns do not have a diffused appearance.

A brief history on Diffused mutants VS Bloodred mutants:

Initially, the corn snake gene mutation, Diffusion (formerly called Bloodred) was described as being recessively inherited, but many of the F<sup>1</sup> generational heterozygotes exhibited some of the obvious features of the gene mutation homozygotes. It is extremely rare for simple recessive F<sup>1</sup> heterozygotes to exhibit ANY features of their recessively inherited genetic mutation. For example, F<sup>1</sup> heterozygous Amel corn snakes have no markers that demonstrate a hint of their simple recessive mutation, Amel. The paradoxical partial-exhibition of the *Diffusion* mutation in the heterozygotes resulted in the *Diffused* mutation being re-described as having codominant inheritance (codom for short), but was tagged with the descriptor, *variable*. At that time, variable codom seemed an accurate and satisfactory genetic description for the radical color and pattern diversity among members of this mutation, but far too many genetic anomalies persisted. Identification of the inheritance of this mutation is once again considered simple recessive, but the Bloodred corn that most of us identify with toDAY is virtually always the aggregate of traits resulting from the *Diffused* (new mutation name) gene mutation PLUS polygenetic traits promoted by selectively breeding toward the highest expressions of melanin reduction, diffusion, and red color saturation.

#### What to expect:

As neonates, Bloodred corns are often heavily patterned (sides are generally faded or lacking typical lateral markings). Some exhibit black (or partially black) scales bordering some of the pattern blotches, and most of them have head patterns that are notably unlike those of typical corns. Most SMR Bloodreds diffuse dramatically through maturity, thereby rendering adults that are nearly devoid of head markings, side markings, (any visible dorsal markings will be very faint). There will be NO belly checkering, but ventral coloration can be all red, all white, or red and white (no black). Many of the early Bloodred corns in the early 1990s were overly inbred and therefore suffered poor fertility (not to mention - the progeny of many of the first generations were stubbornly lizard lovers, refusing to eat pinky mice). Thankfully, through out-crossing in our projects to improve or change colors and patterns, Bloodreds no longer rank high in the realms of sterility or reluctance to eat rodents. In fact, there are some seasons in which Bloodreds are among the best feeders of our corn snake neonates.

SURPLUS section of this web site). We do not provide pictures of individual hatchling snakes for sale, nor do we recommend that you ever choose a new pet based on an image of its neonatal form. Corns change so dramatically from hatchling to adult, they will NEVER have the same colors or contrasts throughout maturity. While most of the snakes we produce will mature to resemble the featured adult image(s) on our web site, unlike manufactured products that are respectively clones of each other, the nature of polygenic variation results in each animal being similar but not identical to others of its morph. The snake we select for you may not mature to be identical to the pictured examples, but will be chosen based on our experience of observing which neonates will mature to properly represent their respective morph. We take this responsibility very seriously, and therefore publish the guarantee that we will exchange your SMR snake if it does not mature to be like our advertised examples.

