

Diffused (aka: bloodred - see details below)

Note: *Expect DIFFUSED and BLOODRED to be used synonymously*

Most Commonly mis-used Name: Bloodred *See details below*

Mode of Genetic Inheritance: Recessive

Morph Type: Single Recessive Mutation

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

If you expected to see beautifully diffused corns with saturated red/rust/mahogany colors, click here —>  
**Bloodred Corn Snake** to see the enhanced version of this color mutation.

A few years ago, due to confusion regarding the heritability of the Bloodred's base mutation (namely 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 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 incorrect. Without polygenetic modification, Diffused corns are not diffused.

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 codominant - (codom for short) in heritable function, 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 gene mutation PLUS polygenetic traits promoted by selectively breeding toward the highest expressions of pattern reduction, diffusion, and red color saturation.

What to expect:

As neonates, Diffused corns are often heavily patterned, most of them exhibiting black (or partially black) scales bordering some of the pattern blotches, and most of them have some degree of black belly checkering (something I have NEVER seen on good Bloodreds). Head patterns are highly variable, but exactly like wild-type corns.

Some Diffused corns may exhibit slight diffusion throughout maturation, but unlike their prestigious BLOODRED cousins, every Diffused adult I've seen displayed prominent markings (head, body, and belly). Many of the early Diffused corns over ten years ago 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, Diffused and Bloodred corns no longer rank high in either of those categories; low fertility or reluctance to eat rodents. In fact, there are some seasons in which Diffused and Bloodred corns are among the best feeding of our corn snake neonates.

General Note:

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 identical to each other, the nature of polygenic variation results in no two specimens being exactly the same. 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 replace your SMR snake if it does not mature to be like our advertised examples.