

Diffuse Rosy (aka: Rosy Bloodred, Rosy Blood, Diffused Kastanie)

Most Commonly Used Name: Rosy Bloodred (pending genetic verification)

Mode of Genetic Inheritance: Recessive

Mutation Compound (?Kastanie?) + Diffuse)

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

Since I began breeding this morph in 1999 when I received a group of them from Adam Sweetman in Kansas, they have been a genetic mystery to me. Upon seeing the first one, I recall the inescapable reality that it was a color variant of the mutation, Diffused. Learning that the first ones were produced from pairing two wild-caught Key Corns (aka: Rosy Rat Snakes), I reasoned that they were Diffuse Pattern Mutants that owed their atypical coloration to the Diffused corn's classic alteration of overall tan coloration. But what are the odds that Diffuse mutants were slithering around on a Southern Florida Key? I began breeding trials to discern if they were actually Diffuse mutants, and in two separate breedings of these snakes to novel Diffuses, the progeny proportions demonstrated that indeed Diffuse was responsible for the pattern portion of this Morph. Inexplicable was the odd - but beautiful - orange and orange/red overtones. And many of the first ones I bred had solid red bellies with little or no white pattern zones (highly atypical in Diffused corns). Were these really Diffuses or mimic non-mutants? BTW, it is probably obvious why I called them Rosy Bloodreds. They appeared to be Bloodreds (new name: Diffused) and were the progeny of two wild-caught Rosy Rats.

Except for the brief breeding trials to only two novel Bloodreds, I saw no reason to alter the appearance of Diffused Rosies, so I didn't out-cross to mutants or non-mutants of any kind until 2005. In 2005, I bred a Snow Corn to one and got the typically *atypical* F¹ progeny we see with out-crossed Bloodreds. Many of the F1 babies exhibited partial Diffused markings, and most also had the orange or orange/red overtones. When I finally paired two of the F¹ out-crosses, I received non-color mutants in addition to the mutations; Snow, Anery, Amel, and among those, some were Diffuse pattern mutants (as expected). Upon showing those F²s to several Corn Snake breeders in Germany (one of whom was Frank Schuab - the discoverer of the recessively-inherited Kastanie Mutation), they commented that the non pattern mutant F² neonates were respectively identical to neonatal Kastanies and their color compounds, Mandarin (Amel Kastanie). In 2010, I paired one of the SMR non-pattern mutants to a German Kastanie and there were only two progeny phenotypes, *Kastanie-like* and *Mandarin-like*. Upon reviewing pictures of these F² neonates, the same three Germany Corn Snake breeders collectively agree that with some expected color exceptions, they APPEARED to be Kastanie Mutants. In 2010, I sent a few of those to Germany for independent breeding trials with known German Kastanies. I will not officially declare that the SMR Diffused Rosies (aka: Rosy Bloodreds) are actually Kastanie Diffused Corns until subsequent breeding trial results are reviewed in 2012 or 2013.

I digress . . .

I have been breeding Bloodred corns to Rosy Rats (aka: Key Corns) for many years. In virtually every such breeding project, almost all out-crossed F¹ progeny were identical to the results you'd get from pairing two Bloodreds. In other words, the diffusion seen in good Bloodreds through maturity, the atypically corn snake head patterns, the greatly reduced black everywhere on the snake throughout maturity, and the un-checked belly were demonstrated in virtually all those F¹s. One can't help but wonder if there is a relationship between the Diffused mutation and most Rosy Rats (Key Corns). I say 'most' Rosy Rats because, just like Diffused corns, not all will have the same degree of mutant traits (atypical corn snake head markings, reduced black, un-checked bellies, and diffusion throughout maturity). This is precisely what is seen in Diffused corns. Some can pass for Bloodreds, some have various degrees of one/some of the other visual features of Diffused corns, and some will have virtually none of the Diffused mutant traits. I am proposing that it is possible that some races of Rosy Rats (Key Corns) are actually Diffused mutants, or vice-versa. The old saying, "If it walks, quacks, and looks like a duck, it is probably a duck" may well apply here. If pairing two Diffused corns yields the exact same results as pairing two *good* Rosy Rats (Key Corns), OR pairing a Rosy Rat with a Diffused corn, does it not follow that whatever causes this means they are the same genotype?

Logical reflections: I am not implying that there is a genetic relationship between Kastanie mutants and Rosy Rats (Key Corns). I imply that the testimony of several German corn snake breeders that are experienced in reproducing Kastanies - saying the pictures of my non-Bloodred Rosy bloodreds APPEAR to portray Kastanie mutants - begs the possibility that Rosy Bloodreds owe their color to the Kastanie mutation, but the other traits may not be what we recognize as Diffused mutant traits. If this turns out to be a reality (that Kastanies and Rosy Bloodreds are the same color mutation), it begs the rationale that if finding a new mutation in the wild is statistically in the realm of one in many hundreds of thousands, finding a novel double mutant in the wild is surely statistically closer to one in a billion (a virtual impossibility). It seems to make more sense that the mutants we thought were both Kastanie and Diffused (two distinct and unrelated mutations) were more likely single recessive Kastanie mutants with the "polygenic" traits of Rosy Rats (Key Corns) and all associative Bloodred-like refinements.

I submit that Rosy Rats (Key Corns) have the same trait standard as Diffused Corns.

What to expect:

Hatchling Rosy Bloodreds (?Kastanie Bloodreds?) have overall gold and/or mahogany coloration. Through maturity, colors intensify and patterns diffuses. Otherwise, the pictures posted here accurately represent the appearance of our typical adults.

Important Note:

The advertising images on our web site are representations of the average adult example of each morph. These images are not renderings of the actual animals being offered, (except for uniquely offered snakes found in the 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.