

Striped Tessera (no aka)

Most Commonly Used Name: Striped Tessera

Mode of Genetic Inheritance: Dominant

Morph Type: Both Dominant & Recessive Gene Mutations

Eye Color: Black pupil with ground zone-colored iris

Other than appearance, the primary (and inherent) value of Tessera-type Corns is their mode of inheritance. Since they are dominant to wild type, pairing any Tessera Type that is a Visual Het to ANY corn (other than a Tessera-type) will render 50% Tessera mutants in the F<sup>1</sup> (first) out-crossed generation. The results of pairing an Tessera homozygote with ANY corn snake (other than a Tessera-type) will render 100% Tessera mutants.

Striped Tesseras are *at least* homozygotes of the recessively-inherited STRIPE mutation and the dominantly-inherited TESSERA mutation. At this time, there appears to be no direct mutational relationship between those two mutations (when in genetic union), except for the seemingly collateral features that distinguish virtually all Striped Tesseras from simple Striped mutants. The features that are demonstrated in most Striped Tesseras that distinguish them from simple Striped corn mutants are:

- Contiguity of pattern. Striped Tesseras have remarkably continuous striping and if it does break - unlike simple mutant Striped corns - it resumes in the same form - without fading to broken striping and eventually no striped pattern at all, as we see in ALL simple mutant Striped corns.
- Stripe that extends to the tail *and beyond*. I have never seen a simple mutant Striped corn that had a stripe that continued to the tail tip. I've seen nearly full striping in some lines of Striped Motleys, but never in Striped mutants. When one corn possesses both the STRIPE and the TESSERA mutations, most of these corns have striping that continues to the tip of the tail, regardless of how many stripe breaks there are between the neck and tail tip. When the striped pattern of Striped corn mutants begins to break up and/or fade, it does not resume in recognizable form. My reference to "tail pattern" is

the dorsal location that is the polar opposite of the cloaca (*polar* as opposing points on the same vertical plane).

- Variable stripe width. It is not common, but some of the Striped Tesseras we've produced have varying stripe width, which is something seldom observed on simple Striped mutants. Generally speaking, the striping of Striped Tesseras widens as it extends tailward. Some have intermittent and abrupt changes of width from the neck to the tail, but except for gradual widening of stripe, some have remarkably clean stripes. The question that can't help but be asked is, "In STRIPED TESSERAS, is the striped pattern the result of the Striped mutation, the striped version of the Motley mutation; Striped Motley. OR the striped version of the Tessera mutation?" I don't know the answer at this time.

Note the comparison of a Striped Amel (Het Caramel) and a Striped Tessera in this image.



What to expect:

Striped Tesseras are still fairly rare. So far, the only feature that is atypical - compared to typical corn snake mutations - is that many of the non-mutant siblings of Tessera types seem to have enhanced pattern and color features. So far, I don't recognize any traditional markers that are unique to hybrid colubrids, since the collateral sibling features to which I refer are - *so far* - in the realm of improving existing corn snake features (i.e. some non-Tesseras have better, brighter, cleaner, and/or more consistent colors and markings). I'm intrigued by the collateral nature of some of the non-Tessera siblings coincidentally having improved characteristics without changing standard features of the species (i.e. body shape, belly checkering, head pattern, shape and number of markings).

As hatchlings, Striped Tesseras generally look like Striped corns, except for the precision of striping and retention of black pigment seen in most Striped Tesseras. Other than the obviously better quality of striping in Striped Tesseras, the primary difference between the

closest corn snake phenotype (Striped Motley) and Striped Tesseras is that of the dominant genetic inheritance of the Tessera. Naturally, the Stripe and Motley mutations (which are alleles of the Motley locus) are inherited in recessive fashion. Just like all corns, Striped Tesseras gain improved color saturation as they mature.

#### History of the Tessera Mutation:

In 2007, Graham Criglow asked KJ Lodrigue to order a 1.2 trio of Striped Motleys that were advertised on one of the popular Online Classified sites - since Graham's job prevented him from personally receiving them at that time. When they arrived, KJ discovered that they constituted a 2.1 reverse trio (two males and one female) instead of the advertised 1.2 trio (one male and two females). KJ and Kasi recommended that Graham gift the extra male to me, and that's what Graham did. Profound thanks to Graham, KJ, and Kasi for that gracious *and fortuitous* gift. In 2008, both the Lodrigues and I independently bred our males (Graham's and mine) to novel (*unrelated*) corns. I produced about 24 TESSERAS (*so named by the Lodrigues for the tessellated lateral markings*) from over 50 fertile eggs, but since the Lodrigues were in the middle of a career move to another State, they were less fortunate, producing just four non-mutant Okeetee-looking corns. My Tesseras were produced by the pairing of the male Tessera to three novel female corns (two F<sup>1</sup> Locality Okeetees from Chip Bridges *Rhett Butler Line* and one Okeetee-ish female, Het for Stripe and Amel). Imagine my surprise in seeing what we thought were nearly flawless Striped Motleys from three different females, only one of which was Het for a recessive pattern mutation? After the first brood of 50% Tesseras hatched from the female that was het for Stripe and Amel, except for the perfection of pattern, I was not thinking *new* dominant mutation, but when both wild-type Okeetees produced the same results, it was obvious that a new mutation was discovered.

Upon receiving the reverse trio from the seller, we all commented on the mutual peculiarity of the phenotypes. Most appeared to be the most perfectly Striped Motleys ever seen - in so much as their dorsal stripes were nearly contiguous from neck to tail tip (something never before seen in any corn snake pattern mutant) - but that was hardly possible if the admission of the breeder were true - that they were products of pairing a Striped corn with an Okeetee corn. How could these descendants of a Striped corn bred to an Okeetee be

Motley types, instead of Striped? It is still unclear if those 2.1 Tesseras were F<sup>1</sup>s (*first familial generation*) or F<sup>2</sup>s (the originator of this line is now out of the hobby and difficult to reach - for clarification). If these three Tesseras are F<sup>1</sup>s, my deduction is that the striped corn he used in the original pairing was actually Striped AND Tessera. Even if those three were F<sup>2</sup>s, the likelihood of the mutant patriarch being a Striped Tessera is strong.

In the 100+ Tessera mutants produced by me as of Fall, 2010, I'm seeing the following features:

The most obvious advantage of having Tesseras in your breeding inventory (aside from their inherent beauty) is that because the mutation is dominantly inherited, 50% of every brood of corns from them will be Tessera mutants. With most other corn snake mutations, one must raise all the Het F<sup>1</sup> progeny, and won't receive any mutants until F<sup>2</sup> reproduction (a task that can take four to six years). In the course of adding Tessera to the myriad current patterns and colors of corns, an entirely new market is now in the making.

Predominantly contiguous dorsal striping is the most unique feature of most Tesseras. Even when the stripe is broken, it resumes immediately thereafter (unlike Striped and Motley mutants whose dorsal striping never resumes with any degree of renewal). Roughly 1/3 of all that have been produced so far have no stripe breaks. Another 1/3 or so have two to four stripe breaks, and the other 1/3 can have five to 20+ stripe breaks, but those breaks are merely interruptions of the stripe. Not unlike very good Striped Motleys, many Tesseras have an interruption of stripe at the girdle (*anatomical location - polar to the cloaca*), but unlike Striped and Motley mutants, the dorsal stripe almost always continues to the tail tip. Thus far, fully striped Tesseras have been produced from parents with *some-to-many* dorsal stripe breaks. Hence, broken-striped Tesseras can produce fully striped striped Tesseras, even though their stripe is broken. Incidentally, none of the original 2.1 original Tesseras in this line have complete dorsal striping, but many of their progeny and grand progeny do.

More than 2/3 of the Tesseras produced by me so far have atypically large amounts of black pigment in their non-ventral pattern — a feature roughly 1% of all Striped and Motley mutants have demonstrated to date. Less than 1/4 of all Tesseras produced by me have little to no black in their markings, and these are mostly Striped Tesseras.

The belly patterns of most Tesseras that are not also homozygous for other pattern mutations (i.e. Stripe) are all over the charts, but so far, all the bellies on Striped Tesseras have had no pattern at all. Apparently, the STRIPE mutation trumps what normally occurs on the bellies of Tessera mutants, thereby not allowing belly pattern.

Having grafted another entire branch on the already sprawling corn snake family tree, we think the Tessera mutation will offer genetic flexibility never before possible; mainly in the realm of making Stripe and Motley types without losing the black (white in albinos). Imagine all the current colors of corns infused with the Tessera, Striped Tessera, and Motley Tessera patterns?

#### Important Note:

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.