

(no aka)

Most Commonly Used Name: Amel Tessera

Mode of Genetic Inheritance: Dominant

Morph Type: Dominant & Recessive Gene Mutations

Eye Color: Red pupil



FIRST, what makes Tessera corns so expensive? Other than appearance, the inherent (and primary) value of Tessera-type Corns is their mode of inheritance. Since they are genetically dominant to wild type, pairing any Ultra Type that is a Visual Het with ANY corn snake (other than a Tessera-type) will render 50% visual 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.

Amel Tesseras are virtually identical to exceptionally well patterned Striped Amel Motley in appearance, but that's where the resemblance ends. The remarkably consistent Striped Motley-type pattern that derives from the base mutation, Tessera, is inherited dominantly. Hence, when you breed a Amel Tessera to a Amel, both Amels and Amel Tesseras (approximately 50/50) will comprise the F<sup>1</sup>'s (First Generation Progeny). No waiting one more generation to get pattern mutants, since Tessera is dominant to wild type.

#### What to expect:

At this early period in the Tessera's resume, we still don't know what phenotypic potentials exist. So far, the only behavior that is atypical for a corn snake mutation is that many of the non-mutant siblings of Tessera types seem to have enhanced pattern and color features. So far, I don't see any hybrid markers, 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).

As hatchlings, Amel Tesseras look virtually identical to exceptionally patterned Striped Amel Motley. Of course, the primary distinction is not visible. It is that of the dominant inheritance. We're still not quite sure what to tell you about the adult appearance of Amel Tesseras, as 2010 was the first year they were produced here. Updated pictures will be made available 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  $\frac{2}{3}$  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  $\frac{1}{4}$  of all Tesseras produced by me have little to no black in their markings, and these are mostly Striped Tesseras.