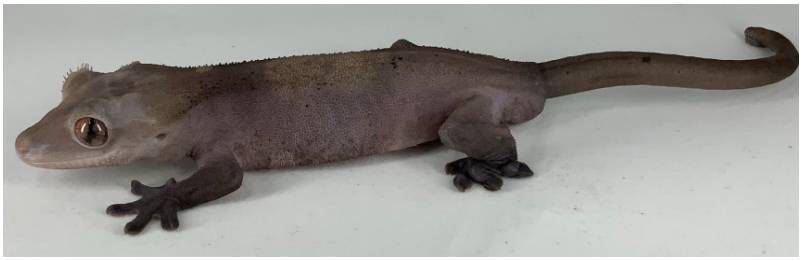
Reptile City Korea

Cappuccino Frappuccino & Melanistic

What we know, and what we do not know, about this hot new gene.



Trait details:

GENOTYPE: C
PHENOTYPE: Incomplete dominant
Heterozygous form = Cappuccino
Homozygous or complete form = Super Cappuccino or Mel
Non-allelic with any other known traits.

Rev.1.1_11/22/21

We began our cappuccinos project while attempting to identify and prove out geckos that possibly carried the axanthic gene. We have never purchased or bred axanthics, but over the years we have produced geckos that were very similar in appearance. Because our main business is supplying geckos, to pet stores, we have never bred for any specific trait other than reds and quads. For this reason these “axanthic like” geckos were produced and outcrossed, but never bred together. In fact, we now know that the gene has been outcrossed in our colony for several generation, thus resulting in a very diverse gene pool.

In addition to being outcrossed to various phenotypes, we also unknowingly added the phantom gene. These original geckos had the appearance to what are recently referred to as charcoals. In fact, they looked so much like charcoals that for my in house records I just labeled them as such, although we have never bought or bred charcoals. Of course, we now know that, like the charcoals, they are simply dark phantoms, which is a simple recessive gene. Without even knowing it we produced the first Capp combo, the Cappuccino Phantom.

When we decided to attempt to prove the “axanthic type” we coined the term cappuccino. We actually set up several groups and separated them even further by identifying them as Capp light (possible hypos) and Capp dark and charcoal, which is now identified as dark phantom cappuccinos.

In Nov 2020 our first Capp x Capp egg pipped, but the baby got stuck and died. The sibling hatched the following day (pictured below). Of course, we now know that baby was in fact a cappuccino.

Then in Feb 2021 we hatched out a melanistic baby from a different cap x cap group than the one that produced the first unborn mel in November.

This baby appeared identical to the first baby, except this one was alive and appeared healthy. There were no visible marks or pattern, the tail was longer than normal and the crest was minimal. It's eyes were solid black! The baby was active and had a great feed response. It appeared to be strong and healthy.

On March 11, 2021 we hatched out a pair of eggs from a group that we had originally set up and labeled as charcoals. To our surprise the hatchlings were both melanistic. We now know that the breeding group was not identified as cappuccinos, because in addition to being cappuccinos, they also carry the recessive phantom gene. The phantom gene covered and darkened the already dark base of the cappuccinos sometimes (but not always), reducing the pins and tail pattern to the point that it is difficult to see.

Up until this discovery we had been selling geckos from the outcrossed groups. After the first melanistic baby hatched here, we halted all sales of cappuccinos, and received messages from a few people who believed they had some. For this reason, we realized that this was not a project that could be kept under wraps until all the questions could be answered. We knew that we would need to work together with others. In fact a few weeks later another breeder, who had contacted me and believed he had 1.2 of our cappuccinos, hatched out a pair of melanistic babies. At this point, having 4 separate groups of Capp x Capp breeders hatch out identical melanistic babies, the first question of whether it was in fact a newly identified gene was put to rest. We still had a million other questions at this point.

Near the same time, that we set up the Capp x Capp groups, we also set up a Capp x Lilly group. In February, prior to the first Mel hatching, we hatched out a rather unique looking Lilly from that group, as well as a phantom Lilly, from the same group a few weeks later. During this whole process I had been communicating with several guys much more versed in genetics than I am. Anthony Vasquez from lil monsters was a huge help and based on what we had produced thus far we were able to identify the cappuccino gene as an incomplete dominant gene (same as Lilly whites). The melanistic is the super (complete) form of the cappuccino gene (cappuccino + cappuccino). The baby, pictured left above, is a 2 gene combo (cappuccino + Lilly white) both of which are incomplete dominant non-allelic traits. With a little help from Instagram friend @reptilectrix_exotics we settled on calling this combo morph “Frappuccino”. The baby directly below it is a 3 gene combo (cappuccino + Lilly white + phantom). This includes the recessive phantom gene and the two incomplete dominant traits.

We have not designated a name for this triple gene morph yet, simply calling it a phantom Frappuccino, but the combination so far has yielded some very cool patterning. Below are these same two babies as they look today.

Identification and color changes in all 3 are varied, and like most crested geckos can be rather drastic. For cappuccinos, as a general rule, adult colors tend to blend and fade from their baby colors, with most losing all of their dorsal pattern. Pinstripes will widen and spread with the dorsal on many Capps and can be found in both yellow and white. There tends to be mostly grey and black or dark brown base colors. That is most likely due to the originating geckos colors. With continued outcrossing, the dark color as a marker has not held true. We have other base colors now. Many of the dark Capps ,and phantom Capps, also have tongues that can be near black, but their tongues do change color from dark to light rather quickly. Identification of the baby Capps is actually quite easy with high expression animals. The base of the tail is a brighter, sharper white color, and the end of the tail is typically very dark with little to no pattern. Of course, like lillies, high expression animals are much easier to identify than tbose with low expression. When in doubt we simply hold the animal back, until either the growth reveals the gene, or in some cases like with phantom Capps, we can prove them out by producing mels. As pictures are worth a thousand words I will let them explain better than I can.

Top is cappuccino and bottom is it's non Capp sibling. In this case they are both phantoms.

Left is the cappuccino and right is it's non cap sibling.

Even without it's non cap sibling for comparison, it is easy to see that this little guy is a cappuccino.

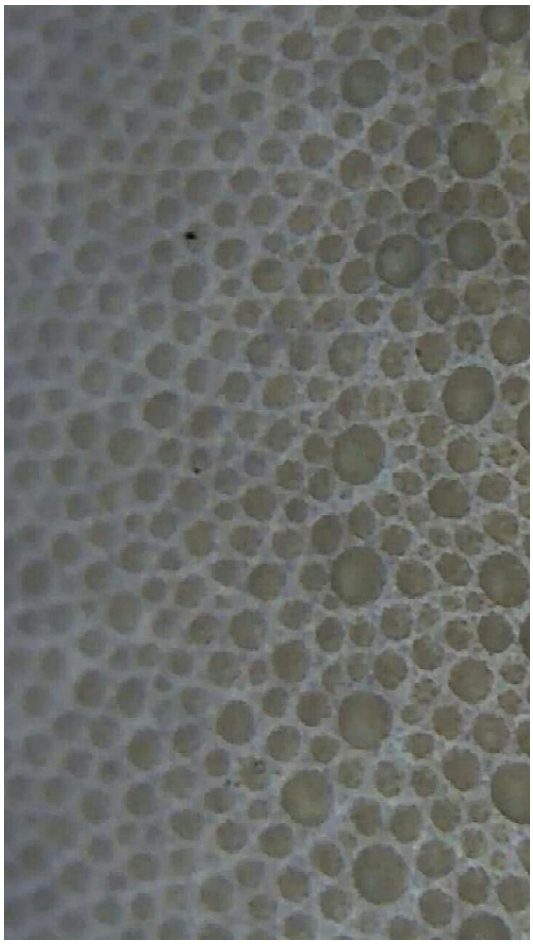
Below is a proven Capp male as a juvenile and as an adult, with the pin going yellow in this case. This is what we first called a Capp light. It is a gray based animal, and even though the pin is quite yellow as an adult, the baby pin and base of tail is the nice bright white color. This appearance is used to help identify it as carrying the capp gene.

We understand that the cappuccino gene is not the only one to produce babies with bright white on the base of the tail. It is simply a way to help identify a Capp baby that is produced by a pair that has at least one known cappuccino parent. It will, in addition to the white base, also be much darker than normal towards the tip of the tail. For anyone who feels that they have a gecko that may carry the cappuccino gene, based on our identifying markers, and whose lineage is not from a known cappuccino, will have to breed it to a known cappuccino and produce a melanistic baby to “prove it out”.

Frappuccino's tend to display characteristics of both Capp and Lilly, or in the case of phantom frapps, all 3 of the genes characteristics as shown in the earlier pictures. As babies the white is also "whiter" than normal just like with Capps.

The left baby is a frappuccino and the right one is a Lilly white.

RCK Melanistic are the super, or complete, form of the cappuccino gene. This new form leaves us with many unanswered questions.
One of the first questions asked was if they were translucent. It is a fact that the color of the skin is not the only difference. It will take someone much more versed in this area to decide that, but if the scales are examined closely, it is obvious that they are different. Because of the reduced scales and crests I have wondered if a layer or component of the skin is actually missing, and this is actually what causes the look, rather than poor structure. If it were just poor structure then it would make sense that there would be some difference between them, especially considering that they are now produced by many different parents. Based on my observations, so far, it would be my SWAG (Scientific Wild Ass Guess) that the cappuccino gene acts very much like the leatherback bearded dragon gene, that produces the silky back super form. Other than the fact that silkies retain their color and pattern, the other similarities are uncanny. In addition to their color, silky like skin and poor or no structure, they also are born with black eyes. As they grow they will lose the solid black, in varying degrees, and develop what we refer to as snake eyes, which I understand is common in super forms.



Like all crested geckos, they are able to fire up and fire down. With age the color change can be remarkably drastic. Some have developed Dalmatian spots while others have developed white or tan areas that appear random and without pattern.

There is still a lot of work to be done, with the cappuccino gene, including outbreeding to various phenotypes and genes. Since we have already produced combo morphs with Capp, Lilly and phantom genes, that still leaves the axanthic gene, and the genes that make up the designer morphs. I know some guys who have already started down that road but I have opted to keep the axanthic gene out of my colony to help with clarity of our existing projects. We have also not

added charcoals to our stock, because we already have the phantom gene, and will produce our own line of black phantoms and black phantom cappuccinos.
Because we had released cappuccinos before we realized what it was, and had to go public with the project before all the questions were answered, it has left a void that has been filled with rumors. Some of these rumors are rather bizarre and totally off base. Below are a few rumors that I have heard thus far...

RUMOR - melanistics are not able to escape the egg and must be cut out.

UNTRUE - as these two will attest. I also have a video on Instagram of a Mel hatching. Other than the first baby, I have only had one other baby drown and dozens successfully hatch on their own.

RUMOR - Melanistics are all females.

UNTRUE - Not sure who started this one, but I will say that I am slightly heavier in males than females at this point. I will however note that because the skin is so fine it is much more difficult to see pores and several of my males were still thought to be female at 8 or 9 grams.

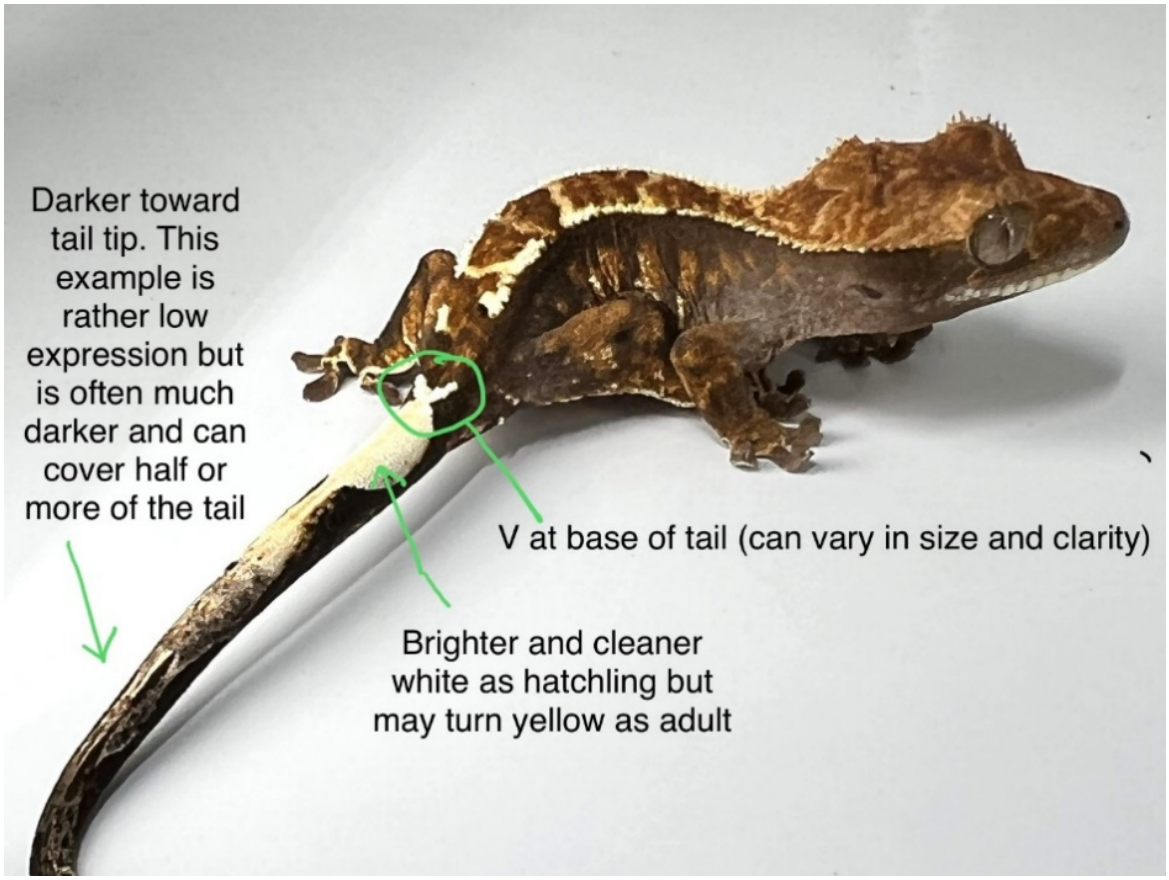
RUMOR - (I will lump these two together)… Mels were produced from a genetics lab -OR- are crested and sarasinorum hybrids.

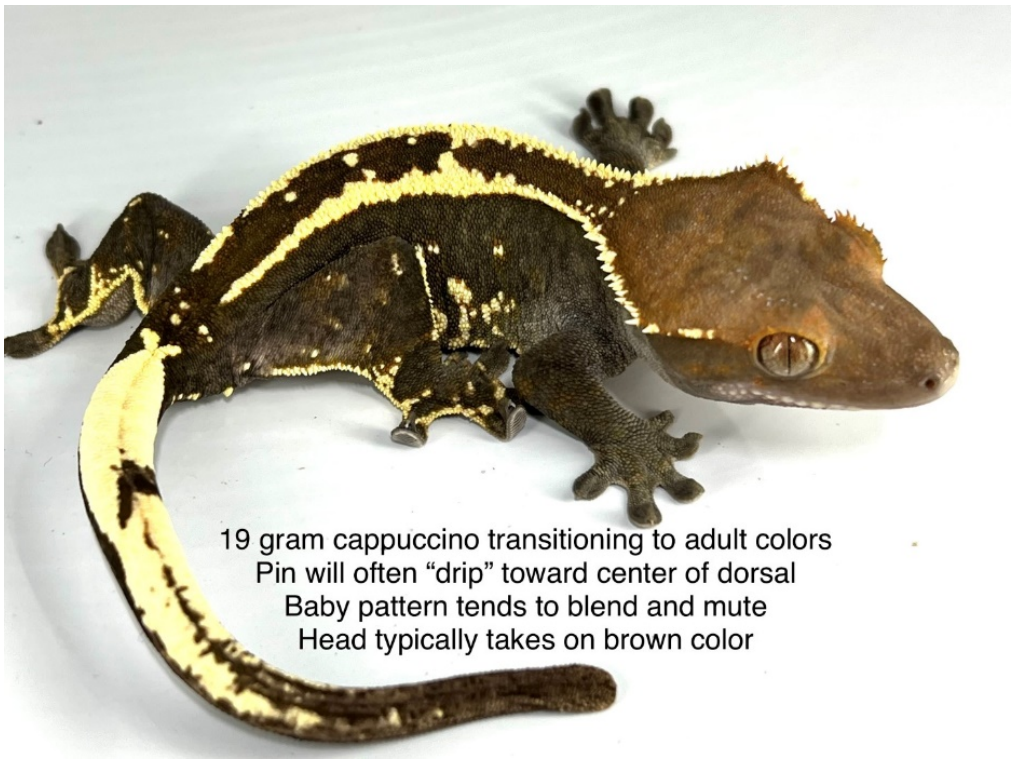
UNTRUE - I am not smart enough to produce one in a lab and I am not stupid enough to produce one by hybridizing and trying to pass it off as something new.

RUMOR - Melanistics are infertile.

NOT SURE - I am not to the point of even attempting a melanistic breeding yet, although we should have an answer to this question early next year. It is of course a possibility and if this turns out to be the case, then we obviously will put it out there. We have seen no fertility problems and no defects or neurological problems with any of our cappuccinos. I believe that this may, in part, be due to us outbreeding them for several generations.

In conclusion, we as breeders, do not have control over how various genes present themselves or interact with others. In all her glory, Mother Nature decides these things and all we can do is learn as we go. We hope that with the emergence of several different genes, in recent years, that the future remains bright for all who enjoy working with crested geckos as much as we do. For those with questions, or who may wish to share information, you can DM me on Instagram @city.reptile. I will conclude with pictures as they are worth more than my ramblings…..





Below are just a few more samples of baby cappuccinos

As we continue to outbreeding we find ourselves faced with unidentifiable animals. Cresties, that we believe are Capps, but present a new and unfamiliar visual. We simply hold those back to prove them out, with like animals, or known Capps. Here are a few examples.

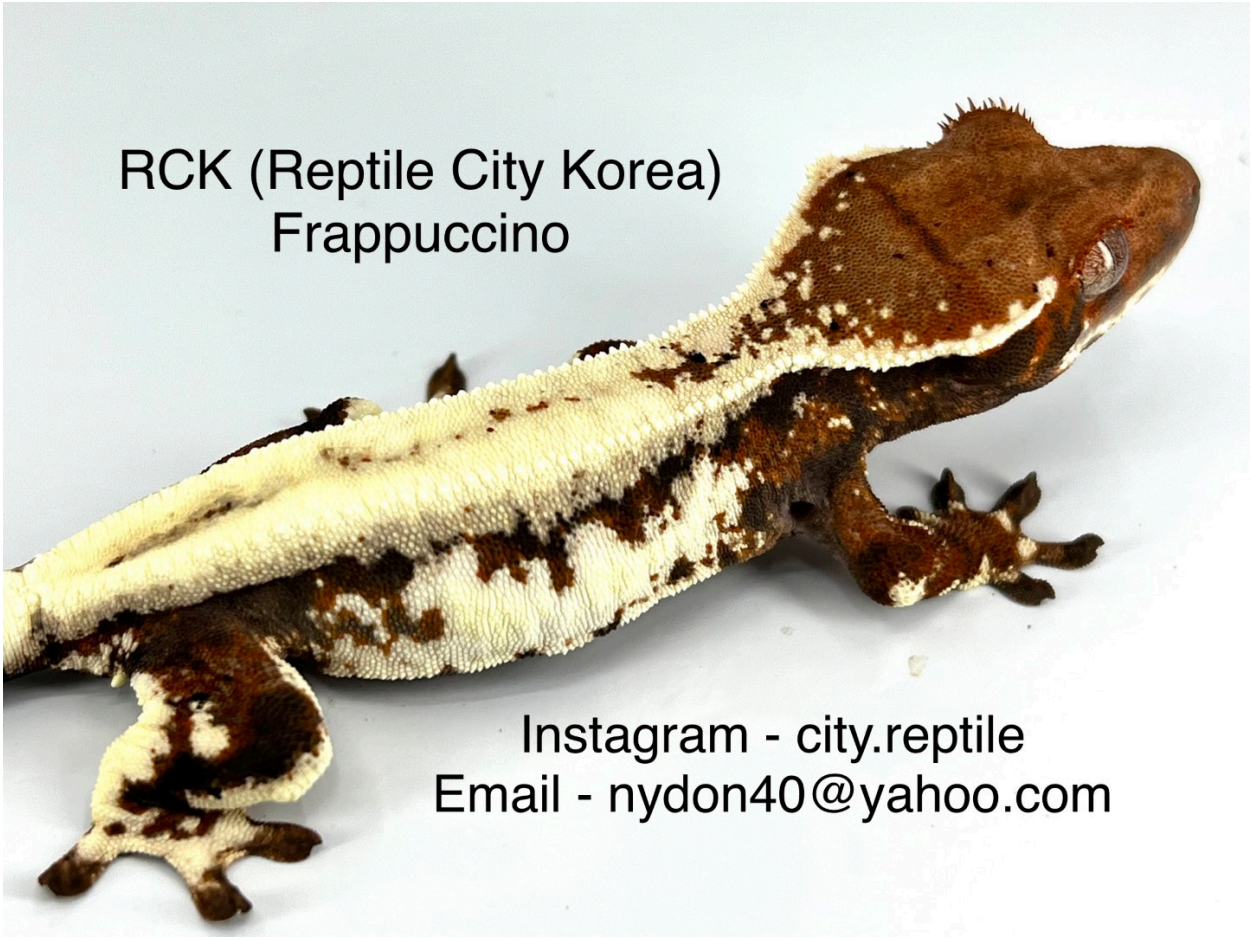
This project is a work in progress and there are already several breeders, from throughout the world, who are working with this cool new gene. I am very excited for the future but wish to take the time to thank a few people whom have helped us along the way…..

Anthony Vasquez - @lm.reptiles – www.lmreptiles.com

Tom Favazza - @geckological

Jake @Reptilectrix_exotics who gave us the Frappuccino name.

All of my customers and Instagram followers who have given me support and kind words. I am overwhelmed at times and miss followbacks and replies but I assure you it is not intentional. Just hit me in the head to wake me up!

THANKS!!!!!!

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