New, Cutting-Edge Corn Snake Morphs Article BY KATHY AND BILL LOVE

n recent years, the corn snake world has seen numerous new genetic traits come to light. It's not clear if they have appeared spontaneously as mutations or if they have masqueraded beneath our notice for decades, because they were not as obvious as things like amelanism. The hypo- (having less than usual) and hyper- (having more than usual color traits) are especially prone to lurking unnoticed, because corn snakes are naturally so variable in the amounts of pigments they display. Hypomelanism has been particularly puzzling, as at least four separate genetic types of anomalies, that all reduce the amount of black in corns, have been demonstrated as "hidden" in corn

collections. It often takes multiple generations of line breeding (crossing related animals to concentrate traits) cryptic phenotypes like that to reveal the hidden presence of inheritable colors and patterns that were formerly considered just tendencies toward or against showing those looks. This will give you a good introduction to the how corn snakes have evolved to the mass market 'universal' pet snake they are today. If you find it daunting, rest assured that it's perfectly acceptable to simply enjoy them as pets and forego breeding them at all. But if you're inspired to investigate further, here are some brief descriptions of corn morphs on the cutting edge of herpetoculture:

Ice: When lava is combined with anery, it produces a sort of ghost that often exhibits increased yellow and a subtle difference in the hue of the gray colors.



Hypo Lavender Blood-Red: Some might call this diffused, because the lavender masks the red color. The lavender color is lightened by the hypo gene, and the lower sides are diffused because of the bloodred/diffused gene. The result is this stunning corn.



Pied-Sided Blood-Red: Still fairly new, current breeding trials suggest that this is a modified pattern in blood-reds. Highly variable, the constant seems to be an abrupt cutoff of white color on the lower sides. Do not confuse it with some typical blood-reds that show a little white creeping up the sides from the belly.





Hypo Pewter: Three traits in one snake! When blood-red is combined with a gene that erases the signature blood-red color, only the diffused pattern remains on the lower sides. Thus, many breeders call such animals diffused instead of blood-red. Pewter combines diffused and charcoal, and the hypo lightens the color even more.



Lava: This relatively new gene mimics the old, original hypo gene in lightening and brightening the reds, but it will produce normal babies if bred to the original hypo corn. It often (though not always) adds an unusual translucent quality to the grays in the blotches.

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Salmon Ghost: Some breeders call this hypo version strawberry while others use salmon. Here is where it can get complicated: It appears that strawberry is co-dominant with the original hypo. That means a corn can be het for both types of hypo, and intermediate between the two. Strawberry seems to intensify red colors and may be

> useful in projects where light, bright reds are the goal. When combined with anery, the reds show through more intensely than in a typical ghost.



Tessera: Don't confuse it with the old striped corn! This new trait appears to be a dominant gene. That means it can be reproduced (and combined with lots of different colors) in the first generation. Unlike striped corns, there may be some checkerboarding on the belly. The new combos coming soon should be really eye-catching!



Sun-Kissed Caramel: Sunkissed is another hypo gene that originated in pure Okeetee bloodlines. Like blood-red, there is a pattern component as well as lighter and brighter reds. Breeding to any other type of hypo will result in normal babies. The caramel gene intensifies yellow and reduces red, as in this unusual example.

Ultramel Motley: Most corn traits are recessive and easy for beginners to understand. But ultramel (similar to hypo and strawberry) occur on the same allele, and an ultramel is heterozygous for both the ultra type of hypo and amel. Thus ultramels are often the lightest colored corns, other than true amels. In addition, the motley genes causes a general lightening of the black colors, giving this animal a double dose of light, bright colors.

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Sun-Kissed Blood-Red: The reds of blood-reds, coupled with the light, bright color and pattern variations of sun-kissed, make up this gorgeous snake.