

November Newsletter 2019

# The Pigeon Genetics Newsletter, News, Views & Comments. The Pigeon Genetics Newsletter, News, Views & Comments.

( Founded by Dr. Willard .F. Hollander)

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Firstly we would like to respond to a couple of statements in the letters from Members last Issue.

(1) From **Tom Ah deMunnik** , I have followed your description of bronze as Kite/bronze and assumed that Kite is the base and recessive red being the variance of bronze . Then in another discussion on Non Spread , Non smoky , Dark Kites, being Kites with blue series T check and Homo Dirty which some call Dirty/Kites.

**{ Our response : bronze of any sort is never a base nor is it ever a 'foundation . It is a dominant mutation modifier and may express on any bird regardless of what other trait or traits may be present with very little exception. Recessive red is just one of the mutations that may also have Kite bronze and we have never stated that it is a variance of bronze, so not sure where you got that impression Tom.. Secondly : The point we want to make clear is that the GENE is KITE bronze and ( K ) is the symbol. Some people have been of the opinion that only the Dark ( Dirty factor T-pattern birds) should be called KITES. We suggest that that is not appropriate as not all of them have the Kite bronze gene. The BRONZE is the feature "Kite" regardless of the pattern or any other darkening modifiers. }**

(2) From **Bill Greenslade** : The idea that Kite is a phenotype not a specific gene is truly interesting.

**{In the July Issue , responding to Mr. Joe Powers, we emphasized that we do not agree that a Kite is only a T-pattern phenotype , and further explain that it is indeed a gene mutation modifier that has been tested and given the symbol (K).}**

Bill added : The old time ESFT breeders insisted that kites had to be almond bred in order to be used in an almond mating. Kites were dull, dark black in appearance with some bronzing showing in the flights. They did not have bronzing (rec red?) showing in the coarse spread area on the shields. Breeding kite to kite brought out the red overtones on the shields as well as

increasing red in the flights and secondaries. These were not deemed to be suitable mates for almonds. Probably some of them were used but the advice given was always to use an almond bred kite when selecting a mate for an almond.

{ **Our response to this is that no matter how you think about it , they had to be creating homozygous Kite bronze when mating any of their Kite bred almonds to either a recessive red, an Agate , or a Kite bronze T-pattern. The amount of KITE factor would be the same. The result would always be variable due to the extremely unstable nature of all the components involved , such that making any specific statement regarding a set formula would be a 'general' but otherwise impossible task.**}

Bill also said : I have not seen any of the breeding results that proved the existence of a brander gene, but then, I haven't seen anything that proves the existence of a separate kite gene, either.

{ **We will see if we can present those details in the New Year when we again cover the "Bronze factor(s) topic.**} **Special thanks to Tom and Bill for their input and interest!**

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**TOPIC #1 : David Warren asks :**

Does recessive opal and dominant opal both have a lighter tail bar ?

{Edited slightly for clarity}

**Bob Rodgers** - The short answer is yes.. Both tend to wash out the sub-terminal tail band smooth spread. There is quite a range of expression of this in both , but particularly in Dominant Opals. Both may have what looks like 'fret' marks especially in the tail feathers as youngsters , that will correct itself during the moult.

**David Warren** - I bought a bird that I thought was an Opal and bred him, but I didn't get any Opals this year, after I got to look at him I noticed that he has a regular tail. He is blue and his tail has a black tail bar/band. He has bronze wing shields so I was wondering if he might be Ts1?

**Michael Spadoni** - David , get us a picture and we should be able to work it out.

**Bob Rodgers** - That is of course a possibility. We would have to see him at least, and even then it may not be possible to say without seeing his parents. Phenotypes can often have different genetic causes .. there Michael beat me to it ..

**David Warren** - I will try to get a picture of him tomorrow as it is dark here now. I thought they had a washed out tail band and I never paid attention until the other day . Michael thanks , I will get one.



**Bob Rodgers** - To be a recessive opal , both parents would have to be either recessive opals (o), both carry (o), or one be opal while the other carries the gene. This bird looks like a smoky factor , Dirty factor , Dominant Opal (Od), to me . In that case only one parent needed to be Opal.

**David Warren** - So he doesn't have to have a light tail band ? Thanks , as Dominant Opal is what I was hoping he was , but I didn't get any Opals from him this summer. I got a dilute spread factor ( Dun) ., and some checks.

**Bob Rodgers** - If he is a recessive opal , that is linked to pattern, so as he appears to be T-check, any t-check young would be recessive opal. Odd that you did not get any Opals if he is Dominant Opal ., but not impossible to happen as the ratios can vary.

**David Warren** - Thanks.

**Michael Spadoni** - I have been breeding some Indigo's with light tail bars.

{ Editors} Indigos usually do have bleached tail bands , but just as we see in the opals, reduced, rubellas, etc, there is quite a range of variable expression.

## TOPIC # 2 :

**Bobby Corrales** asks: Will you talk about this colour?



Bob Rodgers - It may just be smoky factor and Dirty factor , the bronze - like cast may be the lighting. May we see the Parent's colours?

**Joseph Braun** - Definitely see smoky.

{Editors} we have seen on several occasions where such phenotypes were labelled Sooty factor., however this is NOT Sooty. Note that the central tip area of each shield feather is lighter than the rest of the feather, which is darker as if a 'shadow' of the checker pattern. This is typical of many smoky factor birds. Smoky and bronze do not seem to express well together if at all , and often give a tarnished appearance as seen here also.

**TOPIC #3 : The U of U report is now available on the net regarding their preliminary study of Stipper /Almond feathers and alleles. You may access it on line at this address:**

**<https://www.biorxiv.org/content/early/2019/07/01/688671.full.pdf>**

**You may find it very confusing because they must repeat much of the same material over and over again , and the fact that not only do they use 'genetic' terminology, but there is a misuse of standard terminology as we are accustomed to seeing it used.**

**There were a number of points that I was pleased to see . You will recall my conversations with a couple of fellows where they argued against my views on what was going on with the Stipple gene. This report clearly supports what I have been saying. (1) The white areas ( break) caused by the stipple gene lack pigment granules! The pigment producing cells are present BUT they have been stopped / prevented from functioning so that no pigment granules have been produced in the white areas. (2) The stipple gene acts on light feather buds, and the feather buds of homozygous stipple birds, not dark feather buds so that its best effect is seen on the early (new) feathers before the moult allows reversion. (3) During their comparisons they found that there were a number of autosomal traits that appeared to be those chosen and introduced by breeders to get the phenotypes they desired. These are the traits such as T-pattern, recessive red, Kite bronze etc. that I have been saying all along resist the influence of the breaking action of the Stipple gene. There is a great deal more in the report that we will touch on in the future.**

**Topic #4 : Question by several Breeders private messages , Can two non-stipper offspring each with a stipper parent , produce a stipper offspring ?**

The answer to this question is no. The non-stipper offspring do not receive the stipper gene, that is why they do not express it in their feathers. The gene is a dominant, more specifically a semi-dominant, and must be seen if it is present. One case was two solid blacks that had one baby solid black, and one near white with some coloured flecks. The parents were from a Stipper mated to a solid black. Obviously we would have to see the grand-parents to sort that out, but the two blacks could not carry and produce a stipper offspring.

**Topic #5: Question :** If I mate a normal Satinette to a chocolate laced hen what will I get ?

**Answer:** Black and Chocolate are spread factor on the blue and brown series. If they are pure for spread, then all babies that they produce from any mate will be spread; however, the chocolate hen is a recessive colour gene, so none of her babies will be chocolate/brown. They will be black or blue. If each are hetero spread (which means they had only one parent spread), then half of the babies will be spread and half non-spread (some pattern bar, checker etc.) If the male carries the brown series gene, then when he is mated to the chocolate laced hen, you could get chocolate cocks and hens. If he carries the dilution gene then when mated to this chocolate lace hen, some khaki hens would be possible. So a great deal depends upon what recessive genes are carried hidden by the cock as well.

**TOPIC #6: Question :** I paired a black magpie Danish Tumbler cock with a yellow hen and this pair produced a black magpie chick. That chick is 8th. feather now. From a sex-linked theory I thought it should be a hen but as it is growing, he is showing as a male. Is it possible that a black cock and a yellow hen pairing can produce a black cock too?

{Yes, the only time a pairing is considered 'sex-linked' for a given trait is when the hen's trait is dominant over the same trait on that of the male. In this case yellow is a recessive to intense black in two ways., so if she is in fact recessive red dilute then intense recessive red is also recessive to black. So unless he carries recessive red, all babies will be black. If he carries dilution then some babies in both sexes would be dilute, and in this case dun. Now if the hen was

**black and the cock dun for example , then a criss-cross in colour between sexes would occur., so that all of her sons would be black and all daughters dun. That would be sex-linkage. If she was solid recessive red , and the cock yellow, then the same : all sons would be red and all daughters yellow, again a sex-linked mating. If she is indeed an ash-Red dilute, then the ash is dominant over the black, so in that case all sons would be ash, so obviously your yellow is a dilute recessive red.}**

**TOPIC # 7 :** Private message ~ Bob , what's a crossover ? I have a brown stipper, but can't classify it as a brown Sprinkle because of three colours.

Our Reply : During meiosis , which is the process by which sperm and egg cells are produced, the genetic material in the chromosomes separate and rejoin. This is called recombination., it usually joins up the same way again, but in some cases it rejoins opposite or nearly so to what is normally expected. Some of the genetic material crosses over to the other chromosome strand. It is a complex event. We have discussed it in the newsletters a number of times. The closer the traits are located on the strands of a chromosome , the less likely a crossover will occur. In the case of these blue based stippers with brown feathers , the female would possibly have been a stipper and brown. She passes both the Stipper gene and her colour to her sons as they are linked on her chromosome , with no crossover happening.

For example , if the cock's Mother was a brown Almond and the Father was a non-Almond , non brown, then we can certainly say that the cock has both Almond and brown mutations in the same chromosome and that both are from the dam. So in that case no need of a crossover to get a brown Almond female from him.... but we would need a crossover in order to get just a brown female . If the cock's dam is an Almond and the sire is a brown, so that the cock is a blue Almond split for brown ... that means that the chromosome that he got from his dam had the Almond mutation, and the chromosome that he got from his sire had a copy of brown....so the two mutations are in different chromosomes ., in this case a crossover needs to take place in order to produce a brown Almond female from him. The third colour would have nothing to do with a crossover, usually that is remnants of bronze. There could be other modifiers such as dilution, reduced etc. that can be expressed on some of these birds causing additional tone differences in some feathers.

**TOPIC #8 :** Rafiqul Islam asks : Any idea about breed Name?

Father white short face and mother Satinette.



My reply That would make this simply a 'crossbreed' between two specific Breeds, one a Satinette, and the other what you call a white short face, which I assume you mean is a Tumbler? Generally , the white bird may be an ash-Red and possibly a grizzle which might explain the colour phenotype.

There were no further responses to this post on "Unnamed Unique Genetic Pigeon Traits" Facebook. This bird could also be a spread ash-Red ( Strawberry), possibly with Sooty factor.

Crosses are fun and often just the result of an accidental mating in an open loft where a number of Breeds are permitted to live together both cocks and hens. These crosses are an added expense however., and should be avoided unless one has a lot of space and money to put into keeping and breeding birds that may not have any resale value. Unfortunately 'culling' is a common practice in the hobby, so it is best to avoid it as much as possible. All of the cocks should be placed in one loft , and all of the hens in another preferably some distance away so as to prevent hens from staying attached to the call of an old mate. Individual breeding compartments should be utilized to help keep perfect records of everything that you do . Care must be taken not to move a hen from one breeding cage mate to another as she can retain semen from the first male for quite some time. She may still lay eggs fertilized by him even though she has been covered many times by her new mate. There must be a rest period for her whereby she perhaps may lay a set of infertile eggs to be certain she is free of semen from the first male. This may seem like a great deal of extra work and delay but it is far better than getting completely off track in your breeding program with youngsters that keep you guessing as to what the heck is going on !

**TOPIC # 9 :** from **Charles Kendrix** ~ This post is not related to feather color as are most of the posts on here. It is about an oddity with eye color that I recently noticed.



The young German Modena in the picture shows a rather large pox lesion on one of its eyes. The other side was unaffected. This lesion got even larger and uglier before it finally dried up and fell off. The bird for much of this time kept the eye closed, and when the eye would look infected I would run a few days of **Terramycin eye ointment gel** in it. I did this for three or four days , two or three times. I was looking at the bird that last couple of days and noticed that the eye that was untreated had began the change to the usual red/orange of the breed. The eye with the pox bump had not began to change in fact there is a marked difference in color on the eyes.

I don't believe the Terramycin ointment was the cause. I believe the lack of exposure to sunlight might be responsible for that eye remaining more juvenile colored. What do you think ?



My response : I am wondering if it is just a coincidence, and that it is a natural event based on the pied factor involved? The beak base also seems to be stained darker on the more pigmented eye side than on the side with the dark eye..

**Charles Kendrix** - I have noticed on some of the young that get pox up around the face , the beaks tend to get stained , but the dam of this bird also had the pox on the bill , and she has a stained beak. It could be a coincidence or may just be in their genes. I had not seen this oddity with the eyes on any of the others. I was thinking about how one might test this, and I guess

giving a youngster an eye patch might work. It will be interesting to watch to see if that eye changes later.

**Quido Valent** - Sometimes they do have 2 differently coloured eyes , as we can have also. But , interesting to find out if this eye will change to match the colour of the other eye. Do winter babies take longer to get to the correct eye colour ?

**Charles Kendrix** - I've never paid any attention to the age that they change. I suspect the eye on this bird might change. It is still a gray tone right now, but German Modenas are not known for having different coloured eyes like some other breeds will do.

**TOPIC # 10 : Extreme dilute hen ... Porumbei Colorati.**

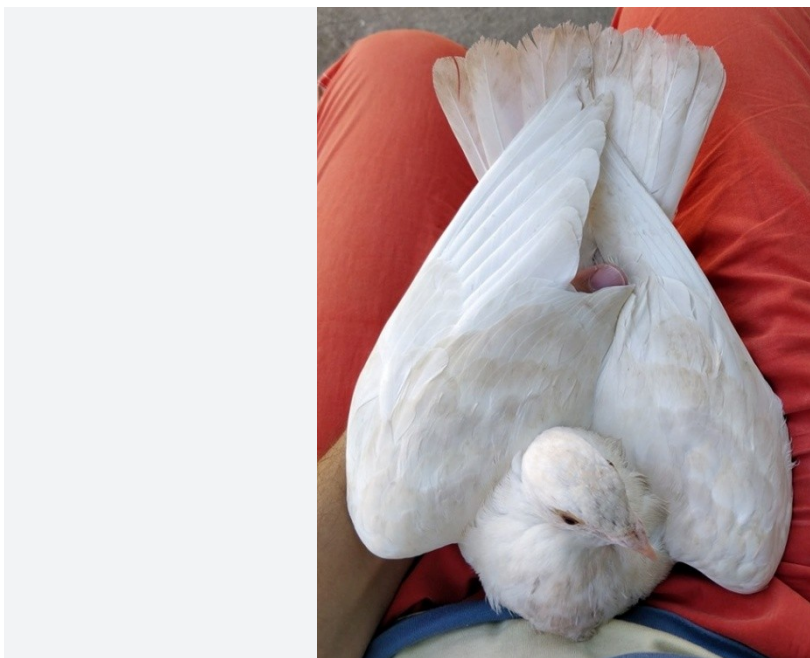


[Bob Rodgers](#) Very lovely looking bird , but of course we still have no expert molecular study of this gene to say for sure if it is an extreme expression at the dilution locus or INO, a type of albinism. The term 'lemon' refers only to blue barred birds that have this gene also , according to some people. The overall colour phenotype of this gene has been named "ECRU" by Doctor Lester .P. Gibson.

**Porumbei Colorati** - Didn't know... I thought Ecrú is a different gene which is not in the same locus as dilute. Thanks for the info. I also have an odd bird which have an extreme dilute look alike phenotype...I do not know who the father is. Also, I do not think is an extreme dilute hen. Look at the length of the fuzz.



**Porumbei Colorati** - The same youngster ... My assumption is that he could be rubella stipper.. will see next year.



**Topic #11 : Porumbei Colorati** writes ~ Any thought about the gene combination which produced this phenotype? ... Faded is not involved. Photo below : Hen , sire was ash-Red check carrying reduced and dilution, dam was a blue with reddish bars said to be reduced. No pied white showing on either.



We will continue next issue with the talks that followed this post in Strictly Colour Genetics Facebook . In the meanwhile , if you would like to send me an email with your thoughts about this bird , we will add your comments.

That is it from the Loft for the Month of November 2019 , just one more Month and this great year for some and not so great for others is over ! Hope you had a good year in the Loft , and both the show and flying season. Please keep in mind that we want to hear from all of you and see what you have for birds , and what you have done with them this past year and/or have planned for the New Year !

All the Best from Canada and Oman ~

