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The Pigeon Genetics Newsletter, News, Views & Comments.

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(Founded by Dr. Willard .F. Hollander)

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"The latest updates from around the World brought to You Monthly"

(Last Issue I mis-spelled the name of a contributor /Member , Charles Kendrix , not Kendricks., my apology)

TOPIC : FOLLOWING THE WHITEOUT TALKS .

Another member Tim Stone, also got some foundation stock from Mike Bordelon apparently , and he mentioned in a comment in our Strictly Genetics Facebook Group that he was enjoying working with Whiteout. However continued talk seemed to reveal that he may also be working with yet another trait under the name whiteout. Here is our exchange :

Tim Stone : I've been working with whiteout for a while now, fun thing to play with.

[Bob Rodgers](#) Hi , any pics or insight to offer us !?

Tim Stone : I bred a whiteout cock to a reduced bar hen and have produced lemon bars, qualmonds, and dun whiteouts, among others. I think my whiteout cock is so genetically loaded that its hard to sort through.

[Bob Rodgers](#) I read your comment again .. so the hen was a reduced Blue bar ?

The lemon bars and dilute black whiteouts would have to be hens , and that would prove that both dilution and the so-called "extreme " dilution were carried by the cock . That would be a major revelation ! It would mean that the two are not alleles as being aggressively postulated by some . Perhaps the lemon bars are from the St. locus , **Edit { the male could be dilute and carry a non-allelic lemon trait} .**

Tim Stone: The hen is reduced blue bar. I suppose the duns could be extreme dilute spread blue, would need more test matings that I don't have space for.

Bob Rodgers They would be a creamy fawn colour if they were extreme dilute spread blue . If they are dun , then no they are not Lemon genome .

Tim Stone : they're dun whiteout, looks different.

Bob Rodgers Lets see , as it would be helpful to compare with the post bird that is blue/black whiteout. A lemon whiteout would almost certainly not express anything that would look dun colour even in the lacing. We need to see some pics .

I think it could be significant due to the implication that both dilution and lemon would have had to been carried by the male in question! This we know could **not** be possible IF indeed lemon/Ecru/extreme dilution is in fact an allele at the dilution locus! We know from all published photos around the world that if Lemon expresses on any other trait , it masks it at least partially, so that its presence is very obvious, and even in the heterozygous state on Almonds. His whiteout would have to be a dilute spread factor split for Qualmond and lemon in order for him to be producing Qualmonds, spread factor , dilute and lemon young.. I asked Tim again for photos that may clarify things, and he said he will try to get some).

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There have been those who state that this trait does not express as epistatic to all colours and patterns, but we have only to compare it with other truly epistatic genes such as recessive red and Spread factor to realize that there are "unimproved" versions in those traits , and therefore it is reasonable to suspect that lemon / Ecru is also unimproved , and thus when we discover the modifiers that enhance its expression it may well cover pattern as completely as do good recessive reds and spread expressions.



lemon brown bar **Clint Robertson**  
Gimpel- developed by **Tim Kvidera**



lemon blue check **Theo Thramp**



lemon(Butterscotch) blackwing



lemon recessive red **Robert Mangile**



lemon blue Bar **AFPA,Gr**



Lemon Black **Brad Stucky**.

( Lighting in photos may cause some to appear lighter or darker than real life ).

# **TOPIC** : GETTING TO THE MEAT OF "CLASSICAL ALMOND" !

**Accepted symbolic description** : St//+, C<sup>^</sup>T//C<sup>^</sup>T, K//K , e//+ ( may be C<sup>^</sup>T//+ , K//+).

**Desired phenotype** : This applies ONLY to the English Short face Tumbler and European Oriental Rollers at this time , as no set requirements have been made for "Almond" classifications in any other Breed that we know about. We generally aim for the same phenotype as is applied in the ESFT , but in some Breeds recessive reds are either not readily available , or simply not possible.

**Question** : Many want to know if what they are breeding , are indeed Classical Almonds. The main thing we need to ask ourselves is what did we combine to get each bird. The first trait needed is the "**STIPPER**" gene ! ( It should be carrying recessive red and at least hetero kite bronze all on a blue base T-Pattern **without spread factor**).

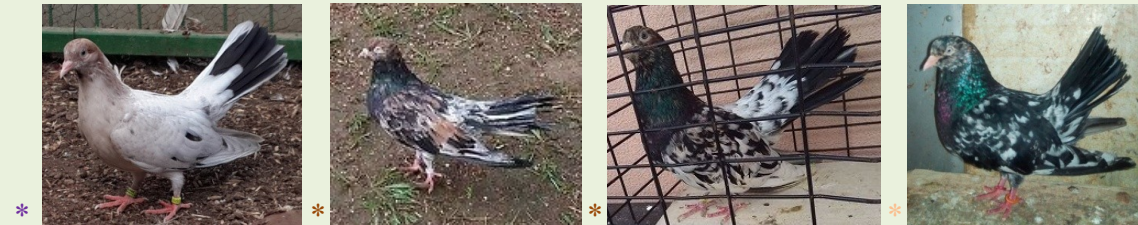
Then mated to a saturated T-pattern **pure blue/black** series free of SPREAD factor = (+//+) (C<sup>^</sup>T//C<sup>^</sup>T). This would include at least hetero Kite bronze (K). Finally this bird should also be hetero. recessive red (e) . = (K//+), or (K//K) ., and (e//+) or (e//e).

**NOW WE HAVE ONE MORE OBSTACLE THAT, I HAVE NEVER SEEN EXPLAINED GENETICALLY BY ANYONE !**

That is, the fact that the saturated T-pattern blues, used in the breeding of ESFT and some Oriental Rollers claiming to express as true Classical Almonds , are in fact as close to spread blue (BLACKS) as you can imagine! These birds lack the typical blue underbody of even the darkest T-pattern blues that we see in most Breeds. (What is the genetic difference)? It does not seem to be explained by homozygous Dirty , smoky or Sooty , not even in combination. These dark birds do not express much Kite bronze ( if any) in their flights and tails , but instead we see a bronze on the head , neck, and shields in adult birds, which is not typical of KITE bronze. This characteristic is one explanation of why the Classical Almonds they create are bronze over the head , neck, body and shields, but often have very little if any in the Flights , rump and tail feathers. Basally there is usually just enough bronze to qualify that the birds are Tri - colour in the flights and tail as set by the standard for ESFTs. The main body consists of various shades of bronze (almond) with a mix of residual base black pigmented feathers or part feathers. The desired phenotype is so rare that it is almost impossible to find suitable photos to demonstrate here as Ideal specimens! (Photos by permission of Walter Wojcieszki Oriental Roller Color Group, Facebook. also \*Mick Bassett. ( Known Breeders are : \* **Walter Wojcieszki**, \***Edin Etko Tatarevci**, \***Gokhan Demir** , \***Amir Hrnjic** , \***TC Umit Bilgin**, \***Petar Briosic**, \***Kenan Bwm**, \* **Jerry Charcon** and **Sermet Memis**. ESFT by **James Ellison**. (Match asterisks with photos).

{The genomes below may not be exactly as indicated , the phenotypes suggest that possibility}

A progression from a Black (spread blue) X stipper = some with bronze, then adding reversion.



Below a Saturated T-Pattern that is near solid black X Stipper & hetero (a bronze), Het. (e)?



Next a progression from a Saturated T-Pattern Blue series bird X stipper. homo..(K).



Next a progression using a Sat. T-pattern het. Kite, hetero (e) X - unknown.



SO , We know that the English Short Face Tumbler Breeders have long been striving to maintain what they consider the ideal "Classical Almond" phenotype based upon the effects of the Stripper gene. They apply a specific formula to maintain deep rich bi-coloured birds with tri-coloured flights and tails.

Oriental Roller Breeders in Europe have three classifications. The Black sprinkles , the Classical Almonds , and the Multi-Colour, the latter allowing more variance in Body colours.

The Modena Breeders have named their phenotypes for show purposes as : Black Magnano, and Magnano . The Black Magnani appear **not** to have any Kite , or recessive red and may be any pattern with black pigment. There often seems to be other modifiers present such as smoky , or milky as the overall colourations may be muted to soft ashy tones. The straight Magnano is again a soft muted version of the Multi-colour of the Oriental Rollers , may lack kite , not likely hetero rec. red & possibly lacking smoky.

In North America there are no set phenotype standards in any Breeds as they basically are all called "Almonds" . That is gradually changing as numbers increase at the shows and knowledge increases. Most of the time Almonds are relegated to the A.O.C classification.

ESFT European Ideal "CLASSICAL ALMOND" Breeder : **James Ellison.**



Post by Ben Ricketts , Australian Fancy Pigeon Assoc.. Facebook Group Michael Spadoni Administrator.

# TOPIC : TALKS ABOUT MOSAICS . ( TRUE OR FALSE )?

Here are some comments made at a Facebook Group that show there are still some misunderstandings regarding Mosaicism.

"A true mosaic is split down the middle with two different patterns on each side. Some guys think if it has oil spots or blotches of black over recessive red they have a mosaic, not true." { FALSE, not always}

"I don't think it has to be split down the middle but I've had a blue bar red bar mosaic ,just like a rec red with a black wing." { TRUE}

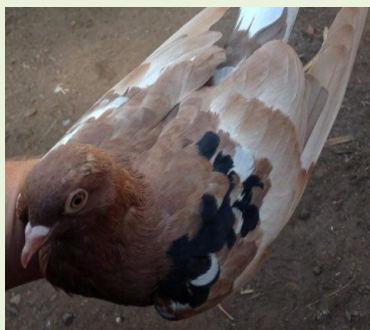
"It's the Epistatic flip of the chromosome that doesn't line up on the DNA strand." {FALSE}

"You would think so right? But I had been to a friends loft and seen pairs he has had that produced true mosaics every second round. He had 2 pair that did it.... I'm still kind of confused about it and not sure about our understanding of the mosaic." { TRUE}

{ Editors }

There are two types of Mosaics - we have dealt with them before here in the Newsletter. They are : Somatic , and Chimera Mosaics.

Somatic Mosaics are the result of somatic mutations, which involve development of a cell population carrying variation in the DNA as the mutant cell continues to multiply. Unlike Chimera, only one zygote is involved in somatic mosaics . Somatic mutations cannot be inherited in Pigeons as it will not happen in sperm or egg cells, however ., Mutation in the Somatic cells can be inherited in plants and Microorganisms . Conversely , Chimera mosaicism involves fusion of two zygotes . Sometimes the fusion can take place before the Blastocyte stage. , and results in a Chimera mosaic. There appears to be a gene involved that causes a predisposed tendency for some families of Pigeons to produce a higher number of Chimeras than would otherwise be expected. (Jith Peter ).



SOMATIC MOSAIC

DANNY R DUREN SR.



TYPICAL CHIMERA MOSAIC

LEEJ SOUA SUE YAAJ

We cannot always tell the difference by size or distribution of markings .

## TOPIC : BREEDING DEEP RED RECESSIVE REDS .

Hi, Guys:

A possible topic of interest for a future Newsletter? What is the full genotype of those brilliantly rich, Carneau Reds? Years ago, I read in a genetic discussion, that the Carneau Red was not a rec red, but an Ash Red bronze, further modified by Dirty, Sooty and smoky. All homozygous. It was so convincingly stated, I bought it. (I have never raised Carneau.)

But today, on Wikipedia, I see a pic in the Description of the Carneau...and it was that rich, bright color and titled: *Recessive Red Carneau*. I may be the only one not knowing the genotype?

Thanks, Garry Glissmeyer.

{editors' reply edited }

Hi Garry, You bring up a topic that a number of people are still questioning in breeds such as Oriental Rollers, Modenas, and Swing Pouters etc. I believe that in these and the Carneau, they are in fact recessive reds. Paul Gibson once wrote that to make them a deep even red, one needs to add rich shiny black with white beaks and toenails brought about by the addition of homo Dirty and homo smoky. Hetero smoky would give the horn tip beak. I believe that homo Kite is also required. **Years of selection are also involved maintaining Family traits.**

**This is not** usually the type of recessive red that is used to create the Classical Almond in the ESFT. There is a saturated T-Pattern bird that is homo Kite (possibly with other bronze traits), that is used in Oriental Rollers and ESFTs. These T-pattern birds must not have the usual "blue" underbody, so they are very black. The oddity is that being Homo Dirty, Sooty, and smoky, does not seem to be sufficient, however I have not been able to pin down any other explanations as to what additional modifiers may be involved. Axel Sell hinted that there may be another "DIRTY" factor that we have not had identified as of yet. Since spread factor is not desirable in Almonds, these saturated T-Patterns are used instead.

Regarding the ash-Red phenotypes, there are some very rich red birds out there, usually of one PIED Design or another, that look like good recessive reds, these are in fact loaded with bronze and other modifiers such as previously mentioned. These birds allow a rich red phenotype without the typical mottling up of the shield etc., as is so often the case in recessive reds that are not compatible with pied. I will offer this topic again in the Newsletter to see if anyone will add anything of interest! Thanks and good to hear from you! ~ Bob.



rec. red (e//e) that sometimes masks spread as well as Sat. T-pattern.

The story behind the "AGATE" . Basically an agate is a STIPPER BRED recessive red that does not have spread factor in its background. Agates may be solid recessive red or mottled. So how do we explain the deep red Carneau that is supposed to have a shiny black in its pedigree but mottles out to a rosewing or more? Possibly only T-pattern not spread ?



(Levi photo)

So we have a contradiction that must be bridged.

Recessive reds that appear as unimproved recessive reds with bluish tails and flights may be the result of masking non- smoky blacks , and/or only hetero for Kite . These are unlikely to mottle out in any manner.

Another contradiction lies in the fact that homo smoky lightens the beak and toenails , but homo Dirty counters that to cause dark beak and toenails on smoky factor birds..

Some recessive reds will have dark beaks , but I have always been of the impression that those birds masked Ash-Red. ( test hens with blue to reveal ash cocks if this is so ).

The ash-Red that looks like recessive red .



(Mick Bassett photo)



# TOPIC : THE INDIAN CHAUWA CHONDON (CHANDAN), AMAR CHUA (CHANDON ).

This colouration was recently discussed on the Facebook Group Australian Fancy Pigeons .

Most feel that it is a Gimpel Archangel with modifiers such as milky, but may be Atlas (Ab).



**Dekho.com.pk,**



**Pigeon World** from Australian Fancy Pigeon Group .



**Mohammedpur Farm.**



**MD Riaz Udin , NPAB Sale Bazar.**



Cropped photo AFPG, Breeder ?, Atlas, **Zeman Werner**, Lane G, Leipzig 2011, **Abdul Halim**

{They are similar to Gimpel arrangement (gp), with smoky and lacking other blackwing genes}. They are bred in plain headed and perhaps are actually Atlas bronze (Ab) like above center.



These are very soft cream versions by **Sarwar Zaman Chowdbury**



# TOPIC : LOOK-ALIKE TRAITS .

Undergrizzle has a number of look - alike traits , some we know and others we simply do not .



(Ug) **Barry McPhee**

(First 4 darken with age ).



(Ug) **Jith Peter**



(Ug) rec. red **Clint Robertson,**



Brander bronze (Ug) **Dihantha Reiad**



(Ug) look-alike that works opposite to (Ug) on recessive red becoming more white. **Jith Peter.**



**Jith Peter** Undergrizzle look - alike , remain the same through life.



Pencil- M.Bassett , Unknown trait - Mahadi Hasan, Unknown Trait - Zahid Mehmood



Smoky , Dirty factor T-Pattern Print Grizzle plus "undergrizzle " ? Non - Pied. **Sahroz Khan**

Last issue we saw specimens that **Charles Kendrix** provided from one of his genetics projects . He then posted the following photos of yet another expression not related to the first . It performs similar to Undergrizzle as it undergoes reversion after the first moult. ( Photos below ).

MYSTERY TRAIT BY CHARLES KENDRIX -

1 & 2 = before and after first moult .



## **TOPIC** : MISDIRECTED TERM.

We occasionally see or hear someone use the term "**PUNCH THROUGH**" when pertaining to the manner in which the Stencils Toy and/or Frill stencil express particularly on Spread Factor birds.

The expression of those genes **DOES NOT** "punch through" spread or anything else ! In the case of Toy Stencil , we know that hetero and homo Ts1 express on Black Pigeons (Spread blue) , as BRONZE. Ts2 also expresses as a Bronze. Then ts3 is thought to express as a green sheen. These combined in various ways may result in the bronze becoming whitened. This all takes place on the COARSE SPREAD patterns of the shields only, and will do so regardless of whether the spread factor masks the pattern or not. There is variation, which may be explained by other modifiers present or absent .

The frill stencil gene whitens the Smooth spread areas in particular that are condensed such as the Tail band, and darkest regions of the vanes of the flights and tail feathers. It requires darkeners in order for its expression to be visible. Sooty is one such enhancer, as well as spread factor. The clumped areas are not conducive to strong enough contrast to enable a good expression of frill Stencil .

Frill Stencil is a recessive and highly variable trait that may actually skip generations without showing any expression. Poorly expressed birds may produce champion quality offspring , and vice versa .

Dirty factor as we know it , symbol (V), is another darkener that must be considered as an enhancer. There are other more subtle traits that perhaps we have not considered and in fact that have not been noted , let alone studied . One in particular pertains again to the clumped smooth pigment that we see in the vanes of the tail feathers. Normally the tail feathers appear as a soft gray with a black sub-terminal tail band. However some birds have a difference in that there is a much darker accumulation of pigment about half way up the vane . This area corresponds quite noticeably with the increased black of a spread factor frill stencil bird upon which we normally expect a "laced" effect . The area is also associated with the bronze expressions in Almonds, and has not been researched, and is widely ignored.



Normal clumped pigment



Basal white (Ug)



Note dark area on each .

That is it from the LOFT until April 1 , send us your thoughts please and breeding News!