

The Pigeon Genetics Newsletter, News, Views & Comments.

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COVID -19 SPECIAL for all of you shut-ins who cannot attend Shows and Meets but need a pigeon fix!

February EXTRA 2021

We thought you may enjoy this Extra Issue at this time when Governments are warning of second, third and fourth waves of a worldwide People Virus, that has had just about everyone changing how they do everything in their daily lives!

This Issue will have some of your comments , and various photos of some interesting phenotypes , but also I would like to make another suggestion to you that may reveal yet another specific gene mutation that has been right in front of us but going completely unnoticed !

I have been giving this considerable thought for several years and thought that now may be an ideal time to run it past all of our readers. I have discussed it briefly with Jith as well and we hope you find it interesting.

So I will let you see what I have to offer , so that you can mull it over and come to some conclusions of your own. I will prefix it by saying that we already know that we have identified Spread factor symbol (S) for a mutation that facilitates the expression of smooth spread throughout all feathers as an epistatic (masking) trait. MORE AT THE END OF THIS ISSUE !

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Some of your Comments after the January Issue :

From **John Smillie** : thank you for the newsletter Bob . very interesting read .

From **Ranjith Balram** : Dear Bob Many thanks.

From **Ash Hammett** : Hiya Bob. Thanks for the newsletter. Indigo is one of my favorite color modes. Here's a pic of one of my Spread Indigo Horseman Pouters. I'm not sure what pattern he is under the spread but he's pretty dark and shiny...probably at least checker. I have a couple of het Indigo, het Recessive Red t-pattern ones I'll try to send you pics of. Het Recessive Red included in a het Indigo t-pattern seems to intensify the pseudo-bronzing effect on the coarse spread... Stay well! -**Ash**



Here's a hetero Recessive Red Hetero Indigo t-pattern one of my favorite color expressions. (Below).



From **Robert Warry** with thanks for his contribution to the last Issue : Thanks Bob I really enjoyed your article on Indigo coloured birds, The pictures turned out better than I expected, and the material was very informative, thank you for doing this article. Yours sincerely. **R Warry**.

From **RN DR. Milan Tyller** : Big thanks Bob, I will use all your additional information. I hope I will find time next weekend for a very short article. Openly my idea is to find and help young pigeon fanciers use genetics by improvement of new colour varieties in existing breeds and increase interest by breeders studying genetics on the web, where there are Newsletters starting in 2005, when I started to obtain it. Good health and a big thanks for your important job and help to pigeon genetics worldwide. Best regards, Milan.

From **Martin Gangkofner** : Hello Bob, thank you very much for the newsletter. - Martin.

From **Gene Hochlan** : A while back I sent you a note stating that I theorized that the reason homozygous Stipper cocks displayed semi-lethal defects is because they were also homozygous dilute. Had the need to lookup Frosty and was presented by Jith's thorough analysis of Stipper and possible reasons for the lethality problem in PGNV&C, October 2015, Volume 10. He stopped just short of confirming my assumption. When I worked with Frosty I was curious about its effect on Ash Red. Raised a heterozygous Ash Red Bar cock that had very washed out bars showing that Frosty was present. No other mutants in the bird that could have been responsible for the change in the bars. I remember telling Tim Kvidera about this aberration from normal. The reason I refreshed my memory about Frosty is because I plan to transfer the wine red wing shield color of the Dwarf Turtle Dove male (*Streptopelia tranquebarica*) into Domestic Ringneck Doves. Sexual dimorphism has not been a common point of interest. Females must play a role in this and if they don't I will be very surprised. - **Gene**

From **Josh Zilles** : Hope you are well. I was told by multiple pigeon Breeders that you are an expert on Pigeon Genetics and colours. I am part of the NPA ( U.S.A.) and was asked to help out with the quarterly magazine that is sent out to all members of the club. I was looking for someone that knew pigeon genetics well and could help write some articles for the quarterly. I was wondering if you would be interested in helping to teach those of us that don't know very much about genetics with an article in the quarterlies ? I would appreciate any help that could be given. Thank you for your time and support. - **Josh Zilles**.

{ Ed. - I thanked Josh for his request but simply had to decline as I just do not have time to take on any new projects. I wish him all the best with his endeavors to help new members of the US NPA. }

From **Mujeeb Mohammed** : Dear Bob, Happy New year to you and all other contributors on this great work...stay safe ... Thanks - **Mujeeb Mohammed** .

From **Ash Hammett** also : Hey Bob, Stipper is probably the most misunderstood color mutation. Most breeders don't grasp that "Almond" is *not* a single mutant itself, but a *combination* of several color mutations that all have to be expressed to achieve that fleeting period (one to three years old) when that beautiful nut-brown ground color is visible in the plumage and makes "Classic Almond" (I hate that term), so desirable. Have a great new year! - **Ash**

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OK , Here is my New Idea. All of you are familiar with Spread factor. It is the gene that facilitates the 'spreading' of the expression of concentrated smooth spread normally found in areas such as the sub-terminal Tail band, the Edges or ends of the flights both Primary and secondary., most likely the Sooty marks on the shields , and possibly the outer edges of the Coarse spread pattern areas, such that that pigment saturates every feather on the bird. This effect is epistatic to most all other factors which means that it masks or covers them, however it does not cover pattern completely.

NOW , WHAT IF -

there is another epistatic gene mutation that causes "Coarse Spread" to spread throughout all feathers on the bird? This genetic effect may explain a number of phenotypes that mankind has been struggling to explain for a number of centuries without success. I believe that this mutation does exist and has been for centuries right under the noses of the experts without detection, and it is the explanation or part of it, for (1) the black wing and tail of the Gimpel coloured Archangels., and (2) the Black Saturated T-Pattern that everyone is calling a Kite in both ESFT's and Oriental Rollers. I also believe that when it is combined with ash-Red , it produces those deep rich reds that look like recessive reds but have been proven to be ash.. This spread gene may also explain why some spread Chocolate brown series birds appear Dun while others are Chocolate in tone and two different eye colourations exist in these birds..

Smooth spread does not express any bronze, not even when it is de-pigmented by genes such as Stipple, Indigo, ash-Red , reduced etc. You can see that in that the sub-terminal tail bands, flights, and Sooty factor marks do not express bronze. However it appears that the fully spread or saturated factor coarse spread pigment does allow us to see a bronze at any time regardless of modifiers. That would allow for the gimpel markings of bronze, the kite bronze on the black Saturated T-Pattern birds , and also explain why when those 'black' birds are mated to blue bars , one never gets the expected normal T-pattern series young.

Let's have a look at the actual birds : First spread factor smooth spread.

Condensed smooth spread blue/Black , - Bob R. (wild bred Feral)



Condensed smooth spread ash - **Robert Corrales** and Chocolate - **Clint Robertson**.



Now here are some Saturated factor Coarse Spread - Black wing Gimpels Copper and juvenile Gold.

Gimpel Archangel Photo **M. Bassett**.

Juvenile Gold Gimpel - **Mohan Shreejith** .



This mutation may also explain the green iridescence that many rich blacks show over their shields and Pattern areas as well as the rump area rather than just the neck region.

Saturated factor Coarse spread Ash-Red.

Saturated factor Coarse spread ash -Red Lahore.

Shakh Sharli - **Paul Sulja**.

Nilesh Rajput - Red Lahore



Kite and brander respectively expressing with " Saturated coarse spread factor " ???



Black Sat.T-Pattern Kite - **Rob Grogan**.

Black Sat.T-Pattern Brander Photo by **Mick Bassett**.

The deep red Lahores and a number of the "Toy" breeds of Europe look almost exactly like recessive reds, but as pided they do not mottle out in the wing shield area at any point in their lives. The tail band and flights are however also very dark red which seems to suggest recessive red. Some of the birds do express a slight lightened tail band and flight vanes suggesting normal non-spread ash.

I bred Lahores since I was very young as my Father purchased a pair as a gift when I was only a pre-teen. They were laced reds, which back then were just that to me and I can recall wanting to create the same effect in both Lavender and Black without realizing then that I would have to have completely different mutations for that to be possible. My mind was always working 'colour genetics' even before I knew what that was! These Lahores turned out to be spread ash. More recently I was discussing deep red Lahores with a middle Eastern Breeder and he told me that his Reds produced solid blacks. There was only one way that they could do this and that is if they both, or at least one was Spread factor". The Spread factor Lahores are very rich shiny black. I therefore am not certain that they are smooth spread or Coarse spread. The Reds suggest the latter so I included them here as Saturated Coarse Spread.

So there you have it straight from the horse's mouth! A never before noticed New form of Spread factor that we may call Saturated Coarse spread? The trait has never been considered by anyone until now. It therefore has never been tested and not closely analyzed. Its order of dominance appears to be partial or variable dominant. Some preliminary observations may suggest a recessive since it seems not to express on any young when mated to a blue Bar, but as the juvenile demonstrates above, there is often still a cast or shadow of the darkening gene or genes which darkens to black later. This has been dubbed "Shadowing" in Racers in particular that trace back to Archangel Copper Black Wing.

Of course we would love to hear your opinions on this proposed mutation, and see any examples that you feel either support it or refute it. { Take note: In the last Issue I stated that I was the first to make a connection between the absence of any bronze expression on condensed smooth spread , and Sooty actually being condensed smooth spread rather than coarse spread as reported by Hollander . However it was Dr. Lester .P. Gibson who first noted that certain traits did or did not affect pattern , to my knowledge he did not make any connection between those traits and the smooth spread pigment.. }

I have been criticized by a couple of people on Facebook who take every possible opportunity to try to place a negative spin on efforts that Jith and I have made to either present new ideas , or set old records straight. All we ask is that you read the ideas over and form your own opinion. If you do not agree or do not wish to apply anything we say to your breeding programs or keep it in your file of information , then that is up to you. Please if you are approached by someone trying to discredit anything we say , either tell them to get lost and/or tell me about it.

You can read a great many Books and websites on Pigeon Colour Genetics , and I can guarantee that there will be INCORRECT information in all of them. You just need to consider all of it and apply that which seems to make the most practical sense to you . If it works as stated , then you know you have picked up the information you needed.

Make certain you completely understand what you read, I have a couple of people on Facebook who keep repeating things back to me , saying that "I" told them that fact , when I had not said anything like that at all. I can only imagine what they went on to tell others what I had said !!

"PROJECTS ONGOING"

Some projects that are being tested out as a result of our presentations here in the Newsletter are :

(1) Testing 'PRINT Grizzle' Tippler on a wild-type Blue bar, to see if the young are hetero Print Grizzle.



Noor E Alam Nabel photo.

(2) There are still ongoing tests of the 'Lemon' Ecu , extreme dilution mutation :



Dan Skiles photo.

(3) Investigation into smoky and Dirty continues.



Kabtar Baz Daud Khel photo.

(4) The black Whiteside gene .



Tom Ah DeMunnik photos.

(5) { Sooty factor , Dominant , partial dominant , or recessive , no one in particular has stated that they are testing it , but we suspect it is underway in the U.S.A. }

(6) {Saturated T-Pattern , breaking it down to see what traits are working together to maintain this phenotype and IF Kite bronze is necessarily part of that make-up, no one has stated that they have taken up the study}.

(7) { AGATE , the term is generally used to describe the phenotype of a Mottle wing, a rosewing , a white side etc., BUT only when they have been produced out of a Stipple gene classical Almond phenotype. Recent stipulation is that these Agates must not mask Spread factor and must be Saturated T-Pattern. } I have suggested that it has nothing to do with being Almond bred genotypically speaking , and that it has nothing to do with the stipple gene itself. The moult to white is most commonly explained as being caused by an "ENABLER" gene (En). However some say that the moult to white is caused by the Kite and recessive red genes coming together , but that has all but been debunked. I think it has more to do with the fact that (e) masks Sat.T-pattern and that as the bird moults out , the red phaeomelanin is shut off to some feathers. Photos - **Rob Grogan**. Australia.



Almond Breeders claim that spread factor must not be part of the Classical Almond genotype and that any Agates born to such birds should be called Agates whether they express white or not , with the solid reds (or nearly so) being called "Whole Agates" . One person answered my challenge for anyone to mate two such solid red birds from Classical Almonds together to see if any white marked Agates can be produced . One fellow said Yes they can, but we have no statistics. The symbol for the Enabler gene believed to be responsible, was given in Europe (Germany) as (En) suggesting a dominant.

So it would appear that a considerable amount of testing and record keeping will be required to sort this one out . IF YOU or someone you know is doing anything along these lines , please share the info with us at some point in the near future.

(8) Recessive red whiteside - **William Greenslade** . Canada .



We covered some of Bill's work in a previous Issue .

Finally : Below is a Tortoiseshell that appears to be either Print Grizzle or Classical Grizzle. Some say they are one and the same Grizzle but with various modifiers. I have bred bronze in Print Grizzles but have never had it express in Classical Grizzles.



Bred and photographed by **Lou Alves**.

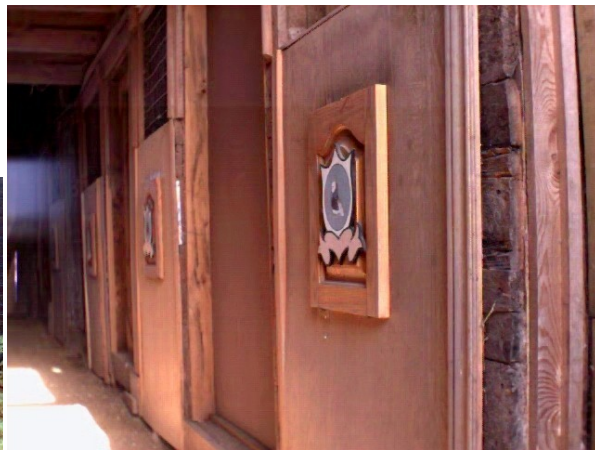
Some breeders are currently attempting to discover if Print Grizzle can actually be present in some Classical Almond Breeding Programs without being detected unless it comes together with recessive red to make Agates , and Deroy's that express white in the shield and possibly head and neck areas . We would love to hear from anyone doing some testing with these phenotypes and to see some photos to share with the membership.

Some of these test projects can be extremely expensive to conduct . Loft space , Time in care and record keeping Photography ., actually often having to keep everything you breed in case it is needed later in the program to dip back in for some unexpected reason. This all adds up to money and time spent in the loft. It can take years just to establish clean test birds to even begin. Every time I read where someone mated blue bar to a pied mottle black grizzle double crested muffed this or that to test something , I cringe !

That is it for the special Issue sent to you on the 16 day of February 2021 , to help brighten an otherwise dull day. Here in Canada East we are having our first Hail and freezing rain storm. Seems gentler than predicted . Hope all of you are having at least as good a day!

Your regular March Issue will be mailed out on the first of the Month as usual. Be Covid safe and mask up in the loft also !

All the Best from Bob in Canada and Jith in Oman !!



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