

July Newsletter 2018 -

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"

First up - Correction : I was correct in saying that we would visit the Loft of Abdulah Al Qafi in Bangladesh, however did not notice that in the actual item , I stated India. That was one of those typos that went unnoticed . We like to be as correct as possible , and I do apologize to Qafi for that error.

You may see comments written in Groups on Facebook for example that use the term "Expert" , or "self proclaimed Expert" etc. Firstly , just because individuals give their opinion even somewhat emphatically , does not mean that they consider themselves experts , they simply are sharing their experiences and related opinions. There are no actual experts in the Pigeon Hobby, if indeed in any field that you may wish to discuss. No matter how much one knows , there will always be new discoveries that will contradict earlier beliefs. It would be most helpful if we could all simply accept the fact that we offer information for consideration. If you can apply it to your situation and have it be of assistance then all the better! There are a few who aggressively present the same old ideas as if there are no other possible alternatives and if we allow them to dominate with their misinformation , then we set the hobby back many years ! We still have people promoting errors made 300+ years ago despite legions of advances since then. Their breeding programs demonstrate that they are still applying the errors and proudly admitting that they breed hundreds of such birds ! Worse yet is that we have Judges placing these birds at the top , and clubs are assigning Master Breeder Certificates to these people who are further disillusioned by these accolades ! Buyer beware is still a good guide !

Quick response to the comments of Hein Van Grouw and Andreas Boisits. The point I hoped everyone would see is that there was/is a noted similarity among the three traits : recessive red , Spread factor , and Ecu in that there is an overall "Colour Tone" in each of the three traits that when not selected specifically for that , do not appear to be completely epistatic particularly to Pattern. We have however created recessive reds and Spread specimens that do in fact mask pattern as well as other colours . I suggest that we may be able to enhance the "muslin Tone" such that it also will eventually mask colour and pattern in like manner. Lets keep an open mind to all possibilities.

This issue our world tour takes us to the loft of Steve Shaw, U.S.A. **for a discussion of** the ratio of a brown stipper cross-over by Jith Peter, Kerala India ..

Next to the loft of Porumbei Colorati to see his suspected pair of Tiger grizzles with the Rubella gene., in Romania.

Then to the loft of Joe Power in the U.S.A. for the breeding of the ideal Almond colour .

Then we take a brief look at Breeding to whites by Bob R. Nova Scotia Canada.

Then we travel to Bangladesh again to visit Shoibal Sabbir to check out the unique Roshan Chiraag breed .

Then it is back to Nova Scotia Canada to the lofts of yours truly, Bob R. to revisit an unique trait that I worked with some years ago and reported on several times . New members may not have seen this .

Then we have a description of the unique cases of pure ash-Reds that express blue/black feathers in their phenotypes by Jith Peter.

Finally we have some words from you the members about past Topics and/or what you are doing .

TOPIC : THE RATIO OF A BROWN STIPPER CROSS-OVER .

Following all of the recent talks about the Stipper gene (almonds) we revisit a three year old post in Pros & Cons by Steve Shaw.

Almond cock carries Brown, Brown hen. Both babies look to be Almond. What are the odds of pure Brown almond? Both of these look to be Blue

Jith Peter 1 to 3 percentage chance.

Steve Shaw I do not believe this is a sex-linked mating. Therefore the young could be either sex. 1 does show definite Brown leading me to believe it is a blue Almond cock caring Brown. The other looks to be blue only.

Steve Shaw According to Jith, 1-3% could be pure Brown Almond cocks. That's 1 out of 33 offspring raised. Odds are not in my favor.

Jith Peter - in this case we are dealing with non-mendelian inheritance(Non mendelian genetics). Mendel's law of inheritance is actually only true for genes that are not linked to each other.

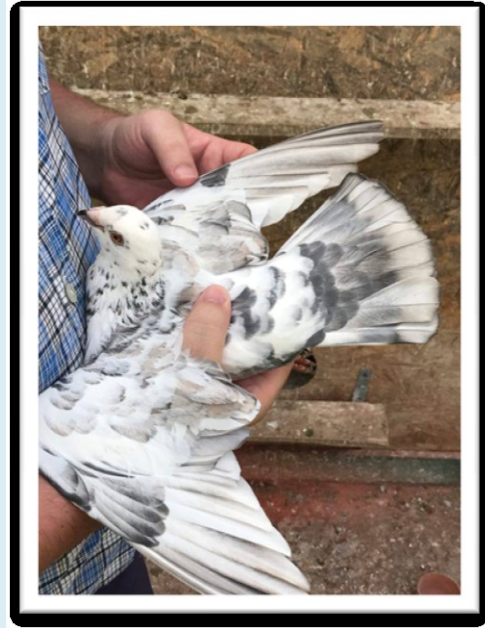
Jith Peter Yes, I was just wondering why he looks so lighter as you said "this pair together for many years". But then I thought perhaps it is an old photo. By the way, I like to use the term Stipper as that is the name of the mutation. so I said stipper, just for you to recognise that is the bird im asking about....if it was a spread, I would like to call it spread stipper....It is just a term, not meant anything else...They are beautiful indeed.

Kenny Pomona Feed I think the "Name" for a Spread Stipper is 'Sprinkle'....., but I know and understand what each of you are referring to!

Jith Peter Sprinkled In oriental rollers and Grey stipper in Danish tumbler are spread stippers

Jith Peter I was just going thru all the comments once again...Steve shaw, I did not understand what "almond in 101 terms" meant. Since the crossover rate is 1 to 3...lets take average as 2 ...so we can get 2 crossover types in every 100 babies... the two can be either male or female...So the percentage to get male brown stipper is 0.5% and female brown stipper is 0.5% . Since stipper is linked to blue in the cock...it takes crossover to get non stipper blues from him...so the chance to get blue daughters from him is 0.5% and chance for blue sons carries brown is 0.5% ... Chance for stipper black daughters is 24.5% ...chance for brown daughters is 24.5%..chance for brown sons is 24.5% ..Chance for Stipper black sons carrying brown is again 24.5%

TOPIC : SUSPECTED TIGER GRIZZLE RUBELLAS PORUMBEI COLORATI , ROMANIA



The Rubella trait is an allele at the reduced locus and as the name suggests , they reduce the pigment intensity so that often it appears quite bleached out in its expression. The Rubella allele has been given the symbol of (r^{rb}). It is a recessive sex-linked gene. Here it is combined with what he believes is the Tiger grizzle gene so that most of the whitened areas are caused by the grizzle gene and not by the rubella gene. The rubella lacks the whitened (silvery) neck/ hackle feathers that are typical of the reduced (r) trait.

Tiger grizzles usually have coloured tails as seen in photo #1. Here minimal effect of the rubella gene is seen. In photo #2 there is much more effect particularly in the smooth spread areas of the sub-terminal tail band.

This presentation demonstrates also that a number of different genetic traits may appear quite similar . We must have additional information about the parents and even the grand-parents sometimes in order to be able to say with any certainty just what some of these phenotypes represent genetically , especially when judging from photographs only. No amount of breeding/showing/judging experience can allow us to make snap decisions regarding a phenotype's genetic composition!

The cock is in picture #1 , and then the hen. This is a pair so I assume that Porumbei will raise some young some of which most likely be primarily white with a lighter distribution of faintly coloured feathers. Normally Tiger grizzles have only solid coloured feathers on an otherwise whitened bird with coloured flights and tail feathers . Other traits that can change the pigment expression are : Classical Grizzle , undergrizzle , reduced, Opal, dilution , Pale , Ecu , to name a few.

TOPIC : REDDISH KITES IN THE MAKING OF IDEAL ALMONDS BY JOE POWER.

Bob

Hope all is well there. Below are photos of a kite roller hen I bred and gave to Link Martin, who took the photos. As you can see this bird has super reddish color, even under her tail. This is the expression desired for great color. Kites that tend to go bronzy rather than this reddishness will produce almonds that are extremely dark as young birds. That pretty much means that they are only going to have a year, possibly two, as a show bird. Getting away from kites that are bronzy is quite difficult.

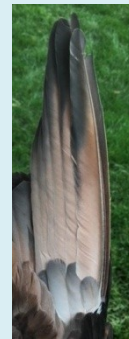
I learned to use a kite to recessive red or yellow mating every year. This helps to keep more red in them which also helps the almonds and getting a great color express of almond.

I hear a quite a bit about deroys and ticking. But in the English Short Face Tumblers I bred, as well as both my roller and Komorner Tumbler families (based on E S F) I seldom had more than an occasional darker feather in my deroys. I think, but have never tested to be sure, that those deroys that have this darker ticking are more than likely out of a family where the kites are very bronzy. Part of this bronzy expression has to be tied to an extreme amount of dirty. Dirty surely helps the almond family but too much is not how I want mine to be.

I never found smoky in any of the E S F almond families I worked with. Really can't see it doing any good. It would lighten the blue/black expression which would not be good.

We recently lost Wil Hubel. He was the best of the best almond breeders. He knew how to get and keep that awesome color. I was most fortunate to have met Wil about fifty years ago. He single handedly got me keyed into almond even more than what I already was. I still have the envelope and Fulton almond info on breeding that he had his wife type for me in 1972 or so. That was a chore on a regular typewriter back then. Following this old info is how to breed them Wil told me many times. I really agree with that. It's how I've bred almond and the sub varieties all these years.

More another time. Joe Powers



(Joe .P.)



Above , is a lithograph painted by J.C. Lyell of England in the mid 1800's . The "Tri-colour" then was considered to be Yellow , red , and black. Then in the tails and flight feathers ONLY , the standard of the day required the white breaks . The red was said to appear mainly in the area of the neck hackle . Somehow that changed over time to leave out the red so that to this day tri-colour includes the white which of course actually is not a colour , but in fact is the absence of colour pigment, and still must be seen only in the tails and flights.. Since this is the most desired phenotype for showing the ESFT , it is usually called the Classic , or Classical Almond.

There are still those who are promoting the error by Fulton that Stipper Break means either just the Black flecks , or the overall colour arrangement of an Almond. The break is actually just the white areas created by the Stipper gene temporarily shutting off the expression of the base pigment . The yellow is where bronze has been added to counter the break over most of the bird. Breeders will always have difficulty maintaining proper colour as long as they do not understand this specific function of the Stipper gene !

(Bob R.)

TOPIC : "WHITE" , WHAT IS IT REALLY?

I often hear people say that the only colour they put into their main colours is "recessive white" ! this implies that they consider white as a "neutral colour" . White is a lack of colour , an absence of pigment expressing in the feathers and skin. It is not neutral . Genetically it can be most anything , so you may be introducing a pied , a grizzle of any type , as well as blue/black, Ash/Red, or brown /Chocolate, plus any and all other modifiers .

I actually read one fellow's comment to not put white to a black if you want to breed GOOD blacks ! Why not ? If you know that that white came from excellent blacks then of course you can use it to pass on those black genes to its offspring when mated to a good black.



Photo by Mick Basset .

This white could be a Black , or anything else , we cannot know without a breeding test with either a Blue barless , or a brown barless. That would allow us to determine what traits are present genetically but "shut off" by the homozygous recessive white gene.

TOPIC : The Roshan Chiraag , **Shoibal Sabbir**.

Here is another Indian Breed that seems to have been bred mainly in just one colour and pattern , and is particularly unique in that it also has a rather "Ice" - like modifier that also may slightly fade a portion of the bars. The Breed generally looks like a Racer in type, being slightly more coarse than field type.

Shoibal has had this pair for some time but so far no eggs have been produced. They are a very young pair so hopefully they will settle into their duties soon.

The Roshan Chiraag is as its type suggests , a flying Breed . Note the third bar . The light coloured haed , dark eyes , and horn tip beak are all typical of this Breed. It is thought to have come to India from Turkey , but apparently no mention of it in early Turkish writings . "The black bars are preferred and it has been considered a rare breed , kept in Zoos etc." (Levi)

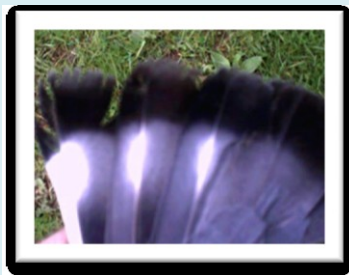


TOPIC : EXTREME TAIL FEATHER ALBESENCE BY BOB RODGERS.

I first reported on this trait back in the 1990's when Paul Gibson was Editor of this Newsletter. He stated then that it was a completely new genetic trait that they had not worked with or even seen prior to that . I captured a wild "feral" Blue bar hen after noticing that she had an unique looking colouration in her tail feathers when she flew. I also captured her blue checker mate as sometimes these pairs are full brother and sister. From this pair I raised several young with the trait and subsequently mated one of the sons back to his Dam. I suspected that the trait may be sex-linked as only her sons expressed it and the hens did not.

Mated to her son I got a different expression than I had anticipated. I expected that the albescent spots would become perhaps larger and better defined , and possibly carry across the entire tail rather than just the first three or four feathers on either side.

What happened was that the whitened spots extended down the length of the second affected feather rather centrally placed in the feather vane.(Photo attached). By this time it had become clear that I would have to part with all of my birds so I did not get to do anything more . I was able to breed the original hen to a Fantail in an attempt to place this trait into my flock of both Standard Fans and my flock of Indian Fantails . Her only blue bar pied son had three spots on one side of his partially fanned tail , but none on the other side .



First two shots of the original hen., then one of her son heterozygous for the trait .



Here you can see that the double mating of Son to Dam produced the albescence well down the outer vane of the second feather .

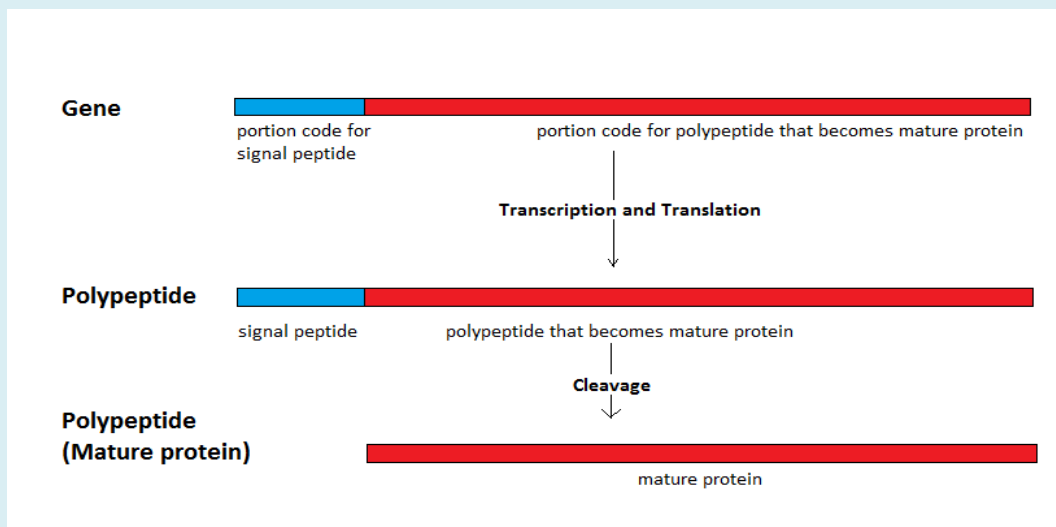
TOPIC : PURE ASH-REDS THAT EXPRESS BLUE /BLACK FEATHERS. BY JITH PETER, INDIA.

Why some ash red birds do show black flecks even though they don't carry the allele.

I am going to explain it as simply as possible, so that everyone can understand the concept. I remember seeing posts which were related to pigeons that are pure for the ash red mutation but show blue or black flecks, and I have also seen some photos of birds which breeders claimed were related to the previously mentioned case, especially photos of some female ash reds. We know that it is very common in the case of ash red cocks which carry the wild type allele at the colour locus to have blue/black flecks, and in this case, we know that at least the ingredient is present there. However, that is normally thought impossible in the case of a bird that is pure for ash red at the colour locus. As a beginner, a few years ago, I absolutely didn't have any idea as to how this might happen. And even some of the veterans in the past admitted that they had not had a convincing theory for the phenomenon yet.

Quite unexpectedly the research report on Ash red and its allele brown published by the University of Utah gave me some insight into the enigma. Some people might be skeptical about my theory and that is ok, because after all this is just a hypothesis that occurred to me some years ago when I read the research report, and I am not absolutely certain that this would be the case.

I am explaining it in layman's terms in this manner, a gene consists of a chain; it can be long or short. On one side of the gene, a part of the chain, is the portion code for polypeptide seen in red in the diagram below, which is the protein involved in the molecular process. The remaining, a short portion, is the code for signal peptide seen in blue below, which drives the polypeptide to its target. Normally the signal peptide will be removed by special enzymes and the remaining polypeptide becomes mature protein once the whole polypeptide chain reaches the target.



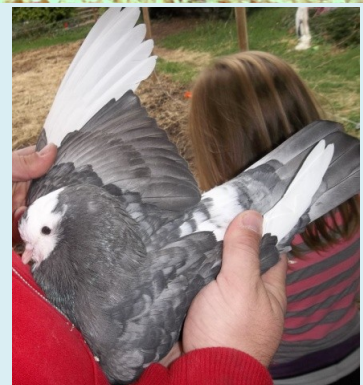
This is what happens when wild type is present at the so-called colour locus. The mature protein is the final product that goes to take part in the biochemical process, whereas in the case of the ash red

mutation , it happens at the cleavage site. This likely occurred right in between the signal peptide and the mature protein, which affects the cleavage efficiency and results in dramatic reduction in cleavage. As you can see , the mutation doesn't alter the mature protein unlike brown mutations, in which the quantity and/or quality of the final protein is altered by the mutations. Both the ash-red allele and wild type allele at the colour locus code for the same protein, except that in the case of the polypeptide that is coded by the ash red allele, the signal peptide (in blue above) is likely not detached by the enzyme which does the job well for the polypeptide that is coded by the wild type allele. If by any chance the cleavage is caused by some chemical forces or the variation in the cellular condition in some cells, it is possible to produce black pigment by a bird that is pure for the ash-red mutation.

THIS PHENOMENON HAS BEEN DISCUSSED A FEW TIMES OVER THE PAST TEN YEARS WITHOUT ANY SORT OF EXPLANATION PRESENTED. DUE TO THE RARITY OF SUCH BIRDS , WE HAVE NO PHOTO THAT WE CAN SHARE WITH YOU AT THIS TIME .

TOPIC : GENES THAT AFFECT THE ENTIRE BIRD BUT MAINLY PATTERN.

The Dominant Opal gene (Od) causes all pigment to express less intensity while making the smooth spread tail band and to some extent the flights, and the coarse spread of the Bars and checks to express as a colourless state that we call white patterns. The Blue bar Baldhead bred by Bob Rodgers is also hetero Dirty factor (V) so a bit darker than a wild-type hen. The Opal male bred by Aubrey Simms is lighter than usual mainly due to the camera flash, but none the less it is much lighter than normal Intense blue. It appears to be a dilute "silver" here but was not. Checker by Stephen Scott, Opal checker by Bob R., Black by Bob R. and Opal black by Ryan Ward.



Note: If a bronze is present, Opal will allow it to be expressed minimally in the coarse spread areas.

TOPIC : FINALLY THIS MONTH , YOUR LETTERS .

GENE HOCHLAN WROTE : Hi Bob,

The various types of Grizzle that we recognize are not all that complicated until they are combined. Kendrix's birds are probably a combination of Typical and White Grizzle. That is what most "Bandits" are.

Gene . (Perhaps more on the Racing Homer "Bandits" next Issue). Eds.

ADAM ARCHER WROTE : Hi Bob, Thanks so much for all your work on the Newsletter, it is a highlight of the month.

As for your call out for info on what we're all working on, please see the attached image for my current "mystery". I don't have any data to report yet - some have suggested Drizzle, but that trait is not currently known to exist in Australia!

Give me 12 months and hopefully I'll actually have some more solid data to report, but for now, thanks again for the work you do. It is very appreciated!



Here again we have an undergrizzle look-alike such as we have seen in birds that Charles Kendrix and others have presented , each with something different about them that prevents us from "pigeon holing" them under one specific title.

That is it from the Pigeon Loft for July 2018, may all your dreams be good ones ! Think Pigeons !