

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

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The Topic this Month is : ---- "Matters of interest to some of you out there in the Pigeon arena " ----  
Before we start I think it is important to say that in the Hobby of Fancy Breeds of Pigeons the World over, there are no set rules governing what you may or may not do . IF you belong to a specialty Club, then yes you are bound to their rules as set out by the Board of Directors IF you plan to exhibit your birds at their shows. IF you plan to exhibit your birds at any show that is sanctioned by a specific NATIONAL Pigeon Association , then of course you are bound by their adopted rules and regulations.

However if you want to introduce the Gimpel Black Wing colour arrangement into the Oriental Frill or some other Breed , that is your business. If you and at least five (5) other Breeders want to form a Club and draw up your own rules and hold shows that is your business. You may not use the services of a certified Judge at your shows unless sanctioned by the National Association that he/she obtained their certification from.

Having said all of that , it is also up to you if you want to breed birds that may not sell well because people will be limited in their ability to show and sell also.

Nowadays we hear a great deal about Rare colours being seen in a wide array of Breeds in which they have never before been seen. Some of these are flying/performance Breeds. Others are show Breeds and they are possibly eligible to be shown in A.O.C classes at sanction shows.

The following input from YOU our readers is always most welcome and very interesting. Some of the projects that you are working on have a direct relationship with many of the topics we have discussed in past Issues. We hope all of you will enjoy seeing the efforts of these Breeders and that there will be items herein that will prove helpful to you in your breeding Programs.

The Brander Bronze colour as I have said previously , seems to express as an "OVERCOAT" as it appears on the outer ends of all feathers except the tail band and smooth spread areas of the wing flights. Usually in the blue/Black series the under feather is a dark rather smoky looking colour.

Several Breeders of different Breeds have introduced this Bronze to their programs, each with slightly different results.

1st. two below -Almond Bred from Branders - Male 2021 Voiajori Colorati - Romania.



2nd. two above - Blue Almond Brander bronze het brown and grizzle from 2022.

Brander Bronze Almond Male 2022



A blue spread faded het rec opal and possibly het dilute male



Some of you may look at these and wonder how on earth do they know if that is "faded" or "Qualmond" etc. Certainly it is not always easy just from photos alone. The Breeders usually know from the stock that they used in the production of each bird. Even then seasoned Breeders make big mistakes. This bird certainly looks more like a spread factor blue/Black Qualmond to me. Usually spread black (St^F) males look more like Sprenkles/Sprinkles as in Spread (St).



Opposite left Young Brander hen of the type used in the above Almond breeding program.

Here are some comments that I presented for a question by Walter Wozceiski.

{ Due to the fact that using the term BREAK in any of the ways you suggest, will continue the gross misunderstanding out there that anything other than the stipple induced de-pigmentation is also break. SO, I maintain that each element should be recognized for what it is . The Black Flecks/ Flecking is/are the Base pigment. The breaks are the white areas only. The Ground is the bronze/recessive red "Almond" colour. Collectively they make either an ideal Classical Almond, or one of lesser quality. The term pattern should only be used for the "C" areas Pattern series and referred to only if the sat.T-Pattern of the bird is being discussed.}

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Some of YOUR comments from the January 2023 Issue.

Thanks Bob, Super interesting as usual! **Mario Beaugard.**

Dear Bob Happy New year As usual very well enjoyed reading the articles, informative too. Always thankful to you and Jith Peter. **Ranjith Balram.**

Bob ,This is a very good issue! **Murray Gaskins.**

Happy New Year Bob and thanks. **Frank Hammond**

Thanks Bob and happy new year, **Andreas Boisits**

Had blood tests today to see about medication adjustment to get my heart rate a little higher. Once I get more energy I'll get back to the bronze T et al situation. Have a lot to share including a bunch of photos on them. Happy New Year!! **Joe Power**

Hi Bob, just took the time to read through the newsletter and I agree with the starting compliment that you make a lot of the complex material better understandable to novices like myself. **Erik Graumans**

May 14th. 2020 M [Mohammad Atiq](#) wrote : sir thanks for detail elaboration. Picture below.

From my Facebook Group "Unnamed Unique Genetic Pigeon Traits".

Hi What color is this bird? Thanks. **Mohammad Atiq**

Editor {I understand what you mean by 'What Colour' , but actually the Base colour is Blue series . The pattern is Bar . Now as for the modifiers that make it different than a wild type blue bar : (1) of course it has what appears to be a PIED gene causing the white areas, (2) the rich red bars most likely are Toy Stencil Ts1, but could be something else , the flights show a bronzing which may be Kite bronze. Finally the overall expression appears to be the result of smoky factor. Normally we would also say Dirty factor as the beak and toenails are black and the shield blue colouring is darker than normal. The wide wing bars and light terminal tail band suggest smoky. Recent testing suggests that Dirty and smoky are alleles, therefore it should not be possible for them to express equally on the same bird. Just the lighting in the picture may make a difference, and the bird may be hetero for Saffron from a Lal Band cross. }

From **Jerry Sindelar** - Hi Bob, thank you a lot for a quick answer, thanks also good to know you are o.k. Re-colour it is what I expect, thanks a lot. Wishing you all the best. Jerry with regards.

{ Jerry's "NIAGARA POUTERS" that he has developed over the last few years in Canada. }



We thank Jerry for sharing his work in creating this attractive new Pouter Breed and wish him all the best in the future! Jerry is a well known Pigeon Judge here in Canada, as well as in the U.S.A. and Europe where he travels to visit fellow fanciers and to attend various shows. It is much appreciated to have him as a supporter of this Newsletter. He is a long time friend of Dr. Lester .P. Gibson and was also a supporter back when Paul edited .



We have discussed this topic a couple of times well back in the Issues , but here is another case where a Breeder is getting some ash-red hens that 'appear' to be expressing the allele, 'brown'.

There have been a few ideas kicked around as to how, but nothing definitive.

Note that the sub-terminal tail band is indeed either dilute blue or intense brown. Normally an ash tail band is near white unless hetero (e) in which case it will look like a dull bluish gray.

Below she is the center bird



Here are some other birds from his breeding family.



August 21 / 2020 **Adam Archer** of Australia wrote:

This hen has always intrigued me. She's sooty ash red bar, but is just "lighter" than you'd expect. She's not dilute, and is from pure racing lines (no colour projects). Any thoughts?

My reply: She strikes me as being smoky , not Sooty. I see what you see , but not certain it is Sooty. The blue series tail feathers also contradict everything we know regarding a hemizygous ash-Red hen. Interesting for sure !

**Brad Stuckey** - [Adam Archer Pigeons](#) I also am intrigued by the tail. Can you tell us anything more about that?

**Adam Archer Pigeons** I just put it down to age, she is 8 years old. She's the daughter of the red cock in my Facebook picture, and it isn't unusual for his daughters to have "brown" flecking. I'm not sure how long she's had them or if they developed over time, I bred her 8 years ago and she's been with my father ever since. I've hardly seen her. I just borrowed her for one round of breeding and took these photos as I was giving her back.





Photo posted in my Group " Unnamed Unique Genetic Pigeon Traits", by **Mohammad Atiq** May 02 / 2020. This appears to be an Almond Lahore that is a T-Pattern Blue/Black with perhaps two forms of Bronze. One Kite Bronze and the other a bronze yet to be identified that is common in the Lahore Breed. The white break in the flights and tail is lacking due, I think, to the second type of body bronze. It is difficult to tell from the photo but the bird does look as if it is intense phase just lightened slightly by the Stipple gene to appear dilute phase.

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Here is an example of what can be produced when a Blackwing Gimpel Arrangement Archangel is mated to a wild-type blue bar. The underlying pattern is NOT saturated T-Pattern . In this case it is a very dark checker pattern ( $C^{Dk}$ ) as opposed to T-Pattern ( $C^T$ ). There are possibly three bronze traits visible. The Kite (K) bronze in the flights, The nebulous bronze ( $Ka1$ ) on the underbody., and a bronze cast over the head and wing coarse spread pattern areas not identified. This is usually a sign of hetero recessive red or a weak expression of Brander bronze , but neither is common in Gimpels so would have to be tested to see what may be hidden in the genome. Photo by: **Lumir A Anna Justovi** May 02/2020 in my Unnamed Unique Genetic Pigeon traits.



**TOPIC:** Brown flecks and patches in Ash-Red hens. by **Hein Van Grouw**. (Reprinted, earlier Issue).

Is it Bronze or is it....?

An increase of red phaeomelanin and the occurrence of brown eumelanin flecking

First a few facts and observations.

1) Romanian Naked-neck Tumblers only come in colours based on Ash-red as the gene for naked neck (dropping feathers) expresses itself only in combination with phaeomelanin pigment. Blue/black or Brown pigeons (eumelanin based) who are homozygous for the naked-neck gene do not express a naked neck. The absence of pigment producing cells (leucism, like self-white) also prevents the naked neck gene from expressing itself.

2) As mentioned above, the pigment responsible for the colour in Ash-red pigeons is (mainly) phaeomelanin. In general only Ash-red cocks heterozygous for Blue/black (or Brown) may show some black (or brown) eumelanin flecking in their plumage.

3) Since a few years I've noticed remarkable brown flecking in my Ash-red Romanian naked-neck Tumblers, mainly in the tail feathers (see photo 1), but rarely also in the flights and even elsewhere on the body. The flecking is present in both sexes, although I have the impression that it expresses more in the hens. The brown flecking is eumelanin, proven by the fact that heavily affected feathers in the neck area do not drop out. The brown flecking occurs only in the individuals who also have an (unknown) form of Bronze, but not all individuals with this form of bronze have brown flecking.

4) The red colour in the Romanian Naked-neck Tumbler is a combination of Ash-red, T-pattern chequer and some sort of 'colour filler' (probably sooty) to fill in the pale ash-coloured T-pattern to colour the wings solid red. Their rumps and tails are pale ash-coloured and so are the larger parts of the primaries (apart from the red inner vanes and finch-markings). Under their wings (underwing coverts and flanks) they are white (see photo 2). Many of my birds, however, have an extra (bronze?) factor which increases the amount of red (phaeomelanin) in the rump, tail, primaries and under the wings (see photo 3). Often, but not always, the two outer tail feathers are more heavily phaeomelanised than the rest of the tail (see photo 4). This extra factor appears to be dominant in inheritance and, so far, I have not noticed a difference between heterozygous and homozygous birds

5) I am not sure where this unknown phaeomelanin increasing factor came from. I have used Vienna Longface Tumblers in experimental crossings with my Naked-necks, so first I thought it was the dirty-factor. However, this turned out not to be the case and now I think it came from a self-white, silky fantail from Russia of unknown ancestry, which I used to introduce the silky-gene into my Naked-neck stock.

And now the questions I have.

1) What is this 'phaeomelanin increasing factor'? Is it known to be present in other breeds?

2) Is the brown eumelanin flecking likely to be related to the phaeomelanin increasing factor?

(1)



1. Brown eumelanin flecking in the tail feathers of an ash-red Naked-neck Tumbler hen



(2)

2. Random selection of tail feathers of different individuals with brown eumelanin flecking. The feather on the right shows even the brown tail bar in the melanised part of the feather.



(3)



(4)

3. A 'normal' red Naked-neck Tumbler; the underwings and flanks are white. 4. Red Naked-neck Tumbler with 'increasing phaeomelanin factor'; the underwings and flanks are coloured.

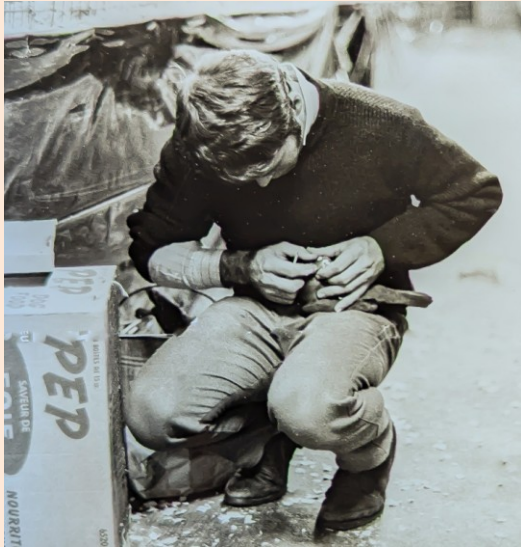


(5)

5. In most, but not all, pigeons with the 'increasing phaeomelanin factor' the outer tail feathers are strongly coloured with phaeomelanin.



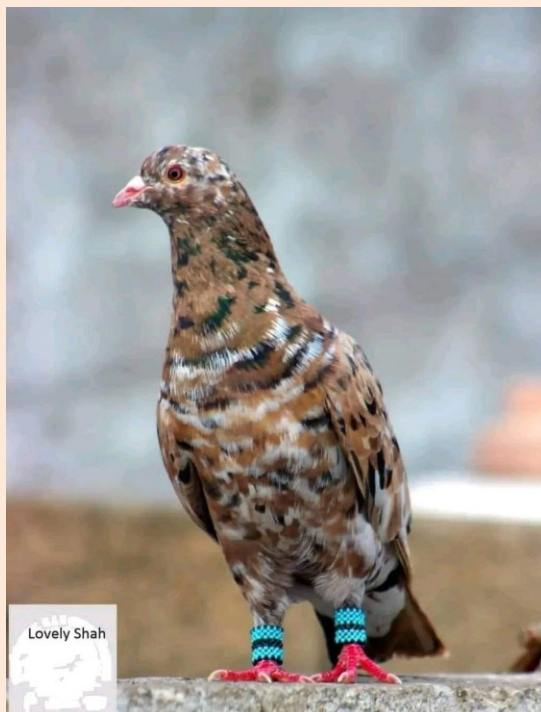
{ You may recall that Stephen Scott of New Brunswick Canada also had an Ash-Red hen that was displaying some brownish feathers and we wondered at the time if it was caused by 'Somatic Mosaicism' whereby just a few skin cells had mutated here and there to produce feathers of the different colour. }



Two photos that until today I did not even know were in existence, taken by a much valued friend I have had since our teens to the present day, Dave Blake. He is an avid photographer and naturalist/ retired Biology teacher/ lover of all things that walk , swim, crawl or fly. In the first one I am checking out one of my entries in a local show. The second one I no doubt am showing all of my winners to another close friend and fellow Rabbit Breeder Stephen Bennett. Oh to have those days back again!

Well , with that bit of nostalgia, we will leave you for another Month when we once again will bring you some hopefully interesting items from the Pigeon World around us.

I said last Month that we would discuss this gorgeous phenotype. Some suspected that it was the (St) gene Almond phenotype. It could be part of the genome but NOTE that normally any bronze ground



'replaces' the stipple white break., but here it is intermixed with the white areas which I do not think involves Stipple break. I believe that this bird genetically is Black and white with the addition of dilute Brander Bronze. The white areas may be a pied factor or more than one pied factor. There may also be another whitening gene that is not of the Piebald family.

I think this is actually a form of what is referred to as Khaal in India and surrounding Countries. There are two expressions. One is similar to whitewing, the other to Gazzi. Both have two separate body colours plus white.

I have seen Almonds in flocks of these birds so it is possible that there have been crosses among the phenotypes.