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

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HAPPY NEW YEAR!

"Here we are starting FRESH, Starting NEW, starting all over again!"

"Compliment of the year 2022." This came from **Terry Lapointe** Ontario Canada.

Wow that was fast! And concise! You have a way of explaining genetics that is scholarly and yet understandable to the layperson. Thank you for that, you have cleared up the mystery that plaqued my brain!

Firstly thank you for clarifying by separating the terms saturated t-pattern from kite as being two separate genes. I will continue to describe them that way especially with newcomers to help them better understand the ingredients that make up this particular phenotype.

And also for clarifying the fact that the stipple gene has little effect early on with kite and recessive red now makes perfect sense to me. Thank you for that. Really, it's been such a puzzle to us until now.

The Almond project has been fun but filled with many challenges. We will not introduce other traits other than bringing in more kite or almond birds for confirmation improvement purposes.

I do believe we may have darkening modifiers in our breeders as well (1 of the 3? Smoky sooty or dirty) which I think is used to make the black flecking shine like the black we see in spreads and it also blackens toes and beaks but I'm not 100% certain. But, like you said, other modifiers like dilute would open a can of worms and would add too many unknowns to the wonderful world of Almonds which has enough challenges on its own!

Thanks again for taking so much of your time to invest in us crazy pigeon people and our amazing hobby! Keep up the great work!

Special thanks to Terry and Family! I sincerely hope it helps with your future activities in the Hobby!

Hello Bob,

concerning your request for pictures of classical almonds in the December issue, I send some out of my birds (see attached pictures). Best regards, **Andreas Boisits**

01: 1,0 ESFT Almond

02: 1,0 ESFT DeRoy (eight years old)

03: 1,0 Oriental Roller Vielfarbig ("multicoloured")

04: 0,1 Oriental Roller Kite (without smoky, hetero e)









Sprinkle and Almonds Joe Powers. I kept several T-pattern almonds I bred and put them on blacks in 2022. I kept three young to breed from in 2023 in my quest for sprenkles. It's just a matter of finding the proper blacks with no bronze or recessive red to get clean white or silvery base color to have pretty sprenkles.







Breeder **Voiajori Colorati** presented by **Octavian Sarofolean** on my Facebook Group "Strictly Colour Genetics for Pigeons" (1) & (2) Kite appear to carry (e), Next three Brander on blue/Black T-Pattern.



Below (6) & (7) Stipple Brander Blue T-Pat., (8 & (9) Stipple Brander Ash-Red T-Pat.,

(10) Almond



(11)Brander Ash/Red Immature (12 & (13) Brander Ash-Red Stippler hetero for Blue/Black may get more blue/Black.. (14) Blue stipper hetero for brown.



(15) Brown Brander immature. (16) & (17) brown Brander adults.



(18) Brander (e)Agate









Craig Denley Saturated T-Pattern Dilute and Intense phases Blue/Black English Short Face Tumblers..





Two Classical Almonds and a recessive red Agate - Rob Grogan, Australia.



Eugene Jordon., & Stephen Scott., Photo - Mick Bassett.

(1)Almond lacking recessive red, one dose of Kite, and dark base pattern. (2)Almond lacking recessive red and 1 dose of Kite Stephen Scott. (3) Almond with all components, poor ground & base color.

James Ellison - Sat. T-Pattern with Kite.



Classical Almond hen.



Below four bred by **Hans van Rossum**.









Below - nine photos of **Walter Wojsienski's** Flock in Hawai.



















Above last two, I think same bird with age related 'reversion' to blue/BLACK.





Laslo Zilard

Jose Luiz de Oliveira.

Rob Grogan in Australia - Classical "Almond" Phenotype at its best!





Brander (True Expression of this Unique Bronze). Voiajori Colorati in Romania.

Then a Brander with recessive Red Photo Layne Gardner U.S.A.. Both likely have Kite bronze in flights.

Below are some photos of birds bred by **Murray Gaskins** who has been breeding Almonds for many years. These represent a more recent project where he has added St. Almond to a grizzle strain of High Flyers. {I suspect Print Grizzle}, plus some kite T-Pat blue and a recessive red he uses.



Perhaps we can show you some additional birds and future updates on this project

Murray has contacts with a number of Almond Breeders in the U.S.A in particular whom we do not get to see on Facebook. He is also a staunch supporter of **Joe Quinn** after whom the Qualmond was named. Murray thinks that if you are just starting out, that you should check on line or ask someone for a copy of **Quinn's** Booklet as a quick reference of all the basics you need to know.

Here are some of the aspects to consider when breeding the Phenotype ALMOND.

- (1) Base Pigments There is a difference between "ALMOND" and "Classical Almond". Any base is fine for Almonds, but blue/BLACK base is best for the Classical Almond.
- (1b) Base Pattern Any pattern is fine for Almonds, but saturated T- Pattern is best for Classical Almonds.
- (2) Spread factor Classical Almond Breeders insist that spread should NOT be used in that phenotype's genome. Examples given have been either poor colour Sprinkles or non-Classical Almond spread? blue.
- (3 Dilution phase Classical Almond birds sometimes get too red and Breeders claim that dilution will correct this. Pale factor would probably give a better result if either actually does work as stated.
- (4) PEV Position Effect Variegation This is an expression to describe how the variegated phenotype can have various carried colour genes / modifiers distributed throughout the phenotype.
- (5) Components: These are separate genes that have nothing to do with the stipple gene but are added to <u>counter</u> the (St) effect. They fill in the break. They are: recessive red, and Kite bronze on Sat.T-Pat.
- (6) Additional colour Modifiers: These are genes that change the tone of other colours, the main known one used is Dirty (V).
- (7) (Cross Over) This is a term to indicate that during recombination of genetic material, some of the ingredients that would normally have reunited, cross over to join the opposite chromosome material.
- (8) Feather colour Break This is the colourless (white) area created by the intervention of the (St) gene on the base pigment.
- (9) Sprinkles versus Almonds. A sprenkle/Sprinkle is when a base pigment is affected by the St. gene, plus (some of the carried allele may be expressed) to create either a unicolor or bi-color phenotype with the addition of the stipple white 'break'.
- (9b) Almonds are in effect sprinkles that have had at least two components added to resist the breaking action of the stipple gene. At least one of these genes should be Kite bronze (K). The other two can be:

 (e) and of course the base colour and Pattern- Saturated T-Pattern blue/BLACK.
- (10) Almonds Versus Alleles There is a saying All Almonds are stippers, but not all Stippers are Almonds. That is to say that all mutations at the Stipple locus are indeed "STIPPERS" and they all have a prefix (St.). However the word "ALMOND" is not a gene, it is a phenotype and includes several closely akin phenotypes that have been separated for standard show purposes. --- IN ADDITION---
- (10 b) there are a number of mutated versions of the (St.) gene that have been given prefixes of (St.) along with a different phenotype name. Some people do not think of these as stippers. They are: (St^W) Whiteout., (St^Sa) Sandy., (St^Q) Qualmond., (St^H) Hickory., (St^F) faded., (St^Fr) Frosty /Chalky. Why would they not be Stippers? They all reside at the St Locus. They all show the St gene.

List of symbols established:

The stipple gene (St).

The St Classical Almond Components:

Stipple Gene (St)

Saturated T-Pattern - (C^Dk) - this may have to be changed to acknowledge an unknown modifier.

Kite Bronze (K)

Recessive Red (e)

The St Sub-Varieties: Deroy (recessive red Almond), Almond Splash (Scattered white areas on almond),

The St combinations: (proposed abbreviated symbols)

The Sprinkle (Sp) (St plus pattern series or spread factor)

The Almond (AI) (St plus hetero or homo kite bronze and hetero recessive red on any pattern base)

The Classical Almond (CI) (St plus set formula: { St//+, K//K., C^Dk//C^Dk.,e//+., V//V.} hens St//* ...

The Deroy (De) (St plus homo recessive red)

The almond splash (Al Spl) (Usually a Classical Almond (Cl) with an unknown gene causing rogue white feathers and patches scattered over the bird in an irregular fashion.)

Known Component Modifiers:

Dirty Factor (V)

faded phase (d^f)

dilution phase (d)

Enabler (En)

Unknown darkener?

Always try to keep in mind that basic rules for breeding Classical Almonds are rather set, but breeding just an "almond" opens that door to just about anything. In the process you may even accidentally create offspring that could challenge the best Classicals at a show. You are not required to provide any proof of the genomes of your entries in order to enter. They simply should LOOK like Classical Almonds as dictated by any given Breed Standard.

Discussion: How does one distinguish among the following phenotypes in **BOLD**?

- (A) A spread sprinkle with hetero or homo Kite {One base colour & white, Tan shield and inner flights.}
- (B) A spread sprinkle with hetero (e) lacking kite {One base colour with white , Reddish head and neck}
- (C) An Almond Splash { Large white splashes on portions of the bird on any type of almond expression}
- (D) A spread blue/Black Almond {Extremely variable phenotype with gray streaks and some kite areas}
- (F) A spread blue/BLACK Classical Almond { Typical Classical Almond with darker black flecking}

FREQUENTLY ASKED QUESTIONS ANSWERED By DR. LESTER .P.GIBSON on this day 12/13/2022.

Does reversion have any affect on a birds ability to continue producing the Almond phenotype?

Answer: Dr. Lester .P. Gibson 12/13/2022 -

I mated a dun male to an Almond hen for 13 years. The first year she was light bronze, the second and third years she was classical Almond, the fourth to seventh years she darkened each year, the eighth year most of her phenotype was blue, and the ninth to thirteenth years she was a blue bar. She continued to produce Almond young right up to the day she died.

How does a Bronze other than KITE affect the Classical Almond Phenotype?

Answer: Dr. Lester .P. Gibson 12/13/22 -

Mating classical Almonds to the other Bronzes did not produce classical Almonds for me. One such mating did produce an interesting phenotype however. When mated to a bronze Archangel, the wings were typical Almond and the breast had scattered light bronze feathers.

Is there anything such as a 'PURE ALMOND"?

Answer: Dr. Lester .P. Gibson 12/13/22 -

My research showed that my Almonds had the Kite Bronze. One year in an attempt to produce homozygous Almond; 4 were produced. All hatched and grew normally. All were pure white. And all died without producing progeny. Of course these were by definition not Almonds but were homozygous Stipple.

{SPECIAL THANKS TO DR.GIBSON for sending in these answers to frequently asked questions!

Finally another talk on BASE COLOUR PIGMENT. Of course we all know that "Science" refers to the 'eumelanin' Pigment that mutated from the Black eumelanin at the Major Colour Locus as "brown". However you will have perhaps noted that I refer to this pigment as "CHOCOLATE". This has brought criticism from a couple (three to be exact) people who say that I alone have made up that term Chocolate. I have shown here previously that I did not. Christie & Wreidt were the first back in the early 1900's. That term was continued by a number of pigeon genetics authors to the present. Hollander and Gibson to be among them. Hollander placed the terms in his Booklet but also seemed to state the opposite in his preamble to Levi's The Pigeon.

Here is my point:

We have something different in Pigeons than in any other animal or bird. We have a "Pattern colour series", and we have the base Pigment colour .

Pattern Colour Series ------ Base pigment colour.

Ash ----- Dominant Red - symbol B^A

blue ----- symbol B

brown ----- symbol b

The advocates of the scientific application say we should eliminate the term Chocolate .

Ash ----- Dominant Red - symbol B*A

blue ----- symbol B

brown ----- symbol b

The argument seems to be that Chocolate has MANY TONES or Shades, while brown does not, now I do not know what chocolate you eat but the most tones I have seen are light and Dark. However brown can be anything from Buff, to tan, to grey brown, to drab, and so on.

In addition it messes up a very well understood template whereby we have a pattern colour series that features many tones caused not by the pigment itself but rather by the 'clumping' of the pigment as it is distributed in each feather in various ways throughout the bird except for the Tail band and the "C" Pattern areas.

The pigment granules themselves were seen as a chocolate colour under a microscope. That best describes the colour seen on the tail band and "C" pattern areas as well as a spread factor bird that is solid colour throughout!



brown, Barred series (Rob Grogan)

chocolate colour pigment.(Clint Robertson).

Ash / Red is an exception to the colour distribution. It is a Domnant brick red colour but it is Phaeomelanin not the eumelanin of Blacks and Chocolates. The smooth spread is very light ash rather than a dark red as we see it. The coarse spread expresses as brick Red.

I will continue to refer to the least dominant of the three as brown pattern series and Chocolate pigment as long as I am editor of the Newsletter. I do not think there is any confusion or harm caused by that , indeed quite the contrary.

Now we begin the New Year with threats of War and a brand new Covid Virus again started in China and already shipped to the USA. The world seems to be in a total mess, yet life must go on! We extend our Prayers and Good Wishes to all of you out there around the World. Take care of Yourselves and Your Families. I have spoken with some of you and had others write to say that they are in poor health and not at all certain how long they will be able to stay in the Hobby. I have been through all of that in my 78 going on 79 years and know exactly how you feel. Please try to stay positive as it can be just a matter of attitude as to how well you adjust.

Below is a beautiful specimen we will talk about next Issue:

