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

(Founded by Dr. Willard .F. Hollander)

Editor R.J. Rodgers Nova Scotia Canada.

Co-Editor: Jith Peter Palakkad India

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

Season's Greetings



Recently , Quido Valent asked on the Facebook Group "Strictly Colour Genetics for Pigeons", If a RED SPRINKLE was fact or fiction, and how one might go about creating a recessive red sprinkle in a like manner to that of the Black Sprinkle.

RED SPRINKLES - fiction? by Quido Valent, Netherlands.

Do true red sprinkles exist? So, like black sprinkles but the black is now red.

I know several people working on it, but is it not an impossibility?

St + rec red is DeRoy. St + dom red, how does that look? If not impossible, pictures, preferably with genotype, are most welcome!

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Bob Rodgers writes: I suggested that perhaps using the spread factor may work, keeping in mind that a sprinkle black is indeed a SPREAD blue /Black pigeon combined with the Stipper gene and spread is said by some to resist or negate any bronze!

<u>Bob Rodgers</u> The recessive red used in Stipper breeding involving Deroy and Agates is void of Spread blue /Black. Perhaps recessive reds that mask Spread blue /Black would give you the "Sprinkle" effect that you seek!

Quido Valent So, a DeRoy or Agate + Spread?

<u>Michael Spadoni</u> Should be possible over saturated T Pattern Ash red. But you won't get the red in the tail and some in the primaries.

You don't want any bronze.

<u>Quido Valent Michael Spadoni</u> but then you need to get St linked to the ash red, right? Spread is not needed / helpfull?



Photo submitted by Walter Wojcieski .

<u>Quido Valent</u> This one, posted by <u>Walter Wojcieski</u>, does have red in primaries, but does not look typically sprinkle to me. More of a grizzle perhaps??

<u>Bob Rodgers</u> Perhaps because you are seeing mainly "bronze" not (e), again probably due to the lack of spread factor. <u>Just assumption on my part as I have not tried it.</u> I am thinking that to get what you want: Spread stipper cock carrying recessive red masking spread X recessive red masking Spread = Homo spread, homo recessive red, Hetero Stipper. IF and I stress "IF" bronze is masked by spread, then there should be Red sprinkle stippers lacking the over tones of bronze.

Michael Spadoni Quido Valent You do not want spread. With Ash red Carrying rec red would help. But not homozygous that would make a Deroy.

<u>Quido Valent</u> <u>Michael Spadoni</u> what do you make of the picture of <u>Walter Wojcieski</u> (he is going to check the genetic background).

Michael Spadoni Quido Valent to me that's a pencil Rec red.

Bob Rodgers Deroy is homozygous recessive red combined with Stipper and T-Pattern, however the golden tone that we see is not actually so much the effect of recessive red as it is the associated bronze filling the areas normally broken by stipper. Any darker red coloured feathers are the masking recessive red expressing on those few base coloured feathers that have not been depigmented by Stipper. In this case, the addition of Spread would possibly assist the recessive red expression while masking the effects of homo bronze. Such spread influenced birds would be of no use in a normal Stipper breeding program. I do not believe that Ash-Red would be of any benefit one way or the other. I also do not think that the red bird above is the Pencil Trait.

Quido Valent Bob Rodgers but would you call it sprinkle?

Bob Rodgers If it is a Stipper bred red and white flecked, why not ??

<u>Quido Valent</u> Dom red + St seems to make most sense, as allele of the other colours used to make sprinkles. One should have to accept the lack of red in tail and flights - like we accept black flecks in blue sprinkles.

(Bob R.- I have added an afterthought here regarding Quido's above comment) - He suggests that Ash-Red St. makes the most sense , however let's look at what is being said more closely -- Black Sprinkles are Spread blue + St. , Chocolate Sprinkles are spread brown plus St. , Ash sprinkles would be Spread Ash + St. and the latter would not express red feathers at all. Then if we go with the pattern series : Blue - barless/ Bar / check / T-Pattern sprinkles we no longer have a white bird with one solid colour sprinkle in like manner of the Black Sprinkle. We have simply Blue stippers not sprinkles. Therefore the same applies to the Ash-red pattern series and the brown pattern series.

Bob R. adds- then Quido followed with photos of what were in effect Stipper ash-reds that were at least hetero for bronze and lacking spread that he and the breeder considered as red sprinkles. Obviously spread eliminates the dominant red expression and gives us the typical "ash" colouration that renders the tail and flights at least , a near white or light ash. Adding hetero recessive red does **not** help because while it may make the neck feathers redder , it will cause the flights and tail feathers to be more dark **gray**. These can scarcely be considered Sprinkles , they are by some , but I do not believe that this is correct.

<u>Bob Rodgers</u> -The birds that you have just added , to me are simply ash-red and ash -yellow stippers not unicolour sprinkles with stipper white break. Lot of bronze , ashy gray , check pattern etc. , scarcely what I would call a red or yellow sprinkle.

He felt that my suggestion of S//S , St//+, e//e {the (e) masking (S)}, mated to a recessive red e//e, masking S//S, was doing too much "trick" breeding and as a breeder he would not accept that .

<u>Quido Valent</u> <u>Bob Rodgers</u> you are right, little white between the red. Possibly some more on big feathers.

Still, a unicolour dominant red does not exist. Recessive red is not properly affected to produce a good stipper effect. Perhaps with certain tricks one can produce something that may pass as red sprinkle with sprinkling all over. Do we accept a black sprinkle produced like that? As breeder I would not...

Bob Rodgers Just to be clear: #1, "You say recessive red is not properly affected to produce a good stipper effect." That is why I suggested that spread factor may be the key. #2, You say: "Unicolour dominant Red does not exist". A spread factor ash-Red sprinkle should be easy to breed but since all traits involved tend to block and/or diminish pigment. The resulting phenotype would obviously not be very striking. #3, you say: "Perhaps with certain tricks", by that I assume you mean any of the genetic modifiers that we have discovered to enhance the various mutations. #4, You say: "Do we accept a black sprinkle based upon those "tricks"? As a breeder one MUST! We know that spread blue /BLACK combined with the stipper gene will result in some sort of a "sprinkle" phenotype, but we also know that we must apply a specific approach to creating one that is ideal for the show room. That involves the "Tricks". That is what being a successful Breeder is all about!

<u>Quido Valent</u> <u>Bob Rodgers</u> I think that depends on the tricks needed. With the red it seems a bit excessive and perhaps wiser to accept the incompatibility of traits...

<u>Bob Rodgers</u> In the showroom the result is the important matter. How one achieves that decided effect has no actual boundaries , may the best man win! :-)

Quido Valent Bob Rodgers yes, but as breeder I would prefer a more stable production route!

<u>Quido Valent</u> From the discussion above, I think we can conclude that perhaps we can create something that looks like what we would call red sprinkle (based on black sprinkle phenotype), but it will never be 'just' a red stipper.

Thus far, I have not seen a truly convincing red sprinkle - which does make me wonder how 'possible' such a creation actually is.

<u>Bob Rodgers</u> The equivalent to that in Blue series is simply a blue stipper, hetero bronze and lacking hetero recessive red. In other words a poorly coloured blue stipper with a bronze neck. This is not a RED sprinkle, it is not a sprinkle period. If anyone wants a red sprinkle, then there is nothing wrong with trying one or two other traits typical of sprinkles to create one, and not be willing to rename a vaguely similar phenotype in the name of a shortcut..

For the Newsletter I have added the following observations:

Ironically four mutations that have undergone the most "tricks", as Quido calls them, in their evolution to standard acceptance have been (1) Spread factor, (2) recessive red, (3) Stipper/Almond, and (4) Saturated T-Pattern. None of these traits are acceptable for standard Show classifications in any Breed as they originally appeared!! Below is a normal coloured Blue T-Pattern pure Stipper hen. This is before all of the so- called "tricks" were applied to create either the "Classical Almond, or the "Multi-coloured Almond". Even the unicoloured stippers: "Black sprinkles" require some Tricks to get them up to show room quality. The Saturated T-Pattern is still a mystery as to what "tricks" were used.



Above , you can see that the blue series bird has given way to the stipper break and there was insufficient kite bronze to replace the break except in the region of the neck. This is also what we saw in the Ash-red stippers posing as Red Sprinkles. So , what could we do to bring about just recessive red and Stipper break on a bird to make a red sprinkle?

There does not appear to be any hope of doing that . Stipper and pure (e) creates a Deroy . Normally they do not involve spread factor. My suggestion was that IF spread does in fact mask bronze (which I do not believe it does), and we make certain that pure spread is combined with Stipper and (e) , then perhaps a red & white sprinkle may be the result. It appeared no one has ever tried that , and if they have no detailed pedigrees were presented to prove it. The birds that were presented all looked as if they may be anything else except masking pure Spread . Some may have been bred from hetero spread parents , but looked like they were masking only T-pattern. This makes for an interesting project for anyone willing to give it a try.

The key point arising from this discussion was that of the comment regarding "TRICKS"! We know that Stipper alone simply whitens feathers through a yet to be fully studied depigmentation process, that may or may not leave some pigment cells or granules in the white break areas. Breeders must apply all sorts of TRICKS to bring out the phenotypes set forth by the various Breed Colour standards for the trait.

Spread factor and reccessive red are said to both be "epistatic", meaning that they cover or hide almost all other traits including Modifiers and Patterns. The original mutations do not mask anything completely. Homozygosity of the mutations of course creates near epistatic forms, but even then the TRICKS had to be employed to create a phenotype that would be near to completely epistatic. Darkening traits such as: known Dirty factor, smoky factor and Sooty Factor seemed to work in making Blacks epistatic to Pattern, at least to the naked eye. The Spread ash becomes less "RED" so that an entirely ASH phenotype prevails, usually any red showing in pattern areas is caused by a "bronze" as opposed to Dominant Red pigment. Spread brown series birds appear as a dark Chocolate colour but undergo the most sun fading such that they rarely present in a truly solid epistatic expression.



Chocolate W.O.E . Tumblers -Clint Robertson.



Solid black, pure spread blue /Black - Ali Khan.



unimproved Spread blue /black - John Smilie .



Saturated T-Pattern (non-spread) -Walter Wojceinski.

Recessive reds are usually thought of as a Deep rich Red all over totally masking not only their base pigment colour but also Pattern , and most modifiers. The original mutation was far from a deep red specimen. The tricks that had to be applied are achieved via "Selection" and the addition of at least one bronze in the homozygous state .



unimproved recessive red - AK Lofts.



recessive red Frillbacks - Alfred Neese . Australian Group.

The following diagrams show approximately what the original mutation at the Sox10 locus looked like. I have painted them from specimens that I saw in my feral study flock. Some of you may say that you have NEVER seen birds that look like this! That is very likely, since the original mutation is so rare. I told you in a much earlier issue about a fellow writing in to the Newsletter to ask Dr. Paul Gibson about such a bird that he had seen, at the same time I described my first encounter to Paul. He stated that he did not understand what all the excitement was about, they were simply recessive reds.

Here is the series of diagrams depicting how they look without all of the so-called TRICKS that Breeders have applied to give us the present deep red phenotypes. I have seen much lighter forms than these.



(1) Barless, (2) Barred, (3) Checker, (4) T-Pattern, (5) Spread factor-blue/black, recessive reds.

Quido Valent Bob Rodgers are there any examples of red sprinkles looking like the blacks?

Bob Rodgers I believe your original question was are they fact or fiction, are they possible? Unless a specific class is offered, then there is little incentive to create one. The fact that spread is kept out of Stipper/Almond breeding for other reasons, then not likely any accidental specimens have been bred. It would take an open mind and a couple of deliberate matings to see if a nice recessive red sprinkle can be made.

<u>Quido Valent Bob Rodgers</u> here (NL) red sprinkles are approved. Several breeders here work on them; also with spread. Haven't seen any fair ones yet.

Along your line: they seem not to be fact yet, thus fiction for now?

<u>Quido Valent</u> <u>Bob Rodgers</u> also, from <u>Axel Sell</u> I understood they worked on rec red based sprinkles for years in Germany, without good results. I think it makes sense to use spread then also.

<u>Bob Rodgers</u> Using spread was suggested based upon a statement by some that Spread masks Kite bronze. If it does, I question why some black sprinkles do in fact still express bronze necks not hetero (e). However it strikes me as a possible way to clear out the bronze and allow the expression of homo recessive red to prevail as we see it doing in some Deroys. If there has been many years of attempts, then there should be a catalogue of good photos showing failures and any that were close enough to warrant all that time trying.

Quido Valent Bob Rodgers there may be. I assume several have been shown.

<u>Michael Spadoni</u> I can't see how e//e can be used at all as that makes Deroy I have never ever seen a Deroy where Stipper has stripped off the red to white. So not possible to create a Deroy Sprinkle.

Ash T Pattern with darkening factors alternative to bronze, like Sooty and dirty, may get some colour on the primaries and tail.

<u>Bob Rodgers</u> The action of e//e when spread is involved along with hetero stipper may not give the typical Deroy expression . I mentioned that the spread is said to mask bronze , but enhance the base pigment in the non- depigmented areas and a pure recessive red would mask those spread blue /black areas. While it may not work , I think it would give a much better chance than dealing with any form of Ash.

<u>Quido Valent</u> <u>Bob Rodgers</u> so, someone should try it! (Although I am sure a pure red has already been crossed with St).

<u>Michael Spadoni</u> I have bred spread Deroy they DO NOT have white feathers.

<u>Quido Valent</u> <u>Michael Spadoni</u> so, adding Grizzle may help there - but at what point will it then go from a sprinkle to a Grizzle?

Bob Rodgers Three points from the last three comments . "Pure red", any recessive red expression is pure for that trait no matter what other genes are involved. "Spread Deroys DO NOT have white feathers", even Deroys that come from the "Almond" matings lacking spread do on occasion express stipper break particularly in the flights and tail. "So adding Grizzle" I see absolutely no benefit from adding any grizzle trait to any stipper genome! I think that two things may help bring a conclusion to your post. (1) we get to see the phenotypes and breeding records of as many German bred recessive red sprinkles as possible, and we get to see Michael's Deroys from Spread factor recessive reds on spread

stipper carrying recessive reds masking spread. Otherwise one or two of you will have to make some of these matings and record your findings with photos along the way.

Quido Valent Bob Rodgers "pure red": somantics. You know what I meant.

"EVEN DeRoys..." you say it like if THEY do, the spread version will certainly, while this is not clear. Michael Spadoni apparently has bred more than one, none showing white.

Is that so surprising?

I spoke of Grizzle, as that does increase white in a DeRoy.

<u>Quido Valent</u> <u>Bob Rodgers</u> I agree about the Grizzle, should have no place here. Maybe <u>Michael Spadoni</u> can elaborate a bit on his spread DeRoys.

Michael Spadoni We already know G & e don't work well together. You usually get an extreme moult to white effect. But I have seen the odd racer almost look mottled but suspect that's due to the complete absence of bronze and the lack of colour intensity found in racers in general that reduces the moult to white effect. Oriental rollers have S, St and e birds. See if anyone can show us a Deroy with white feathers (excluding the recessive pied they have in the breed). Here is Deroy over Black (St//+, e//e, S//+) It does have a lot of what is best described as undergrizzle on the shields and primary flights.



🛮 (I feel certain that this is Stipper white break, not (Ug) or a grizzle.)B.R.

<u>Bob Rodgers</u> Thanks Michael , it would seem from that that my suggestion may not be a solution to Quido's question. I certainly would like to see what others have done . The trumpeter is almost exactly like a bird Axel pictured in his book as Deroy <u>lacking spread</u> . Somehow I think that there must be a difference possible , with such an extreme genome difference .



I wonder if anyone has ever tried mating these Brander mottled recessive reds with spread stipper? (Photo Mick Bassett) . Mick States that these red mottle phase Branders are essential in Breeding good Branders.

<u>Additional:</u> I did not show the examples of Ash-red stippers non-spread that were presented by Quido second hand, as I do not have permission to show those. If anyone else has actually done tests involving pure spread and pure recessive red with the Stipper gene, please let us know!

The following is an October Post by Charles Kendrix in the Facebook Group "Strictly Colour Genetics for Pigeons":

This series of pictures is a project I am just starting. I want to put brander bronze into my German Modenas. My ultimate goal is a gazzi marked brander bronze carrying one gene for recessive red.

The recessive red German Modena is the sire. The brander bronze Show Tippler is the hen. I have only the one round at this time, and it has a pox on the beak. I have been giving it a four in one medication to keep down other infections and it appears to be healthy at this time.

The combination of one gene for recessive red and one gene for brander is giving a good expression in the early plumage, but I expect that to darken with the adult molt.

One early surprise is the fact the eye on the youngster appears to be pearl. I expected the orange eye of the German Modena to dominate. Maybe the bright pearl eye of the show tippler is not recessive to orange?





Brad Stuckey I like this project. Mike Bordelon is doing the same so we can see results simultaneously.

<u>Charles Kendrix</u> A little older now. Lost some of the hen type in the F1, but not bad. The tippler pearl eye shows, but is darkening with age.

(Information from an old Issue of this Newsletter By Bill Peterson .)

Brander is thought to be a bronze of its own. I'm still not 100% convinced that it is but cannot rule out the possibility. People find when they continually infuse kites with recessive red, the kites begin taking on more red or bronze. It is a strange phenomenon but it may explain something in what we see in those birds like bronze show tipplers, which are considered to be brander bronze. We know that they are t-pattern blues, dirty and sooty and they are het recessive red. You can argue whether they began as kites or branders. What does a brander look like if it is not het e? Like a dark kite. They get called things like "too dark brander".

I had some very black kites from Link Martin show rollers. They were homozygous dirty and sooty, tails were very black, the birds nearly looked to be spread but were not, they were t- pattern kites. In breeding them back to reds, they began to take on more red or bronze. I only played with them for two years and could see the difference. Tim Kvidera noticed the same in bronze show tipplers, that the kites were getting more and more red or bronze as time went on. What if we did this for 20 years or 50 years? Would we see something that people would call brander? My suspicion is that yes, we would but I have no proof, nor am I likely to have that much time to prove it. :)



Dirty (V), Undergrizzle(Ug) Brander Bronze - Dihantha Reiad.



Typical Brander (Chila) sooty Check lacking recessive red - Pigeon

Farm. Bd.



Brander T-Pat. hetero (Ug) Dirty (V)- Faisal Hossain PBCPD.



Brander T-Pat, Homo Kite (K), Dirty (V), smoky (sy) - Ridhoy Khan .

The last word goes to you our friends and supporters :

Correction to last Issue, I had exchanged a great many points and photos with Shoibal Sabbir, and in the process, I inadvertently copied the incorrect parents for his Almond Oriental Frill. No one picked it up until he saw the Issue. My apology has been conveyed and correction made here.







This is Shoibal's male and his correct parents .

Now - more letters from you our valued readers :

From Dr. Lester P. Gibson former Editor for 32 years .

Hi Bob

Thanks. Another excellent issue. Grace, peace,& love - Paul.

From Frank Hammond:

Thanks Bob, always a pleasure when this pops into the inbox. Best wishes, Frank.

Champion Komorner Tumbler for Guido Madrusan at the Sarnia Pigeon Show , Sarnia Ontario , Canada . AKTC District 7 .

That is it from the Pigeon Loft for another Month SEE YOU in the NEW YEAR! Wishing all of our Christian Members a Merry Christmas . Peace , happiness and safety to everyone world wide!