The Pigeon Genetics Newsletter, News, Views & Comments.

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Our main Topic this Month is reduced and its allele Rubella.

This locus features just the two mutation alleles from wild type. They are recessive to wild type, but Rubella is slightly dominant over reduced. The genes are sex-linked. The adopted genetic symbol for reduced is (r) and the symbol for Rubella is (r^Ru).

The phenotype for reduced varies depending upon what base colour , Pattern, and modifiers are involved. Generally there is a partial reduction of pigment intensity both in the Intense phase and the dilute phase. On a wild type (Blue Bar) they are fledged near white with very light gray areas that are quite distinctive. There may be a slight pinkish tone on any coarse spread pattern (C) areas. The face usually appears darker due to the fine feather found there. The neck is usually whiter even after the first moult due to the structure of the thin longer feathers found there with reflective sheen.

Reduced Blue Bar Rudi Lombaard.

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Kleurpostduiven Kloosterhaar.

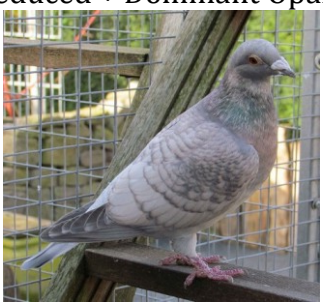
The following are photos submitted by **Rainer Krebs** of some of his beautiful reduced and Rubella Racers .

(1) reduced Bar, (2) reduced bar, spread., (3) reduced Bar , Spread.

(4) reduced spread

(5) reduced spread

(6) reduced + Dominant Opal



(7)Rubella Bar

(8)Rubella+ reduced Chk.

(9)Rubella Checker

(10) Rubella Checker

(11)Rubella Spread

(12)Rubella Spread

Below :

(13)Rubella Spread (14) Rubella Spread (15)Rubella Spread (16) Rubella Spread

The allele (alternate choice) mutation "Rubella" can be darker or lighter than reduced and usually lacks the white neck collar. Similar laced shields in spread factor. The tail feathers are striped horizontally. The tail band is bleached as are the flights but leaving darker edges on the flights. There still may be bronze coloured wing patterns. Some specimens reported as not being typical, may have been smoky and / or Dirty factor birds.



Rubella checker Sooty. You may look at this and think it is just a normal checker , but the center most part of each feather is the area that Sooty occupies and that would normally also be black. However I discovered some time ago that Sooty is not coarse spread and instead it is the same as the sub-terminal Tail Band which is 'smooth spread'. Some coarse spread remains as black. Rubella changes the condensed smooth spread black pigment to an off white. photos by **Voiajori Colorati** (ten photos).


reduced frill stencil Blue bar hetero Gimpel.

reduced blue bar spread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Rubella hetero reduced, dilution and Ecru

Reduced Ember reduced Blue Bar




Ru d,+,Ts1 & 2 & Gimp,.

{ On this checker het. r, Ru, d. you also see the light areas of each checker feather , but this is NOT Sooty as we can see that the tail band is a normal dark 'silver' colour in this case, being dilute blue/Black. So, we know that Sooty is not present.}

Rtm Loft Raffy Monova : I was unable to contact him but his friend MD MeDz Fsl felt he would agree.

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reduced recessive red { **Patryk Kielbasa** } Rubella T-Pattern


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Reduced Bar and checker **Boss Ryan**.

FROM LAST ISSUE : Update on the phenotype of this lovely Toy stencil and frill stencil Racer bred and owned by **MD MeDz Fsl** . It could not be painted any better !

ANNOUNCING :

I have decided to do a separate Show Report Issue each Month to include any shows held around the world . I will pick the best photos from each show to feature in their Report. I will be looking for : Overall photo of the show-Room., Champion Birds of show and also individual large classes. Judges, award presentations ., that sort of thing. I may not be able to include everything I receive so will pick the best. I must have the names of any people included in any photos.

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The following lovely photos reduced T-Pattern and Spread factor are from **Rafal Jamry ., Poland.**


Rafał Jamry

Reduced Spread blue /Black - **Albert Hogan** and Reduced Spread blue/Black **Tommy Cook**.

For comparison - Reduced Opal and pure Andalusian **Jijo Thomas**, Opalusian **Nicolae Florea**

Homozygous frill Stencil /Toy Stencil **Naff Pigeon Loft** and Spread blue/Black recessive opal - **Mike Pernat**

Heterozygous Indigo Spread blue Black (Andalusian) **Stanley Stammer**.

When using the 'reduced' mutation , you treat it like any recessive sex-linked gene. The effects of this gene are the most notable and attractive on the blue/Black series , and on a Spread factor bird that masks T-Pattern. It is attractive on most all patterns however , and there can be a pinkish effect along with the feather laced in black. This residual red may be a bronze or recessive red carried .

The earlier photos show that they usually fledge from the nest with a near white phenotype , and then darken with the first moult. The 'C' Checker areas usually remain quite white or pinkish. The rest of the feathers may be a softer tone of blue/gray in the clumped spread areas of barless and barred patterns.

Since this gene is a recessive, males require the two doses of the gene , one from each parent, in order to be pure (homozygous) for it and thus express it visually. Females only require the one dose to be pure (hemizygous) for it , and to express it visually. Approximately half of all female young from a pair (Male carrying reduced and female Not reduced), will be reduced having received one dose from their sire. One of these reduced females mated back to her sire or another male that either carries reduced or is pure for reduced, will produce ALL reduced young male and female offspring.

Ash - Red plus reduced produces a soft pastel ash with either pinkish or soft grey bars and checks.

Brown/Chocolate plus reduced produces a more pastel tone similar to ash but very soft.

Recessive red reduced birds appear somewhat yellow or pink in tone. They also may have darker edged feathers .

One main identifying trait of the reduced specimens is a very white or 'silvery' neck . Reduced birds may range from very light lacing to quite dark lacing to no lacing at all. The faces often appear darker because of the very tiny narrow feathers found there and the lacing that becomes more like dark tips combining together to give the dark face effect.

A cross-over can occur when the reduced gene is on the chromosome contributed by the male, and the brown gene is on the chromosome contributed by the female. This will result in a gamete (egg) that is both brown and reduced, so that a hen can be produced that is a reduced brown bar, check etc.

The cross-over rate between reduced and dilution is about 7%.

A reduced Almond requires a cross-over to take place as both genes are sex-linked.

The only allele mutation at the reduced locus is the Rubella (r^Ru), it is just slightly dominant over reduced but also recessive to wild type. It usually lacks the whitened neck area, but usually has much darker lacing, and overall colour tone. The tail feathers in particular usually have multiple bands of dark and light across the feathers in a striped manner, similar to the juvenile tail feathers of many Dominant Opals.

Breeders have reported some confusion in identifying differences between some reduced and Rubella specimens and found that some reduced birds split for Rubella appear to be homozygous Rubella.

"SHOW RESULTS AROUND THE WORLD"

I announced on Facebook that I would develop an additional Publication to be mailed out to everyone with this Newsletter, entitled " SHOW RESULTS AROUND THE WORLD" to give exhibitors a chance to showcase their Efforts to exhibit their Best and promote the Hobby.

I neglected to place a deadline on submissions so the two that I received for this mailing arrived only yesterday. To make matters even worse, after a Month of no heart problems , I had a severe attack of chest pain last night after a day of working outside and feeling great.

That meant that I could not possibly load all of the photos in the first report in time for today's mailing, so I will hold them for next Issue in May. Hopefully I will still be with all of you and able to do that as planned!! The deadline for show reports must be the 15th. of the Month previous to the mail out date .

Next Issue I plan to feature the 'recessive opal ' mutation. I was looking through some of the first Newsletters published by Dr. Lester .P. Gibson , and found his feature article on this gene mutant. I will re-publish it along with photos of today's birds . If you have any that you would like to share please send them to me in chat or email - Bob_rodgers556@hotmail.com

That is it from here , I hope that all of you keep well and safe, Spring is slowly getting underway here in Canada and Jith tells me that they are having spring there in England. He had his first introduction to snow and a bit of cold which I found so funny considering what I have to endure here during winter.

A most unusual Pied marking on a white King , Posted on Facebook by Breeder / owner Tudor George.