



The Pigeon Genetics Newsletter

News, Views, and Comments.

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Section # (1) Beginner

Dominant Opal

Dominant Opal is present in a number of pigeon breeds and it is fairly variable in its expression as is the case of many other mutations present in pigeons that are caused by non allelic variations. They are called unknown factors or modifiers especially in the pigeon genetics world. Modenas, Fantails, Homers, some Pouters, Tumblers, Rollers, Trumpeters and colour pigeons are all examples of breeds and/or breed groups in which we can see the mutation with various phenotypes and some of them are very attractive indeed. It is an autosomal, partial dominant mutation, symbolized as Od. Heterozygous birds are usually perfectly healthy whereas homozygous dominant Opal is usually lethal to the birds. Dominant Opal lightens up the feather colour and heterozygous dominant opal on blue bar is usually a light blue colouration with white bars, lighter flights and tail (with lighter band). Homozygous dominant Opals usually undergo embryonic death, however, there are some reports of them being hatched and surviving. The reported homozygous dominant Opals were light grayish in colour and usually showed nervous type behavior.

The above birds from left to right are dominant opal blue bar Bavarian pouter (marked breed; flights affected by pied white), Isabel coloured Brunner pouter, a Spread blue dominant Opal Fantail -Photographed by Dick Hamer. A couple of dirty blue T-pattern dominant Opal belonging to Roshin Ratheesh and a spread blue dominant Opal Indian Fantail bred by Steve Shaw. The birds are all heterozygous dominant Opal.



Dominant Opal blue bar racer- photo from Bijzondere Kleurpostduiven and a bird posted by Jason Gelder as homozygous dominant Opal blue check in the middle of the juvenile moult.

Mating dominant opal to dominant Opal is not recommended as 1/4 of the youngsters from the mating can possibly be homozygous dominant Opal, and probably they will die before they hatch or may rarely hatch and survive unhealthy. So it is wise to pair Dom Opal to non Dom Opal.

	F		
M		Od	+
	Od	Od//Od	Od//+
	+	+//Od	+//+

Opal vs Opal

	F		
M		+	+
	Od	Od//+	Od//+
	+	+//+	+//+

Opal vs Non opal or vice versa

As given in the punnett squares above, from mating of two heterozygous Opals you can get 1/4 Homozygous dominant Opal, 1/2 heterozygous Opals and 1/4 non- Opals. Mating of Heterozygous Opal vs non Opal can produce 1/2 heterozygous Opal and 1/2 non-Opals

Below are some dominant Opal homers with different colouration.



Dominant Opal blue t-pattern and check birds bred by Brian Cullen



Dominant Opal blue check and T-pattern birds, first two by Brian and last two by Bijzondere Kleurpostduiven.



Dominant Opal blue T-pattern and check birds, first one bred by Bijzondere Kleurpostduiven, second one by Lize Mare Juliet's Combrinck, third and fourth by Albert Hogan.



From left to right; a dominant Opal check and a bar bred by Wes Murphy, a dilute blue bar dominant Opal by Bijzondere Kleurpostduiven and last a dominant Opal blue barless by Lize Mare Juliet's Combrinck.



German field colour pigeon by Mick Bassett

The colouration is called “pale blue” in the German field colour pigeon, but genetically they are intense and the lighter pale-bluish colouration is caused by dominant Opal. According to the standard “Even, clear and delicate pale Blue shade, not 'mealy' and without any 'flecking' or shading, the Neck with a Matt Green Sheen, the Flights with paler shaded Feather Webbing, the Tail with a pale Bar, the Wing Bars and Chequering without any Black edging (a delicate Grey edging is accepted)”. Dominant Opal is very much variable and mating Opal white bar as seen in the above photo with unrelated birds (blue bars) may result in undesired colouration; young with reddish or pinkish or off white pattern, flight and/or the tail colour may get darker etc. So breeders who breed Opal white

barred birds usually pair them with non-opals from the same breeding program. Such breeding method ensures that we don't introduce unwanted modifiers which could change the phenotype into the strain. That is the best and easiest way to maintain the desired colouration.



Dominant Opal blue bars; Slovakian pouter by Mick and German beauty homer (breeder unknown) a couple of Owls, a mookiee and a Prachen kanik





Dirty dominant Opal blue bars, the Moravian strasser probably also Toystencil, photo by Mick Bassett. Photos of homers from a facebook group, a group of shield marked homers belongs to Jijo Thomas, An Indian Fantail, I believe it belongs to Dan Skiles Jr and a opal blue bar sooty belongs to José Manuel Jiménez Miguez.

Dominant Opal on brown and ashred are often hard to identify from the colour and are not that attractive, they are usually a bit lighter than non-Opal. From the few Opal brown birds that we have seen, they have shown more expression in the juvenile plumage compared to adult plumage. Opal ashreds often show somewhat golden-pinkish pattern. Dominant Opal on ashred and brown are rare compared to blue/black series birds.



From left to right an adult dominant Opal brown bar belongs to Liviu Constantin, a juvenile Opal brown bar, I believe it belongs to Jithu Thomas and an adult brown check belongs to José Manuel Jiménez Miguez.



On top, from left to right, a dominant Opal brown check Birmingham roller and a couple of photo of a dominant Opal brown bar Fantail in juvenile and adult plumage respectively, bred by Wildbriar lofts. Last one dominant Opal brown check shield marked Homer belonged to Ryan ward



From left to right, a dominant opal ashred bar English Trumpeter by David Britton, and a photo of a couple of Opal shield marked Homers on blue and ashred respectively, belonging to Vong Xiong. Last photo is of a Lahore probably dominant Opal ashred T-pattern?



A dilute dark blue check Opal or Opal dun with check pattern homer bred by Jijo thomas and a dilute blue T-pattern Opal English modena from Melbourne group.

Spread Opals are usually lighter in the juvenile and moult in darker. They come with lighter colour similar to typical spread reduced to dark greyish-charcoal black colour. The expression of dominant Opal is almost impossible to identify on some spread birds and they appear somewhat dull black. Since Opal lighten the over all plumage colour, it is not possible to produce good black white barred/checker colouration by using Opal, for that Toy stencil is the only way that we know yet.

Below are some photos of spread Opal in various breeds.



From left to right, a juvenile spread Opal barred Indian Fantail bred by Vivek Raj, next a couple of spread opal bar Homers bred by Michael Dizon probably in the juvenile plumage and last a spread Opal T-pattern American show racer bred by Stanley Stamer



From left to right, a juvenile spread Opal T-pattern ASR bred by ASR bred Rudi Lombaard, next a spread Opal bar in the middle of juvenile moult bred by Ismail Haji, as you can see the bird is moulting in darker. Third one is a spread Opal T-pattern bred by Eugene Robinson, and the last one a spread Opal bar bred by Lize Mare Juliet's Combrinck.



Some photos of spread Opal Fantails and probably all are barred. First one is in the juvenile, and the remaining three are adult. Third one bred by Mitko Sivev. Unfortunately we don't know who bred the second and fourth birds, photos posted by felice Esposito at Melbourne pigeon group.

As you can see the last one is a dull black in colour and the expression of dominant Opal is not noticeable with a sudden look, however, you can see the lighter base of tail feathers, that is often an identification mark on Opals birds with similar dull blackish colouration.



Spread Opals. First photo from Don dickson. Next a Birmingham Roller and last

one an English Trumpeter bred by David Britton.



Spread Opals. First and second photos of English modernas from Maik Arlt and Michael Spadoni respectively. Third one bred by Wayne Murphy. The last photo is of a Juvenile Indian Fantail from Michael Spadoni.



Spread brown Opal ?



Spread ashred Opal?



Some dominant Opal Indigo birds, first two are T-pattern and last two are barred. From left to right Arabian crested Homer, photo by Kamal El Motaouakkel. Second one Indian Fantail bred by Zaheer Minhas, third and fourth are of Fantails

Some facebook experts often say adding Indigo to Opal birds is an easy way to produce white barred birds. Some Opal indigo birds may show white pattern,

however, with reddish neck and much lighter flights and tail compared to Opal birds without Indigo. Opal can produce white pattern without the presence of any other known mutation, and it is all about selection. If you want to produce blue white barred birds with normal coloured flights, tail and over all blueish colour tone, then Opal would not help, Toy stencil complex is the only possibility in that case.

Opalusian

Opalusian is a name for spread blue heterozygous dominant Opal, heterozygous Indigo. The colouration is attractive and present in a number of breeds. Adult birds are usually lighter with dark head and show lacing on the shield. Some of them show pinkish colouration on the neck.

Below are some Opalusian.



Indian Fantail bred by Dan Skiles Jr, and a fantail in the middle of Juvenile moult



First three are Opalusian and the last one probably a spread blue heterozygous dominant Opal homozygous Indigo. First one bred by Jeffrey Wozniak, second

one is a Parlor Roller by Steve Shaw, third and fourth are homers by Brian Korg.

Below are some photos of a Reduced blue bar dominant Opal (non spread) bred by Wildbriar lofts



In the nest



Middle of the moult



Adult plumage

Below is a breeding result by Jijo Thomas. Sire is blue T-pattern Opal carrying dilute and probably frill stencil and dam is dun frill stencil toy stencil.

Youngsters: a spread Opal stencil and a dilute spread Opal stencil, they may get darker with the moult if they are still in the juvenile plumage.



Parents



Youngsters



Photos of a Mosaic look-alike Stipper blue Check dom Opal after the juvenile

moult bred by Jijo thomas. We have given a photo of the juvenile plumage of this bird in the October 2015 issue, he has darkened considerably with the moult.

Below are some birds with genotype of grizzle Opal on blue/black base



First three are heterozygous classic grizzle blue Opal, first and second birds are Homers bred by Edward karel and Wayne Murphy respectively, third one is an ASR bred by Joseph Ognibene. The last one is a heterozygous classic grizzle spread blue dom Opal American Giant Homer bred by Tibor Kalauz.



A couple of het tiger grizzle blue bar dom Opal homers bred by Wayne Murphy.

Isabel colouration

Isabel is a colour category present in the standard of a number of pigeon breeds, and not all of them are genetically identical. In some pouter and colour pigeon breeds, dominant Opal is part of the Isabel colouration, whereas in the case of a number of other breeds, dominant Opal is not present in them. Since the genetic make up is different, the colour is not always the same in different breeds. In pouter breeds like Saxon, Brunner and colour pigeons like German field colour pigeons, Saxon field colour pigeon, the "Isabel colour" desired is a clear, even, light yellowish creamy colouring, with the White Bars clearly visible against it.

In Saxon pouters, Saxon field colour pigeons, German field colour pigeon, the females normally are darker in colour, but too dark or too light or uneven colour is considered a fault.

According to the test breeding result of some people, the soft light yellowish white barred Isabels are recessive red dominant Opal bar, with either ash red or black underneath. Short downed babies sometimes in the breeding pen indicates some of them are also dilute. According to the standard of Saxon Pouters Saxon field colour pigeons and German field colour pigeons , a light horn coloured beak is required for the isabels and in the standard of Brunner cropper dark beak is considered as a fault. It is suspicious for recessive red birds to have light horn coloured or dark beaks. Do any of you have an explanation for this? We would like to hear from you.



German field colour pigeon photos from Mick Bassett.



Saxon field colour pigeon



Saxon pouter



A group of Isabel saxon and a Spread blue bar Opal belongs to Frank Barrachina, photo from Michael Spadoni.



In the first photo an Isabel (probably dilute) and a yellow young saxons. In the second photo a dark Isabel saxon.

In some other breeds, the so called Isabels have totally different genetic make up and therefore different colour phenotypes. The Mookie Isabel is Milky spread brown (an even, delicate Cream colour without Bars) and in Berlin short-faced Tumblers , it is dilute brown bar (light Cream colour, with darker bars and tail band)



Photo Galatzer roller



Photo Ko van Vliet.

In the New York flying flight and Polsh owls , dilute ashred bar is called Isabel. In the standard of many other breeds the colour is called yellow or cream bar.



Photos from felice Esposito posted at Melbourne pigeon group.

In WOETs in the US both dominant Opal recessive red and reduced recessive reds are shown as Isabel. According to some breeders, spread blue underneath of reduced recessive red Isabel gives better colour.



Photos from Jijo Thomas.



spread Opal or non-spread Opal?

According to Paul Gibson, Gene Hochlen and some other breeders, dominant Opal is part of the genetic make up of some white barred/spangled Ice Pigeons and some other German Toy breeds. Such birds usually show expression on the tail and flights in the juvenile plumage and moult out to birds without any visible expression of Opal. When mating two such Opals, 1/4 of the young usually don't hatch .

Dominant Opal is a trait that is well known to many Breeders and we have heard many ideas about this trait. We look forward to hearing YOUR thoughts and in the future we will add anything new that surfaces . That is it from the Pigeon Loft for this Month of April 2016. See you all next Month !



A blue check opal bred by me and a spread opal bred by Ryan Ward.