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PIGEON GENETICS NEWSLETTER

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GENITICKS 101 CONTINUED sent by Greg Volzke

Recessive = reefurs tu da hairline ov most pigon guys.

Homozygous = Dems da fellars dat live in Sand Francisco.

Heterozygous = Deez guys don't like dem udder fellers too good.

Cross-over = Dats wen won ov deez guys changes to dee udder.

Genes = Wat most ov us warz tu da loft each day.

Chromosomes = Dis iz a real shiny breed ov pigon.

Zygote = Speshell breed of goats dat clean up da weeds around da coop.

Sex-linked = We can't disguss dat here.

Modifiers = Dats hoo ya gets wen ya wanz tu add a pen in yr coop.

Alleles = Deez are names ya makes up wen ya don' know watt to call a nu breed.

Dis iz Sven agin und I gots to stop Ollie cuz deez terms reelly don't got much tu doo wit razin burds. Und dats da point we wuz tryin to make. Ya don't needs all dis hi soundin vergabe tu raze no burds. Yust do what Ollie und me duz. We gets sum purdy burds from da sale sekshon at da shows und puts dem togedder and gets all kinds of geniticks wit out no funy wurds dat don't got nuttin to doo wit pignons.

Ya Sven, dats about al de edukashon we wunts tu give da fokes fer now. If ya haz any qwestuns yust rite a ledder tu us und weel try tu anser dem.

In this issue, I plan to deal with the lemon/ecru trait. And to show some pictures of the trait. The pictures at the top show lemon/ecru squabs. Look closely and you can see the tail bar on the fully feathered one.

First, the legitimacy of the genetic name ecru.

It has been argued that the name ecru (ec) is not valid because of lack of data. The data is plentiful in the hands of the researchers.

The legitimacy of using the genetic name ecru (ec) for the trait acquired and propagated by Jack Barkel under the name of "lemon" follows:

JACK BARKEL wrote: 19dec'06: EXCERPT

“Barkel’s lemon is a strain name, and in that strain are Blue Checks, Blue Bars, and Lemons in colour. Charlie [Klipsch] to differentiate between colour variations renamed the Lemon coloured birds Pearl, because he felt they looked like mother of pearl in colour.

Charlie has informed me that he has sold the Barkel Breeding Station U.S.A. and that I am no longer part of it, so this confusion between the strain and colour I hope will fade with time, and we can return to the terminology I used when first propagating this strain.”

EDITOR:

In another communications, Jack B. stated that unless the bird of this color was a Homer and had a tail bar, it was not a lemon. Thus all other breeds of birds with this trait and Homers that are not blue base are not to be called lemon. Ecu (the color of unbleached muslin) is a genetic name coined to encompass all birds of the lemon phenotype whether they are Homers or not and whether they have a tail bar or not.

A lot of pertinent information in emails containing breeding results were traded between Jim Muckerman, Jerry Sternadel and myself. Each of us did our own tests and conferred at intervals.

JIM MUCKERMAN wrote: 24july'04

Here are pics I snapped of the rec. red X lemon babies. Also the rec yellow [hen] and lemon cock are on eggs again, probably to hatch around Aug. 10.



These show the rec red was at least hetero and probably homo for blue/black.

EDITOR:

[In Feb. 2005, Jerry informed us (Jim and I) that Larry Davis called him twice that week and they talked about lemons briefly. He said Larry is convinced ecu is sex-linked. (I already knew the gene was sex-linked and was making matings with reduced and dilute. I had it in my manuscript of my book which was published in Dec. 2005, I entered it in my book in the sex-linked section and stated it appears to be an allele of dilute.)]

EDITOR: 25mar'05 letter to Jerry,

Yes, those matings will tell us in one nest whether they are alleles or not. If you could get a brown male to put on the ecru hen we can get some information that way and also if it proves to be sex-linked then we can see how far from the b locus it is by trying to get a brown base ecru.

JERRY STERNADEL EMAILS to Larry Davis 16mar'06 excerpts:

Larry [Davis], on the data, Jim Muckerman and myself are sending our information to Paul. ...Part of the challenge is letting data out too soon. I am trying to refrain from this. For example, I agree that ecru looks to be sex-linked so far. However we have not had enough controlled matings to 100%.

The tail band thing may be attributed to several things. Poor photo?? I have some very light to darker tail bands. (This may be caused by other factors.) Some tail feathers show no tail band and some show half tail band.

Your ecru to ash yellow mating will add some more data, just as the rest of our results will add data. The more data we have the better prepared we will be on making some solid conclusions. I am a little afraid of sharing too much with very many people until we know something for sure.

We are either going to find ecru is something as simple as a recessive and/or sex linked or something more complex. I know some of us plan to share some ecru with some other genetic folks. I just hope we can agree to have fun and make sure of our conclusions for the purpose of releasing accurate information.

LARRY DAVIS REPLIED: excerpts

I'd be happy to share with Paul everything I have so far. It's not anymore than you've generated but as you say, it all adds up. As far as I can see the mating of brown cock to ecru hen and producing blues takes it out of the realm of being an allele of brown as well as being a phase of brown.

The tail band thing may as you say be slightly different expressions base on thing such as the presence of dirty. Also...could be attributed to difference in intensity due to T-pattern vs bar. All of mine show full tail bar. Also all mine are checks. Ecru (lemon) doesn't seem to be real stable.

As for the photos ...I've seen many pictures of "Lemons" that looked more yellow but we know they're more beige than yellow.

This is probably true that until all the data base and conclusions can be drawn. I'd be happy to keep it this way.

TOM BARNHART WROTE:8dec'05

The more I think about it, the bird in question looks like some of my qualmonds as well. Are you sure you are not dealing with qualmond, because if so, it is so variable as to mess up even the most experienced geneticist's analysis. I have some brown qualmond here that some would misdiagnose as ecru, and some faded dilute brown (sisters to the faced blue in the picture I reference earlier) that are almost dead ringers for ecru. Am of the opinion that we should not be mixing brown with ecru until we have the

genetics of ecru fully worked out, because of the similarity between the ecru phenotype and that of the brown/almond series phenotypes.

LARRY DAVIS REPIED:

While I fully agree Tom, at least two of the brown pairings done by members of the group did prove that the original lemons from Jack's birds are genetically blues. You are totally, in my opinion correct, that the more factors that are introduced to the gene pool will exponentially increase the difficulty in evaluating the results until the new mutation is fully understood.

JERRY STERNADEL:

No qualmond involved guaranteed.
So I assume Larry D. that you are not scrapping your planned mating of an ecru and brown you mentioned just a couple weeks ago.

I believe we have to make controlled test matings with the results documented. How else are we going to learn. I also think questions should be asked. That and testing is the best way to learn. I plan to continue testing against other known factors to try to discover what ecru is and how it reacts with other factors.

LARRY: 9dec'05 EXCERPTS

Actually Jerry, I'm going ahead with the blue lemon X brown mating.

I paired a blue lemon cock to a light blue hen produced sons that were all blue and daughters that were all blue lemons.

I paired a blue cock and a lemon hen and got all blue young, of both sexes. To me this indicated that this new modifier was sex linked. Following these results, I changed my course of action as F1 pairings were no longer needed.

I should interject at this point that Dr. Peters had reported that the pairing of a brown cock X lemon hen had produced two blue sons. This would show that the original lemons from Jack are blues with a modifier and not some phase of brown nor are they a new color that would be an allele of ash red/brown.

My next thought was to ask where it may lie on the sex chromosome. To start this phase, I paired a blue lemon cock X dilute ash red hen. This would result I felt in all sons being some expression of ash red and all daughters being some phase of blue as this is a classic blue X ash red linked pairing. This resulted in two dilute ash red sons and two blue lemon daughters. Thus, I speculated that for the time being that dilute and lemon may be alleles.

EDITOR:

It is well established by Jack Barkel that the lemons are blue/black and he recommended that matings be made using blue bar or check males and lemon hens.

EDITOR: EXCERPTS OF E-MAIL TO LARRY LONG

On the ecru scene: The past season I flighted 2 young ecru hens from an ecru male and a reduced bar hen. One is bar and one is check. I mated a young ecru hen to a cream Saxon White Tails and produced 2 t-pat cream young. An old ecru hen reared a

pale indigo cock last yare from a pale indigo mating. This year she is mated to a classical almond and produced a nice Almond ecru cock and 2 almond hens. It is interesting to see how strong the ecru shows on the hetero almond genome. In another mating of a Fireback Saxon Whitetail from an ecru hen X Fireback Saxon Whitetail produced a nice ecru hen.

EDITOR:

It is interesting that no matter whether the ecru are ash red, blue, indigo, het toy stencil, black, rec. red, are bar, check or t-pat , they all are nearly identical in being a light tan shade or ecru coloration. No other traits except rec. red and white have this overall blanketing of unified color. The one color that ecru does not affect as much (that we know about) is brown. For some unknown reason the brown ecru birds have darker brown markings, Jerry has reared several brown ecru and I have two, a bar and spread..

The following pictures show this evenness of shades.



Ecru bar and ecru check (blue base)



ecru bar (blue base)

Ecru on ash reds and indigo are exactly the same shade except ashes do not have a tail bar.



Ecru black juveniles



juvenile ecru black & black nestmate.

Notice the muffs. All ecru had scant muffs and their nestmates had larger muffs. After 3 seasons of breeding, no ecru had any better muff development.

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Some more ecru, notice lack of muff development



Actual color of ecru bar and spread



color washed out by camera flash



Ecru rec. red



ecru black after adult molt



Ecru squab at top, Brown at bottom



ecru spread Ts1 (notice the bar areas show)

Ecru peeps have pink eyes and are devoid of fuzz or nearly so. After the 1st molt the eyes usually change to orange. Adults sometimes exhibit the head motion of slowly moving the head from side to side like that seen in albino rabbits which indicates that they probably have an eyesight problem.



Jerry's Ecru brown bar



ecru brown (Jerry's)



Ecru brown check(Jerry's)



ecru brown bar



ecru brown

Besides the anomaly with brown, several questions have arisen about the exact placing of the ecru in the genetic scheme of things. There is no doubt that this trait is a sex-linked recessive, but is it an allele of dilute? Most matings indicate that this is right but Jerry Sternadel has reared several birds that indicate this is not exactly the case. At my loft, I had also reared a few birds that puts the allele to dilute in doubt. Two pictures of such birds follow. They are out of two different pair.



What color is this? It came from a mating of a het. black, het ecru male mated to an ecru hen. Siblings on page 826 top.



Another what color is this? This also came blue base parents but looks ash.

Jerry Sternadel reared silvers and ecru out of males that were het ecru. I need to take time to say thanks to Jim Muckerman and to Jerry Sternadel for sharing of information and pictures during and after the period of study that was reported in our paper on ecru. All pictures used in this paper that have blue pegboard or wire were reared and photographed by the editor.



Old classic almond Roller male



lemon/ecru bar Homer



Young het ecru almond male
From parents above.



young brown het ecru almond – almond father
Notice brown tail feather.



Two mature het ecru almond males



molted brown het ecru almond

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Ecru deroy almond



reduced almond ecru in molt



Ecru ash red check



Reduced brown bar milky indigo

As one can see from the above pictures, even though a wide range of colors were used, the ecru gene changed the ground color no matter what was there except for the anomaly involving brown. Also the appearance of several non conforming young makes one think there is more to this trait than is known.

The last picture of the milky indigo was just thrown in to show that there are combinations that can be mistaken for ecru.

An elderly woman walked into the local country church. The friendly usher greeted her at the door. "Where would you like to sit?" he asked politely. "The front row please," she answered. "You really don't want to do that," the usher said, "The pastor is really boring." "Do you happen to know who I am?" the woman inquired. "No," he said. "I'm the pastor's mother," she replied indignantly. "Do you know who I am?" asked the usher. "No," she said. "Good," he answered.

One Sunday morning, a mother went to wake her son and tell him it was time to get ready for church, to which he replied, "I'm not going." "Why not?" she asked. "I'll give you two good reasons," he said. "One, they don't like me, and two, I don't like them." His mother replied, "I'll give YOU two good reasons why YOU SHOULD go to church. (1) You're 59 years old, and (2) you're the pastor!"