

A Faverolles colour jumped into

Implementing a not yet existing new colour in a breed which doesn't historically have the colour in its pallet often requires converting the e-allele (too).

BRAHMA

How could it happen?

The (blue) salmon Faverolles colour in Brahmas, at first emerged probably from a (unintended?) cross to large buff (= gold s+) Cochin. Perhaps buff Cochin x buff columbia Brahma? This has brought the base e-allele eWh (wheaten) into the Brahmas, which was first assigned to large Cochin in the 1850s. Then it switched to silver perhaps via silver pencilled (dark) or silver columbian (light Brahma).

Anyway one time s+ became S and pencilling (Pg) went mostly lost, in some Pg is still present. Whether a cross between Brahma x Faverolles took place is not clear, this would be a bit more complicated regarding skin colour, beard, fifth toe, all dominant traits, although the Faverolles and the Brahma share a common ancestor: the Shanghae. The Shanghae (Chinese chickens from the port of Shanghai) were sorted by colour and comb shape after arrival in America and accordingly called Brahma (putra) and Cochin, plus a handful of other names which have not survived the test of time.

What is changed?

Brahmas are originally eb multiple laced/pencilled (Pg) asiatic partridge where the hen has black pigment on the breast as opposed to wheaten eWh and duckwing e+ where the hens have respectively a gold and salmon coloured breast and the duckwing e+ hens are stippled with black pigment, historically duckwing



Top: blue salmon Brahma hen, left a ditto Faverolles (German), bottom left blue silver wheaten Chabo, bottom also with a bit more red expression.



Photo: Udo Ahrens

e+ has no pencilling (Pg) although it is very well impossible to create.

DIY, how?

If you analyse (blue) salmon colour (hobby name) you'll end up with eWh (wheaten), S (silver), autosomal red and Mh (mahogany), although the latter is not necessary if you can boost autosomal red by selection or by not pushing Mh (mahogany) over the top causing it to become almost dark brown. This selection process is called adjusting the gene expression of respective genes to a desired level.

Description eb

Characteristic of an eb based silver pencilled - also called 'dark' in Brahma - the silver counterpart of partridge - is prominent shaft stripes in hackle and a black (*) pattern or stippling all over the hen's body. Stippling on an eb base happens for example in Satsumadori. This type of stippling is much coarser compared to e+ stippling. The more fine stippling happens in the German cock-breeders (Cochin and Wyandotte bantams), which is a separate colour and called:

From eb to eWh

Converting an eb based hen to eWh will turn black shaft stripes and 'body black' into red instead of black (*) because eWh wheaten LOVES red and doesn't like black pigment, it tries to change it into red. The excess of black pigment (or blue) compared to the determined default amount of black by the eWh wheaten chickencolour-factory will remain black (or blue).

Salmon colour in the Brahma therefore comes down to converting eb to eWh and if breeders succeeded can be seen by the colour of the hens' hackles. The cock's colour follows suit in the wildtype version and also their, once present shaft stripe, will turn into red till a certain level. The wheaten based (blue) salmon colour Brahma cock is wildtype because there are no columbian added or other genes affecting the overall colour distribution of ground colour - silver - and black (or blue) pigment.

Once the e-allele has been converted from eb to eWh, the amount of black (or blue) pigment must then be

**) or other on black based colours like blue, choc, dun, lav, etc.*



Silver pencilled (eb) without Pg (pg+). You see a little bit of autosomal red on the shoulder. Stippling is all over the body, also on the breast. Imagine black becomes red. Satsumadori eb stippling, much more coarse and enough Ar+ too.

Silver is the (white) ground colour, as much black as possible is red and wildtype wheaten determines there is a bit black in the hen's tail.



balanced, so it is no longer visible in hackle as such. Present shaftstripes in the cock are reddish therefore, often in lower hackle a bit.

To prevent hens from being almost white on the body, the amount of autosomal red is also important, next to a certain amount of black which became red. It is hard to tell what is what.

Think of silver wheaten in Cochin bantams where some have only a bit red in hackle. In the Brahma, black pigment originating from the past and still lingering, comes to the rescue. Not too much, just exactly enough to give the hen colour on her back and a bit on the breast too.

The 'salmon' part in salmon colour, involves next to a load of autosomal red also mahogany (if required). The Brahma has enough autosomal red by its history, to colour the back and shoulders of the hen nicely red. It is not as deep dark red as the German Faverolles (Lachshühner). Leading in the aim for the (blue) salmon Brahma



Photo: Udo Ahrens

A blue silver wheaten Chabo (Japanese bantam) cock with red shaft stripes in lower hackle. To show wheaten turns black if it doesn't belong there > red.

Below: this hackle is eWh/eWh and no Pg present in the body plumage.



is the colour of the Faverolles, without the dark spot in the neck of the cock.

In (blue) salmon colour, both sexes have ornamental value. Since there is no need for Pg, the brother will not show ground colour in his breast because there is no longer a certain balance between ground colour (S or s+) and black (*) in the hens. Oh wait a minute, jet black (*) breasts on wheaten based cocks heppy de peppy?

Nope, in wheaten it 'can' happen ground colour or even autosomal red pops up in the black (*) breast of the cock. It happens in a few breeds, so why not in Brahma?

To wrap this talk up and on a side road: the relatively new Brahma colour on eb: BSO, blue silver pencilled (blue dark) with orange shoulder (ornamental value is in the cock) when it is without Pg and instead of eb the basis is eWh, it is a salmon colour when you boost red a bit more.

If you start to loose red pigment in silver wheaten hens, tweak them with wheaten (s+ gold). Use a silver wheaten male over gold wheaten hens and only use the, of course silver, daughters for further breeding. Sons will be split. Those splits are often mistaken for silver wheaten too if hackle is silver and saddle a bit more yellow. Seems not to make much difference in the show cage (if any shows). And you can breed therefore both gold and silver wheaten together, watch red on the silver hens only, they shouldn't become too pale.



Photo: Udo Ahrens



Above a few more detail photos of the still in development (blue) salmon colour which is silver wheaten based on (large) Brahma in the Lowlands (Belgium, Netherlands).

On the left: a blue silver wheaten (with orange shoulder) Chabo and the one next to it without blue, shows a bit ground colour on his chest, not uncommon in Chabo. Did not see this in Faverolles though and they seem to be made of the same ingredients. It depends on the individuals, it has nothing to do with dominant and recessive wheaten. Wheaten is a weird e-allele, you can expect surprises and illogicalities.