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## The art of breeding is the art of seeing, understanding what you see and the theoretical and practical knowledge of how to improve it.



sabel is the hobby name used for gold (s+) made lighter by the lavender gene (lav/lav). Making lighter by lavender is an actual 'dilution' of pigment because there is less of it in the feather compared to no-lav. The lavender gene prevents pigment from flowing nicely from the pigment cell to the keratin of the feather. The feather is made of a protein called keratin, like hair. The lav dilution is unique compared to black and red diluters because it makes both red and black pigment (the only pigments in chickens) visually lighter, the same time. The other diluters cause a chemical colour change in the red or black pigment granules themselves, so the whole pigment granules change colour. With lavender, nothing changes the red and black pigment, it remains as it is, there is just less of it in the feathers. Visually, this gives a lighter black (perlgray or lavender) and lighter red (called isabel). Yes, black diluted by lav is called lavender and red diluted by lav is called isabel. And that is the meaning of hobby name 'isabel'.

## On isabel partridge (eb asiatic partridge based)

Pencilling in isabel partridge Brahma (bantam) is likely to become blurred over time when breeding isabel partridge x isabel partridge. Isabel partridge is less contrasting and therefore less well visible to our eyes compared to isabel double laced or porcelein (lavender mille fleur) for example.

In isabel partridge it will mainly be the broadening and fading of the lacings and more smut between the lacings which will reduce the gold (isabel) part between them. See the photos on the next pages.

In order to maintain a good feather quality and pencilling it is smart to breed back to well pencilled non-lav or split (heterozygous lav/Lav+) partridges. The sex doesn't matter, lavender is autosomal, and recessive. Being recessive, breeding to another split (= carrying a recessive gene) lavender partridge is a way to bring the distinct colours out. Breeding from split lavender partridges you get normal partridge 25%, splits again 50% and isabel partridge 25%. You

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have full control over the sharpness of the pencilling.

You cannot see who is carrying lavender, you can't distinguish the splits from the normal partridges. Any decline of the quality of the pencilling when a cross to isabel partridge is done, has nothing to do with lavender itself, it is just less good pencilling in the lavender bird used.

The dreaded feather shredder coming with lavender, worse on softer feathers, it seems.



Once you have a good pencilled isabel partridge you can breed it back to well pencilled and typed split. You get 50% splits and 50% isabel partridge. The splits you can check for the quality of pencilling.

'Wing patch' is always there to strike. Wing patch is the drying up of a developing pinfeather, into a hard dry stub, which will never grow out. This happens mostly on the shoulders of cocks. In Brahmas however, this has been seen on hens too in the past, so it is not exclusively a cock problem.

The development of 'ribbon feathers' and shredded saddle feathers in hens as well as the tail coverts, and secondary sickles in cocks by the feather shredder which is part of lavender, is prevented by monitoring the feather quality and changing combinations as soon as this starts to occur.

Lavender partridge or isabel partridge is not an easy colour. This can be seen at shows too where judges have to take the whole chicken into account. The differences are huge when you see a row of isabel partridge pullets.

Since good pencilling in such a powdery pastel colour comes down to training your eyes, here a few large photos you can compare to a partridge without lavender.

Isabelising can be done with any pattern, here a Friesian Fowl hen in pencilled, we call this type of pencilling 'pelling' in Dutch.





The guideline for the pencilling or pattern of an isabelised can be found in the full colours. The same problems as with the full colours can be found in the isabelised colours, which, however, are less visible from a distance.

Links to books where all this is discussed or by gene action: https://www.chickencolours.com/ index.php/genetics-of-chickencolours/ and https://www.chickencolours.com/ index.php/genetics-of-chickenextremes-book/ and https://www.chickencolours.com/ index.php/the-brahma-brahmabantams-book/ depending on the subject of the book.

## First build, then paint?

It is sometimes said that you should build first and paint second if you have a project that involves crossing to another breed. The reality is that you have to paint every board you add as well. You select for type and pencilling and colours, all the same time with a forward-looking approach. Say, you want an isabel variety in your breed, then you get lavender from another breed whose shape and ingredients best suit yours. If you know the recipe of your chicken, say gold or red double laced, then you look for another chicken that has the same basic e-allele, here eb. You also look to see if double laced occurs in that breed and if not then its base: multiple laced (silver pencilled or partridge).

If so then you have a good chance that a solid lavender of that breed has Pg on eb with a load of black. You are now well on your way, building and painting while shaping can begin.



Here it is clearly visible that the pencilling of the isabel partridge are more blurred compared to the partridge hen.

A nicely pencilled breast of an isabel partridge, however, a good open breast pencilling does not guarantee the rest of the hen's pencilling in terms of sharpness. Often the shoulders are a bit darker with a wider lacing. The shape of the feather also matters.





Here are three different isabel patridge hen shoulders to compare with the regular partridge. Put the pdf on 2 pages side by side for a better overview.

You can see clearly the differences, the sharpest isabel is to the right of the regular partridge.







A part of the feather isn't hit by lavender, it was not capable to stop the pigment from going into the feather. Lavender not always stopping the pigment is the reason why you see little transverse bars in narrow softer feathers and also other feathers or course. It is in the nature of lavender that pigment blocking is not always uniform. Sometimes one isabel has a bit more 'colour' than another.

