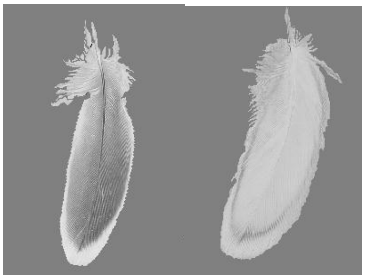
What is a Spangle?

By Rick Millspaugh, U.S.A.

I have heard several misconceptions about the Spangle variety over the years. As popular and prevalent as the Spangle has become very few breeders really understand the variety. Just what is the Spangle mutation and what are the show points?

One of the most common misconceptions about the Spangle variety is that it is a "reversal" of the normal marking pattern. The belief is: what is normally dark is light and what is normally light is dark; this is not true. The pattern is not reversed at all, the basic marking pattern is the same as a normal Budgerigar; but the amount of dark pigment (melanin) is reduced. Most of the feathers are missing pigment in the center of the feather.



Normal Feather Spangle Feather

The mutation is a form of "hypo-melanism" (a reduction in the normal amount of melanin produced), just as, Greywing, Yellow, White, and Clearwing are. The difference is how the dark pigment is reduced. The same mutation has occurred in Cockatiels and is called "Dominant Silver". It has also occurred in domesticated stocks of Pythons and Boas and is referred to as "tiger" (yes, reptiles have very similar Genetics to birds). There are also recessive forms of the mutation in Cockatiels and Milksnakes.

If you compare a wing feather of a Normal Budgerigar to the Corresponding feather of a Spangle, you can see clearly that the pattern is not reversed. The outer edges of the feathers are yellow in green series birds and white in blue series birds in both the Normal and the Spangle. The difference is in the dark area of the feather. In the feather of the Spangle, the outer edge of the dark area is dark like that of the normal but then the amount of Melanin is greatly reduced in the center of the feather. This is why Spangles are considered to have "Bull's-eye" spots. The genetic signals that trigger how much melanin (dark pigment) to produce are inhibited after formation of the feather begins. Only the outer edge of the dark feather area gets dark pigment but the center of the feather gets little or no dark pigment. In the other hypo-melanistic varieties, like Greywing, the amount of melanin is just reduced at a steady rate throughout the feather. If the pattern was reversed, the outer edge of the Spangle feather would be dark not light.

Light Marked Spangle Dark Marked Spangle

The amount of reduction (or the degree the production of melanin is inhibited) is variable between individual birds too. Two different Spangles could have darker or lighter markings than the other. Spangles from the same nest can vary from very lightly marked with no spots to heavily marked with a few dark wing feathers and solid spots.

The reduction in melanin not only occurs in the wing feathers but in all the feathers. Most Spangles have missing or faint markings on the back of the neck and only slightly darker on the back of the head. This is due to reduction in the production of melanin in the center of the feather, just like on the wings. The same thing causes the "Bull's-eye" spots that are the trademark of the Spangle variety.

This reduction in markings on the back of the neck has led to the latest misconception about the variety. I recently heard that a major fault of Spangles is a wash on the back of the neck. Because the pattern is reduced, whatever underlies the pattern is more

visible on the Spangle than its' normal counterparts.

After hearing the belief, that Spangles have a wash on the back of the neck, I walked through the show looking closely at the back of the necks on the normal birds. Every normal bird I looked at had a splash of body color under the markings on the back of their necks. This included those of the person making the statements about a wash on the necks of Spangles. The reduction in markings of the Spangle simply reveals what is already there. In most normals, this splash of color goes unnoticed unless it is so strong that it washes the markings out.

Spangles are also noted as having brighter body color when compared to their normal counterparts. This is also because of the reduction in melanin. The pigment reduction in the body feathers is not enough to wash out the body color but is enough to make the color seem brighter.

I should mention that the double factor form of Spangle inhibits most if not all the melanin production so the bird is all yellow or all white. I am limiting my discussion to the single factor Spangle. I will point out though that two heavily marked Spangles are more likely to produce Double Factor Spangles with some wash of body color, usually around the neck or below the mask. Clear white or yellow Double Factor Spangles are best produced from Spangles that are lacking spots and have limited wing markings.

There are also some misunderstandings concerning the show points of the Spangle.

Opaline Spangle Normal Spangle

The two most common are: they MUST have "bull's-eye" spots and Cinnamon (or Opaline) Spangles should be disqualified.

Spots are a big issue with the Spangle variety. The standard calls for "… large round bull's-eye spots evenly placed…" Bull's-eye spots are not necessary though. Only the complete absence of spots MUST be penalized. Solid spots or misshapen spots should be penalized only to the same degree that any misshapen spot on any variety would be penalized. All of the varieties with spots are supposed to have "… large round spots evenly placed…"; how many Budgerigars on the top bench actually have "round" spots?

Another very common belief is that Cinnamon Spangles especially, should be penalized for lack of markings, spots, etc. There is little justification in the standard to do this just because the Spangle is also a Cinnamon. There are plenty of Cinnamon Spangles with nice spots and wing markings, they are only slightly more difficult to see, but they are there. There is less contrast between the wings and body color of a Cinnamon Spangle, but contrast is not part of the variety standard. By the standard, solid wing markings should be penalized more than light markings. However a Cinnamon Spangle that is lacking spots should be penalized just as any Spangle without spots should be.

We must be careful not to let our opinions replace the written standard for any of the varieties. Proper markings should be a consideration for any of the varieties not just Spangle. Still, a lighter marking due to the presence of Cinnamon is not the same as completely missing or washed out markings. The same argument also holds true for Opaline Spangles. I do have to admit that Opaline plays havoc with the markings of a Spangle but I have seen what can be considered well-marked Opaline Spangles.

Cinnamon Spangle
with good spots

Normal Spangle
Without Spots

Ghalib Al-Nasser, the current Secretary/Treasure for the World Budgerigar Association writes in an article "Judging Spangles":

"With the Opaline Spangle, the black edging on each feather is placed on a body colour ground and symmetrically shaped with an opalescent effect. That is the effect of the Opaline on the Spangle so do not penalise Opaline Spangles because of your preference to Normal Spangles. Try not to penalize Spangles that are well marked Opalines or Cinnamons and treat them as you do with Normal Spangles but of course penalize them if they are badly marked."

Again, the only required penalties for the Spangle variety are a "lack of spots" and completely black (or dark) wing feathers. All other deviations from the written standard should only be penalized to the same degree as they are in other varieties. If Spangles that are also Cinnamon or Opaline conform to the written standard, there is nothing in the standard that warrants their exclusion. The only variety specific traits that MUST be penalized are a lack of spots and completely dark wing feathers. I hope that, at a minimum, I have provided something to consider.

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