

**AUSTRALIAN YELLOWFACE (GOLDENFACE)**  
**An Australian Perspective**

By Ken Yorke (2011 revised)

Given recent renewed interest in the Australian Yellowface variety in Australia, I have been asked to write an article to help those people who are new to this variety. The great problem with this variety and indeed all the various yellowface mutations is that there has been many facts, pseudo-facts, theories and straight out untruths written about these birds. The reality is that there is still much to learn from a scientific/genetic viewpoint about yellowface birds.

This article shall concentrate on the Australian Yellowface but by necessity will make some mention of the other yellowface mutations in order to clarify some misconceptions with all yellowfaces.

**NAMING**

There are three recognised yellowface mutations around the world.

- 1) Australian Yellowface (also called Goldenface, a name created overseas ). I will leave the decision as to what the final standardised name should be up to the hobby participants. For the purposes of this article I will abbreviate it to AYF.
- 2) English Yellowface Mutant 1 (abbreviated to EYF1). In very early literature this used to be called Yellowface Type 1.
- 3) English Yellowface Mutant 2 (abbreviated to EYF2). In very early literature this used to be called Yellowface Type 2.

Note:- There is no such thing as an AYF Type 1 nor an AYF Type 2, such terminology crept into the Australian hobby as a misinterpretation and a confused corruption of the old EYF1 and EYF2 terms which should never be applied to AYF.

**VISUAL DESCRIPTION**

All yellowfaces can be double factor, or combined with blue to become single factor. In each case the double factor has less yellow in both body and wings than the single factor.

1a) AYF double factor has a bright yellow (golden?) face (approaching the face colour of a normal green) The body ideally should be approaching the colour of a normal blue, but spillage of yellow from the mask into the upper chest is common giving shades of turquoise in this area. Wing markings should ideally be white but some yellow spillage is common.

1b) AYF single factor has a bright yellow (golden?) face (approaching the face colour of a normal green). Wing markings usually heavily suffused with yellow. It has a body colour that is turquoise. In many exhibition standards this turquoise colouring is heavily penalised, but the reality is that this IS the true colour the bird should be according to nature. Should exhibition standards be modified to account for this or does this bird become penalised out of existence or made non-standard, either of which will severely reduce the quantity of the so-called "desirable" AYF double factors being bred as well.

2a) EYF1 double factor has a white face and in most cases cannot be visually distinguished from traditional normal blues. (I suspect that some double factors do indeed have a very small retention of very pale yellow on some feathers.)

2b) EYF1 single factor has a pale yellow face. These have been nicknamed as creamface or lemonface. The body colour is very close to normal blue. Wing markings close to white.

3a) EYF2 double factor has a pale to mid yellow face. The body colour is suffused with yellow giving a slight turquoise. Wing markings suffused with pale yellow

3b) EYF2 single factor is similar to EYF2 double factor but slightly more yellow..

It should be remembered that all birds no matter what variety (yellowfaces included) are subject to natural variation in colour and markings. These variations are a part of the toolkit that skilled breeders use to "push" the variety characteristics of their exhibition birds in a particular direction.

All yellowfaces can be thought of as green birds with the yellow pigment partially removed. A green bird with ALL its yellow pigment removed appears blue. Remove some of the yellow pigment and you get turquoise colours. The science behind how this works is still not fully understood as the chemical composition of yellow pigment is still being studied. Likewise there may be several different forms of yellow pigment. Studies on parrots has shown there is both UV and non-UV yellow pigments. Recent studies by Don Burke has also shown similar results in budgerigars and noted differences in the pigments present in AYF and EYF1. Irrespective of the science, the easiest analogy is to think of all yellowfaces as greens with yellow partially removed.

In general, this yellow pigment does not get removed evenly across the whole body. It is removed less from the top of the bird and more from the bottom of the bird. The AYF shows this trait more conspicuously than the EYF1 and EYF2 because the AYF has more (brighter) yellow to start with. It is common therefore for AYF to have a bright yellow face which then spills into the upper chest creating a deep turquoise and then that turquoise becomes progressively bluer becoming near normal blue around the vent. The only difference between AYF double factor and AYF single factor in this respect is that the double factor progresses to blue much quicker (higher up the body) than the single factor. Current exhibition standards do not cover (and in fact discourage) this natural uneven colouring, instead fighting nature to insist on an even shade throughout with a clear line of demarcation at the base of the mask from bright yellow to normal blue. This aspect represents a challenge for the exhibition breeder (OR you change the standard!). The EYF1 achieves the current standard more easily than the AYF.

Many AYF single factors have so much yellow pigment in the body that the turquoise colour approaches normal green. It is this trait that has led to many misidentifications between normal green and AYF single factor. A helpful hint here is that generally (but not necessarily always) the AYF single factor has blue (not turquoise) feathers under the wing whereas a green has green feathers under the wing.

An interesting trait of the AYF is that much of the yellow pigment in the body does not fully appear until after the first moult. That means the body colour of the unbroken cap chicks will be more blue, but after the first moult this changes to turquoise.

## **BREEDING**

The breeding rules of all yellowfaces is still not confirmed completely. Early literature classed all yellowface mutations as completely separate and unrelated and thus tended to call them all genetically dominant over blue and could be “masked” by green. Further research in both budgerigars and other parrots has shown that instead, most (probably all) these mutations as well as blue and green are in fact all genetically related. In other parrot species the equivalent yellowface mutations are called “par-blue” (an abbreviation of “partial blue”) as a group. (Individual mutation names have been called, Turquoise, Aqua, Emerald, Sea Green etc).

*Assumption: All yellowface genes and the green gene and the blue gene are multiples alleles of the same gene.*

This is the current genetic thinking with substantial but not total proof. Based on this assumption, ALL yellowfaces are recessive to green and partially dominant over blue. Furthermore there is probably a dominance hierarchy as follows:-

*Green is dominant over AYF which is partially dominant over EYF2 which is partially dominant over EYF1 which is partially dominant over blue.*

The crude analogy here is that the more yellow pigment the mutation has, the more dominant.

Any bird can have any two of these genes simultaneously. The implications for AYF breeding are as follows:-

2 green genes	= Green
2 blue genes	= Blue

1 green gene 1 AYF gene = Green / AYF  
 2 AYF genes = AYF (double factor)  
 1 AYF gene 1 Blue gene = AYF (single factor)  
 1 AYF gene 1 EYF1 gene = AYFEYF1 (a combination bird)  
 1AYF gene 1 EYF2 gene = AYFEYF2 (a combination bird)

Due to space restrictions, I will not cover every possible genetic combination of all the alleles nor every possible mating as there are dozens. Likewise there is gene linkage with the dark factor because the green, blue and yellowface genes are on the same chromosome as the dark gene. (These are covered in more detail in my “Budgerigar Variety Bible and Avian Genetic Calculator for those who wish to explore the total genetic story in more detail)

You will notice that a green bird cannot be split for both blue and AYF at the same time as that requires three different alleles and a bird can only have a maximum of two alleles. You will also notice the AYFEYF1 bird which is a combination of both AYF and EYF1(with the AYF features being slightly more dominant). I suspect that many of the birds on the exhibition bench today in Australia are this combination and this represents a significant issue of identification by both judges and breeders.

Another interesting feature is that an AYF double factor has NO blue genes. It is technically not a blue series bird. This is a concept that exhibition breeders find hard to grasp as they are brainwashed that all birds are either green series or blue series. In fact the yellowfaces are separate series of their own and not really blue birds at all. This is another reason why it is harder for exhibition yellowfaces to have a true blue colour which is identical to traditional blues. Similarly because they are not true blues then technically speaking the terms Sky Blue, Cobalt and Mauve should not apply to yellowfaces but the use of these terms is historical and is unlikely to change as these colours are deemed to be the ideal body colours to be achieved for yellowfaces. (The technically correct names should be Light AYF, Dark AYF and Double Dark AYF)

The most common matings involving AYF are tabulated below.

<b>X</b>	<b>Green</b>	<b>AYF(df)</b>	<b>AYF(sf)</b>	<b>Green/AYF</b>
<b>AYF(df)</b>	100% Green/AYF	100% AYF(df)		
<b>AYF(sf)</b>	50% Green/Blue 50% Green/AYF	50% AYF(df) 50% AYF(sf)	25% AYF(df) 50% AYF(sf) 25% Blue	
<b>Green/AYF</b>	50% Green/AYF 50% Green	50% Green/AYF 50% AYF(df)	25% Green/AYF 25% AYF(df) 25% Green/Blue 25% AYF(sf)	25% AYF(df) 50% Green/AYF 25% Green
<b>Blue</b>	100% Green/Blue	100% AYF(sf)	50% AYF(sf) 50% Blue	50% Green/Blue 50% AYF(sf)

The crossing of AYF with EYF1 is not covered in any detail here and in theory may have some potential benefit in achieving a desired “generic” yellowface exhibition bird. By creating such a combination bird you no longer have a true AYF nor a true EYF1 and that raises issues about eligibility for AYF and/or EYF1 variety trophies. Not to mention, can such birds be reliably identified, with the potential added need for yellowfaces to come with accredited certificates of authenticity at major shows to avoid misidentification and wrong classing of suspect birds.

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