ARE THERE REALLY TWO MUTATIONS OF YELLOW BOURKES? by Rainer R. Erhart, Ph.D.

In the April-May 1977 issue of the AFA Watchbird, R. Smith gives a very fine account of his successes with the yellow Bourke mutation. One problem with the article, however, is that it doesn't tell us if two different strains of yellow Bourkes really exist, and if so what the differentiating characteristics are in terms of color and genetics.

European breeders are now generally agreed that there are two distinct yellow Bourke mutations. One is referred to as a yellow Bourke and the other a cinnamon. (The existence of a true lutino has also been rumored but has not yet been confirmed or documented in the literature.) The yellow Bourke is definitely a recessive mutation while the cinnamon is sexlinked. When the first birds were imported to the U.S. no one was quite sure what mutations they had acquired and it wasn't long before the two strains were hopelessly mixed together. The results are confusing to say the least and it is no wonder that each breeder of the mutation Bourkes seems to have rather different

results arriving at few clear-cut answers.

The fact is that the two mutations are easy to identify and I would urge that those who breed Bourke mutations take a close look at what they have.

The color of the eyes of both mutations is basically red and hence gives little help in the identification process. Even the feather coloration of the two mutations can be so similar that a clear differentiation is impossible. Only the very light colored yellow Bourkes form an exception — they are predominately of the yellow, recessive type. Some yellow strains in Europe are now already so perfected that the yellow is quite spectacular.

The easiest signs for identification are the toenails and the beak. On a true yellow Bourke mutation the toenails as well as the beak are light flesh colored, while the cinnamons have dark toenails and a somewhat dark beak (though not as dark as the normals). One statement of caution is in order here: don't confuse the toenails with the toes. The toes of both mutations are flesh colored; it's only the nails that give us the real clue.

Breeders who have recognized these differences in their birds have verified the fact that two distinct mutations exist. This discovery has led to better line breeding as well as a better yellow strain among the yellow Bourke. Finally, the separation of the two mutations will also give us more predictable results, which in turn will give more confidence when trading or selling your birds.

To summarize, the yellow recessive Bourke will breed exactly like all other recessive mutations and the guidelines which Mr. Smith has presented in his article are therefore valid. Cinnamons on the other hand are sex-linked and hence breed like white or cinnamon cockatiels and like most other lutino or albino mutations. Remember that in sex-linked mutations you cannot have a split female while in recessive mutations you can. This alone makes it imperative that you know whether you are breeding yellow or cinnamon Bourkes.

Blair's Super Preen for GROWTH • PERFORMANCE	BL'AIR'S Products	container teaspoonful Histidine 4,000 mg 80.0 mg
BEAUTY • BREEDING		Isoleucine 9,300 mg 186.0 mg
Enhances and beautifies plumage grouth		Lysine 10,100 mg 202.0 mg
colors, fertility, general appearance and	DDDD	Methionine 4,400 mg 88.0 mg Phenylalanine 6,900 mg 136.0 mg
performance of your favorite show bird	DDEEN	Proline 13,550 mg 271.0 mg
large or small. Contains all essential amino		Serine 8,000 mg 160.0 mg
All materials used are pure food grade.		Tryptophane 7,700 mg 154.0 mg
-		Tyrosine 8,100 mg 162.0 mg Valine 2,950 mg 59.0 mg
(250 grams) contains 250 days' supply	FINE POWDER	
coo grams, contains 250 days supply.		
GUARANTEED ANALYSIS		DIRECTIONS: One teath of bird's daily food
per one		intake. For example, for a bird weighing 1
teaspoontul per 250 Gram (Approx.		lb., place ¼ teaspoonful (approx. 1½
container 5 Grams)		grams) in the bird's feed. Smaller or larger
Vitamin A 870,000 USP 17,400 USP		will be noticed in 30 days!
Vitamin D 46,900 USP 938 USP Vitamin B-1 440 mg 8.8 mg		
Vitamin 8-2 330 mg 6.6 mg		INGREDIENTS: Vitamin A acetate, vitamin
Vitamin B-12 3.580 mcg 71.6 mcg	A CALL LAND	D-3, thiamine, riboflavin, pyridoxine, vitamin
Vitamin E 2,885 IU 57.7 IU		inositol, calcium pantothenate, calcium lac-
Niacin 2,200 mg 44.0 mg		tate, folic acid, rutin, biotin, calcium phos-
d-pantothenic acid 220 mg 4.4 mg Folic acid 10 mg 0.0 mg		phate, ferrous sulfate, potassium chloride,
Rutin 10 mg 0.2 mg		oxide, manganese gluconate, sodium chlor-
Biotin 240 mcg 4.8 mcg Calcium 8 000 mg 160 0 mg	Contract Will	ide, dessicated liver, hesperidin complex,
Phosphorous 6,000 mg 120.0 mg		yeast, glutamic acid, apple extract, dates,
iodine 0.0088% 40 mg 0.80 mg iron 0.79 % 1.980 mg 39.6 mg	Vallans	frey, dandelion, rolled oats, whole ego sol-
Zinc 0.08 % 190 mg 3.9 mg		ids, milk solids, soya beans, kelp. Product
Manganese 0.07 % 176 mg 3.5 mg	¢750	stable for at least two years if kept in dark,
Magnesium 50 mg 1.0 mg	\$1.50 2H	dry, cool place. No reingeration required.
Capsicum 2,500 mg 50.0 mg	Nutritional Tonic	
Alanine 4,500 mg 90.0 mg	and Feed Mix Concentrate	714 / 547-6462
Aspartic acid 10,350 mg 207.0 mg	for Show Birds I arga and Small	
Cystine 500 mg 10.0 mg Civeina 2.600 mg 52.0 mg	- from Finches to Phasents	RHB Laboratories
Glutamic acid 22,600 mg 452.0 mg		1640 East Edinger Avenue
	Net Wt 250 Grams	Santa Ana, CA 92705