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Head-Leg Feathers in Fancy Pigeons of Bangladesh

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Abstract: Out of 8 types of head-feathers tumbler and fantail showed the highest 4(50%) whereas the second lowest were in lotan and australian red 2(25%). In case of leg-feathers highest percentage (100%) were found in tumbler and pouter and lowest 3(60%) in lotan, fantail and lahore respectively. Head and leg feather looks nice but it was hazardous during breeding and non-breeding time. Leg-feathers are more unnatural than head-feathers. Feather in legs carry huge germs, got wet during taking water, breeding problem, unsafe and walking difficulties. For avoiding such problems trimming of both feathers is must.

Key words: Fancy pigeons; Head-crests; Leg-feathers

I. INTRODUCTION

Pigeons have been selected for a range of plumage size, position and number. These variously important for courtship, mating, pairing, feeding and also for maintaining thermal comfort. Pigeons have patterns of feathering because of the abnormal size or position of the feathers (Baptista et al 2009). A hood or mane of feathers covering the head and eyes and feather in legs and feet which is muff or legging. Fantails have tail feathers higher than normal number of tail feathers. Abnormal feathers can cause difficulties in feeding, drinking, perching, flying and breeding. Some of these breeds are unable to mate or rear young without trimming of those abnormal feathers. These feathers are completed within a few weeks from hatching. Genes are involved in the various feather abnormalities have not been investigated (Wexelsen 1933, Baptista et al 2009). Some breeds have been selected to the people with leg feathers and feet (Darwin 1868). These include the dresden trumpeter, english pouter, english trumpeter, ghent cropper, reverse wing pouter, lahore pigeon, saxon blue spangle, saxon fairy swallow, shack kee of China, and tumbler of Craiora. These feathers interfere with normal perching, walking and act as aerial flight. Genetics of tail feather number and the absence of preen gland in fantails, have suggested that both are due to one gene (Morgan 1918, Johansson 1927). Scientists have decoded the genetic blueprint of the rock pigeon, and how mutations give pigeons traits like head crests. There are about 350 breeds of rock pigeons with different sizes, shapes, colors, beaks, vocalizations and arrangements of feathers. Leg feathers are called muff, slipper and grouse and head crests in shapes known as hood, shell and peak. Noting that more than 80 of the 350 pigeon breeds have head crests which play an attracting role for mating behaviour. The researchers compared the pigeon genome with chickens, turkeys and zebra finches are very similar. The biologists assembled 1.1 billion base pairs of DNA and 17,300 genes in rock pigeon. The researchers first constructed a genome of a male danish tumbler and analyzed partial genomes of two feral pigeons in Utah's Salt Lake Valley and Lake Anna in Virginia. They are genetically very similar to each other and to the racing homer breed. Darwin used this striking example to communicate to the DNA-level changes that are responsible for some of the diversity in 150 years ago (Shapiro 2013). The first pigeon shows as fancy are to be believed in US in 1873 and the leg feathers were well known in trumpeter and swallow breed (McNeillie 1993). In 1941 Levi in his book 'The Pigeon' mentioned various leg-feathers and crests of fancy pigeons.

1.1. Materials and Methods

29 breeds, sub-breed, half-breed and varieties of fancy pigeons were observed in Chittagong, Jessore, Kushtia, Rajshai Bogra, Rangpur, Saidpur and Dinajpur pet shop and their adjacent open markets. All pigeons were in mature for differentiating to their various crests and leg feathers. No crossing schedule was maintained for this purpose. These observations were just on external views. In Bangladesh there are huge tumblers and its ranking on crests and leg-feathers were a lot. Moreover, the variation of head crests was the highest than leg feather (Table 1, 2 and 3; Diagram 1). These feather ornamentation makes a pigeon as a real fancy to the people either it's good or bad. Identification of crests and leg-feathers the book of Levi (1941) and McNeillie (1993) were the basic field guide to

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me. I can't find out the shell crest of fancy pigeons but there were a slight massive broad crest which I have considered common crest (Plate 1).

II. RESULTS

Table1. *Head-feathers in 29 fancy pigeons*

breeds	Wild type	common	peak	broad	hood	rose mark	slight	overlapping	total types
tumbler	√	√	√	×	×	×	×	√	4
lotan	×	√	√	×	×	×	×	×	2
owl	√	×	×	×	×	×	×	×	1
archangel	×	×	×	×	×	×	×	×	1
magpie	√	×	×	×	×	×	×	×	1
lark	√	×	×	×	×	×	×	×	1
nun	×	×	×	×	×	×	×	×	1
helmet	√	×	×	×	×	×	×	×	1
ice	√	×	×	×	×	×	×	×	1
satinette	×	×	√	×	×	×	×	×	1
homer	√	×	×	×	×	×	×	×	1
frillback	×	×	√	×	×	×	×	×	1
capuchie	×	×	×	×	√	×	×	×	1
moorhed	×	×	×	×	√	×	×	×	1
swift	√	×	×	×	×	×	×	×	1
pouter	√	×	×	×	×	×	×	×	1
fantail	√	√	√	×	×	×	√	×	4
mookee	√	√	√	×	×	×	×	×	3
mondaine	×	×	×	√	×	×	×	×	1
swallow	×	√	×	×	×	×	×	×	1
australian red	×	√	×	√	×	×	×	×	2
trumpeter	×	×	×	×	×	√	×	×	1
king	√	×	×	×	×	×	×	×	1
strasser	√	×	×	×	×	×	×	×	1
carrier	√	×	×	×	×	×	×	×	1
scandal on	√	×	×	×	×	×	×	×	1
maltese	√	×	×	×	×	×	×	×	1
lahore	√	×	×	×	×	×	×	×	1
runt	√	×	×	×	×	×	×	×	1

Table2. *Leg-feathers in 29 fancy pigeons*

breeds	non-feather	grouse	slipper	semi-muff	muff	total types
tumbler	√	√	√	√	√	5
lotan	√	√	×	×	√	3
owl	√	×	×	×	×	1
archangel	√	×	×	×	×	1
magpie	√	×	×	×	×	1
lark	√	×	×	×	×	1
nun	√	×	×	×	×	1
helmet	×	×	×	√	×	1
ice	√	×	×	×	×	1
satinette	×	√	×	×	×	1
homer	√	×	×	×	×	1
frillback	×	×	×	√	×	1
capuchine	√	×	×	×	×	1
moorhead	×	×	×	√	×	1

swift	√	×	×	×	×	1
pouter	√	√	√	√	√	5
fantail	√	×	×	√	√	3
mookee	√	×	×	×	×	1
mondaine	√	×	×	×	×	1
swallow	×	×	×	×	√	1
australian red	×	×	×	×	√	1
trumpeter	×	×	×	×	√	1
king	√	×	×	×	×	1
strasser	√	×	×	×	×	1
carrier	√	×	×	×	×	1
scandaroon	√	×	×	×	×	1
maltese	√	×	×	×	×	1
lahore	√	√	×	√	×	3
runt	√	×	×	×	×	1

Table3. *Percentage (highest and lowest) of head-leg feathering in pigeons*

breeds	head-feather (8 types)	leg-feather (5 types)
tumbler	4 (50%)	5 (100%)
pouter	-	5 (100%)
mookee	3 (37.5%)	-
lotan	2 (25%)	3 (60%)
fantail	4 (50%)	3 (60%)
lahore	-	3 (60%)
australian red	2 (25%)	-

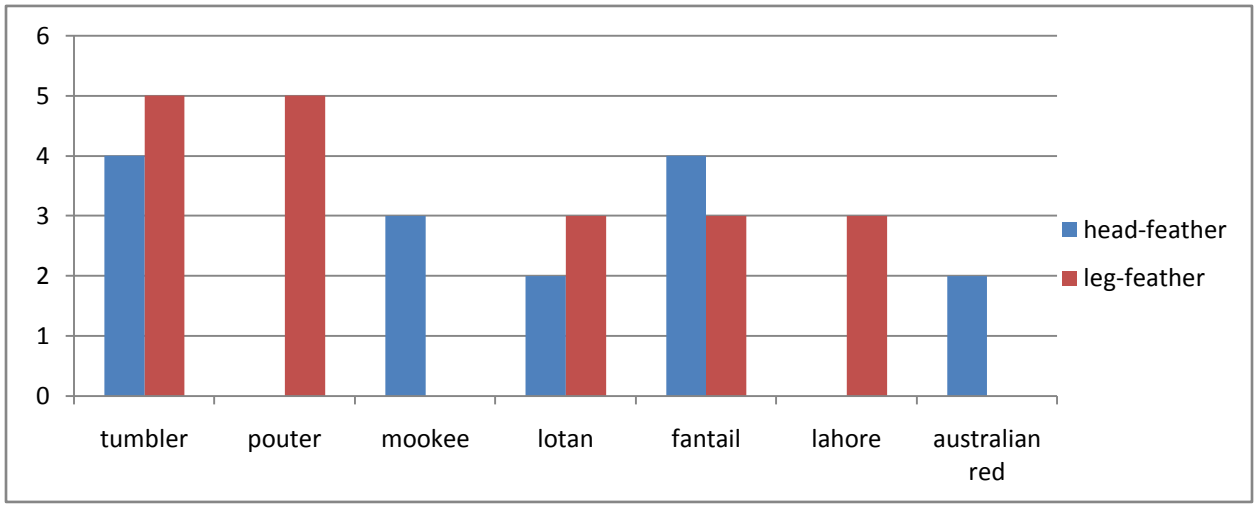

Diagram1. *Total types of head-leg feathers in fancy pigeons*

III. Discussion

Darwin (1868) noted the heavily tarsi in trumpeter breed which look like little wings. Feather tarsi are known as leggings is to be found in lahore, tumbler of Craiora and Shack Kee of China. In fruit pigeons (*Ptilinopus*) are heavily feathered which is closely related to cloven-feathered dove (*Drepanoptila holosericea*) of New Caledonia (Baptista et al 2009). Frontal crests are found in several extant domestic pigeons including nine breeds of trumpeters, the double-crested priest in Tung Koon Park from China. Some extant pigeon breeds have occipital and nape-crest like American crest, Russian highflier and archangel. Breeding studies indicate that the occipital crest is a recessive character in domestic pigeons (Johansson 1927). Some trumpeter breeds have both occipital and frontal crest (Baptista et al 2009). Topknot pigeon (*Lopholaimus antracticus*) of Australian possesses both a frontal and

occipital crest reminiscent of domestic trumpeters (Frith 1982). A conspicuous occipital crest is to be found in the nominate form of the pheasant pigeons (*Otidiphaps nobilis nobilis*) from western New Guinea, whereas the crest of *O. n. cervicalis* of southeastern New Guinea in much shorter (Delacour 1980). Columbiformes order is the successful rank among the avian taxa (Baptista and Trail 1992).

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Plate1. *Common crest in a foster pigeon (indigenous x exotic)*