



Kaunayen chicken – a new indigenous germplasm from Manipur

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Fighting type indigenous chicken population locally known as Kaunayen/ Kwakman/ Koman is found in Imphal valley of Manipur. These birds seem to be energetic, alert and have endurance for a longer duration fight. This type of chicken are reared with lot of enthusiasm by people belonging to different sections of the society. These birds contribute a lot in generating income for the poultry keepers due to its fighting qualities. In addition to this, it also provides nutritional security through eggs and meat, thereby contributing immensely to the economy of the people of this area. These birds are prized more for their 'martial qualities' rather than for meat. India possesses two fighting type chicken breeds, Aseel and Danki, which are registered (NBAGR 2008) and well documented (Terminal Report 1996–99, Vij *et al.* 2005, 2006, NBAGR 2011). However, no information is available on the characteristics of Kaunayen birds and the population is not recognized as a distinct breed. The present investigation was undertaken to study the phenotypic characteristics of Kaunayen chicken of Manipur.

Study was conducted in Thoubal and Imphal West districts of Manipur. Information on flock structure and size, management practices, morphological characters and body weights was recorded from birds maintained by 373 households in the two districts. Performance parameters were recorded by interviewing the farmers. Eggs (12) were collected for studying quality parameters.

Origin, distribution and flock size: Kaunayen chicken are distributed in whole of the Imphal Valley comprising of Thoubal, Imphal West, Imphal East and Bishnupur districts of Manipur but more dense in Thoubal district. Every household especially in the rural areas are keeping these type of chicken. Some breeders believe that in olden times footballers went to Burma, brought back with them jungle cocks with pea shaped combs and crossed them with local chicken (Meitei-yen) of Manipur. The current population of Kaunayen has been developed by backcrossing and selection over centuries and stabilizing the characteristics. Some others consider Kaunayen as the

indigenous chicken of Manipur. The word 'Kaunayen' is a combination of two words - 'Kauna' and 'yen'. In Manipuri language, Kauna means 'kick/fighting' and yen means 'hen/poultry'. Since these are fighting type birds, hence named as 'Kaunayen'. Some other less popular names are Kwakman, Coman, Koman, etc. Flock size varied from 1 to 70 with an average of 5.16 which is less than that reported in Danki (16.7) and Aseel (9.46) breeds (NBAGR 2011). On an average, a flock consisted of 40% chicks, 38% cocks and 22% hens. About 27 percent of poultry keepers reared only cocks or cockerels indicating the importance of cock fighting in this area.

Utility: Kaunayen birds are used mainly for cock fighting. Eggs are mostly set for hatching and consumed only when the mating is by unwanted males. Blades are not used in Kaunayen fighting. Similar practice prevails in Danki tract where cocks are fought in natural heels without slashers (Vij *et al.* 2005). There is a demand for fighter cocks. Breeders rear these birds for commercial purpose and sell chicks/adults to earn money. A pair of chicks (male and female) costs around Rs 500. Price of a month-old cockerel is around Rs 1,000 and 8-month old cock about Rs 2,000–3,000. The price of a fighter cock ranges from 10,000 to 20,000 depending upon fighting qualities. Fighter cocks are also traded with breeders from neighboring countries especially Myanmar.

Management: Kaunayen birds are reared in the backyard system and managed mainly by men (97.5%). Birds are kept in free range system. Some breeders rear the birds especially cocks under intensive system. Housing of birds is both confinement as well as open. Cocks, being more ferocious, are usually caged individually in bamboo cages. These cages are placed in shade to protect the birds from Sun. Hens and chicks mostly remain in the open. The birds are housed during night in single storied enclosures made from wood or bamboo and wired mesh. Scavenging with supplementation of kitchen waste, and local feeds like chamang (rice used for brewing local wine), maize, gram, pea, vegetables, etc. is the most common feeding system but no commercial feed is given. Birds are mostly fed two times a day – morning and evening. Free ranging is practiced in groups to avoid fighting among birds. Fighting birds are fed with dry fish, beef, eggs, banana, almonds, raisins,

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butter, etc. Broodiness is usual. Mostly, broody hens choose their own secured place to sit and eggs are placed under them.

Cocks are trained for fighting at about 8 months of age. One cock is kept in a bamboo cage. Another bamboo cage (a little larger) is placed over it with a little gap between the two. Then the trainee cock is let loose outside the cage. The cock inside the cage gets furious, moves aggressively and provokes the one outside for fighting. The trainee cock moves around the cage and tries to hit the inside cock through the cage thereby sharpening its fighting instinct. After some practice, the cocks are put to fighting each other within the flock. Two training sessions (morning and evening) are conducted every day. Initially, each session is of ½ h duration. Slowly it is increased to 1 h. After about 4 months of training and at about 1 year of age, the cocks are put to competitive fighting.

Special ring type enclosures are made for fighting of birds. Spur is sharpened to enhance fighting capabilities. When not fighting, spurs are taped to prevent injury to other birds. The tape is removed before the actual fight. Cocks are rested for four days before fight. Fight lasts for about 30–40 min during summer and 2 h during winter. After fight, hot water fomentation and pain killers are given to relieve pain. Usually, a cock is used for such fights till the age of 2 or 2 ½ years. Old cocks, which are unable to fight but otherwise are good and healthy, are used for breeding after cutting the spur. Relatively short shank and long thigh, broad and round rib cage, long body, more bony than fatty type, erect standing posture with head high are some of the features believed to deliver a good kick during fight and are considered for selection of cocks for fighting.

Mortality is very low, almost nil. Sometimes, the chicks are crushed by mother. Mosquito bite is a common problem besides cold and cough. Both allopathic and herbal treatments are given for cure. Mosquito repellants and burning of egg trays or dry lemon peel is practiced to prevent from mosquito bite. *Adhatoda vasica* leaves either boiled in water (4–5 drops) or fried and mixed with sugar are given to birds for treatment of respiratory diseases like cough, cold, etc. However, no vaccination is administered against any disease.

Morphology: Kaunayen birds have elongated body with long neck and long legs. The predominant plumage colour is black followed by brown (or red) with patches of white, black, brown or golden feathers on neck, back and wings especially in males. Some grey, white or golden yellow birds are also observed. Pattern is generally patchy in males and solid in females. Cocks generally have shining bluish black feathers on wings, breast, tail and thighs. Hens are generally black, grey, blackish grey or whitish grey with few brown feathers on neck, breast and wings. Comb is red in colour, mainly pea type, and small in hens and medium in cocks. Skin is white or pinkish white. Neck, breast and thighs are generally bare, hard and rose red coloured in fighting cocks. Earlobe is red in colour and ear's hole is covered with small feathers of the same colour as that on the body. Eye ring is

red in colour. Wattles are absent. Beak is generally yellow but grayish black in black coloured birds. Spur is long and sharp in cocks. Shank is yellow, sometimes grayish in colour. Similar morphological features viz. plumage colour and pattern, comb shape and size, skin colour, earlobe colour, shank colour, etc. have been reported in Aseel and Danki (NBAGR 2011).

Performance: Body weight of an adult cock ranged from 2.4 to 3.8 kg with an average of 3.01 ± 0.06 kg and that of an adult hen from 1.0 to 2.9 kg with an average of 2.32 ± 0.09 kg. This is similar to the average weight of cocks (3.1 kg) and hens (2.2 kg) of Danki breed (Vij *et al.* 2006). Kaunayen hens start laying eggs at the age of about 5–7 months. A hen produces about 10–12 eggs in a laying period of 10–15 days. Egg laying is mostly daily in free ranging hens but there is a pause of 1–2 days in caged hens. After laying period, the hen becomes broody. Normally 12–15 eggs are set at one time and the hen incubates the eggs for 20–21 days. Hatchability on total egg basis varies from 65–100 percent with an average of about 80 percent. After hatching, the hen broods the chicks for about 2½ to 3 months. Then the next laying cycle starts. It takes about 4 months to complete one laying cycle and in a year a hen undergoes at the most three laying cycles laying around 35 eggs per year. Performance of Kaunayen birds with respect to egg production is similar to that of Aseel (Terminal Report 1996–99) and Danki (Vij *et al.* 2006) under field conditions.

Egg characteristics: Eggs were medium in size with an average of 42.43 ± 0.07 g which is comparable to that of 41 g in Aseel but slightly less than that of 46 g in Danki (NBAGR 2011). Shell colour was brown. Shell was quite strong having average thickness of 0.36 ± 0.01 mm. Yolk was yellow in colour in about 85 percent and deep yellow in 15 % of eggs. Albumen was thick in more than 85 % of eggs. On an average, an egg was composed off 51 % albumen, 37 % yolk and 12 % shell (including membranes) which is quite similar to egg composition in Danki (Vij *et al.* 2005). Albumen index, yolk index and haugh units were 0.07 ± 0.01 , 0.38 ± 0.01 , 76.88 ± 2.35 respectively. Egg characteristics of Kaunayen are comparable to those reported for Danki and Aseel (NBAGR 2011).

SUMMARY

Kaunayen is an indigenous chicken found in Imphal Valley of Manipur and is reared in the backyard system mainly for cock fighting. These birds have elongated body with long neck and long legs. Broodiness is usual. Plumage colour is black or brown and pattern is generally patchy in males and solid in females. Cocks generally have shining bluish black feathers on wings, breast, tail and thighs. Neck, breast and thighs are generally bare, hard and rose red coloured in fighting cocks. Comb is red in colour and is of pea type. Average body weight of an adult cock was 3.01 ± 0.06 kg and that of an adult hen was 2.32 ± 0.09 kg. A Kaunayen hen lays about 35 eggs/annum. Eggs were medium in size with an average of 42.43 ± 0.07 g. Shell colour was brown. Albumen index, yolk index and haugh units

were 0.07 ± 0.01 , 0.38 ± 0.01 , 76.88 ± 2.35 respectively. Morphologically, Kaunayen look similar to Danki and Aseel breeds but is native to the area (Manipur) which is far apart and geographically isolated from the breeding tract of Danki (Andhra Pradesh) and Aseel (Andhra Pradesh, Orissa and Chhattisgarh). Over the centuries, these have adapted to the local conditions and hence can be classified as a different population of fighter birds.

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