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VANARAJA

A Dual Purpose Bird for Backyard Farming



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VANARAJA

A Dual Purpose Bird for Backyard Farming

The traditional diet of the majority of rural people is moderate in energy and low in protein, because of more use of cereals and restricted use of costly food items like fish, meat and egg are restricted. The vegetable protein sources used by the village households are deficient in critical and essential amino acids like lysine and methionine which in turn can cause protein malnutrition in them. Feeding of diets deficient in quality protein sources like chicken egg, meat and other products of chicken origin exposes them particularly pregnant women, feeding mother and growing children to many common diseases. Backyard poultry farming can perform well in village conditions to improve the nutritional status and economic condition of rural poor. Eggs and birds can be used at home level, as well as it can be sold in premium prices even in urban market where considerable demand for backyard produced egg and birds.

The backyard breed namely Vanaraja developed by Project Directorate of Poultry (PDP), Hyderabad are very well acclimatized to Goan climate with good growth and moderate egg production as per the performance study conducted in our research unit as well as in farmers field.

Because of their attractive feather colour they look like deshi bird but their growth and egg productions are far better than deshi breeds. Particularly these backyard breed is resistant to some common poultry diseases. A desirable character i.e. long shank introduced in this breed helps them for faster movement to escape from predators in the backyard condition, the parents of Vanaraja are selected for higher general immunity.



Vanaraja Birds

The male Vanaraja kept on low density diet attain optimum body weight for table purpose at the age of 10-12 weeks. Female birds lay up to 150 eggs per annum under backyard condition with minimum input cost. In backyard condition protein requirement is met through scavenging

on insects but, chance of protein deficiency is there. Therefore, feeding of birds with different cereals available in rural areas is always beneficial to sustain optimum production. Some of the important features of Vanaraja which have attracted the attention of rural farmers are as described below.

1. Attractive feather colour.
2. Low input cost.
3. High disease resistance
4. Better survival rate.
5. Large egg size with brown colour resembling deshi egg.
6. Deshi hen can be used for brooding of Vanaraja eggs.

FEEDING

The diet of Vanaraja can be formulated using locally available feed ingredients like bajra, ragi, jowar, broken rice or rice kani and cashew apple waste as energy sources, sunflower cake, groundnut cake as protein sources. Under nursery rearing, the chicks require 2400 Kcal ME, 16% protein, 0.77% lysine, 0.36% methionine, 0.35% available phosphorus and 0.7% calcium per Kg diet. Grower feed available commercially can be fed during brooding stage up to 4 weeks of age. The feed supplement required to be given to these birds for optimum production depends on the intensity of vegetation and availability of waste grains, insects, grass seeds etc. in the backyard where they are reared. In free range system in backyard at

the end of the day they may get or may not get sufficient nutrients to fulfill their requirements so, left over food, grain waste or kitchen waste may be offered to them in the evening as supplemental feed.

The nature of the supplemental feed depends upon the purpose for which the birds are reared i.e. either for egg or for meat purpose. If it is for meat purpose then feeding of commercial broiler starter is suggested up to marketing age i.e. 10-12 weeks. If the purpose is for egg production grower mash can be fed up to 4 weeks followed by either complete feed or cereals like bajra, jowar, broken rice with equal parts of rice polish or rice bran, feed with inclusion of agro-wastes i.e. brewery dried grain and cashew apple waste replacing maize upto 20% level can be feed depending upon the forage conditions available in the backyard.

Composition (%) of low cost feed for backyard poultry Vanaraja.

Ingredients	Diet using CAW	Diet using rice kani
Maize powder	40.00	30.00
Cashew apple waste	10.00	--
Groundnut Cake	20.00	24.00
Fish meal	10.00	10.00
Rice kani (broken rice)	--	20.00
Wheat bran	19.00	15.00
Common salt	0.5	0.5
Vitamin and mineral mixture	0.5	0.5

The feeding practices should be regulated to monitor the desired body weight of Vanaraja during laying period because high body weight will reduce the egg production. Sometimes the broken or shellless eggs can be minimized by supplementing the calcium sources (limestone powder, or stone grit) etc. @ 3-4 g/bird/day. Care should be taken to restrict the weight of pullets (female) between 2.2 to 2.5 kg at 6.0 to 6.5 months of age i.e. age at sexual maturity.

Keep the clean drinking water throughout the day.

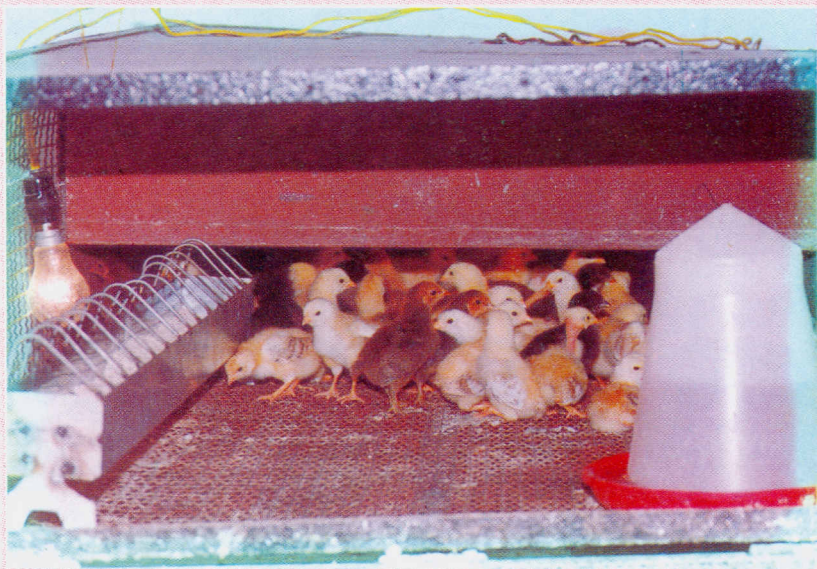
MANAGEMENT

During initial 4 weeks, the Vanaraja chicks need brooding to maintain required body temperature. At day old stage chicks need optimum temperature of 90-95°F at the level of



Vanaraja Birds in Farmer's Backyard

chicks on the floor. The temperature is usually lowered at about 5°F each week until a temperature of 70-75°F. The position and movement of chicks also tell about the right temperature of brooding. If the chicks huddle or crowd together, they are too cold. If they move away from the source of heat or if they pant and hold their wings away from their bodies, they are too warm. Too cool temperature cause diarrhoea and increases susceptibility to infectious diseases. Too high temperature results in reduced appetite and retarded growth. When the temperature is adequate the chicks will be scattered all over the brooder. Hover type electric brooder with different intensities of bulbs are used. Brooder can be made from wooden or steel structures or from locally available cheap materials such as flat bamboo baskets, wooden boxes or any other such structure. These structures should be fitted with electric bulbs as per the



Cage brooding of Vanaraja chicks

heat requirement. The edge of the brooder should be 4-5 inch above the litter to allow the free movement of chicks. Brooding can also be arranged in cages with provision of electric bulbs to maintain required temperature.

During this period they must be vaccinated against marek's disease and ranikhet disease (Table). After 4-6 weeks they can be allowed to backyard for scavenging the free range area. During the initial acclimatization care should be taken to habituate them to reach the nest in the evening for night shelter. Night shelter should have proper ventilation, required light and protection from predators. Since, the chicks move in free range, there is possibility of parasitic infection. Therefore, periodic deworming at 2-3 month interval is required. Under backyard condition adult vanaraja birds should be vaccinated against ranikhet disease at six monthly interval. Since, there is a change of transmission of diseases from native birds to vanaraja, vaccination of vanaraja along with native birds is suggested.

For better egg output and survivability, the weight of Vanaraja should range between 2-3 kg. Excess body weight (> 3 kg) considerably reduces the egg production. The weight of Vanaraja can be regulated to some extent through controlled feeding of cereals.

AVAILABILITY OF CHICKS / BIRDS :

1. The ready to lay pullets can be obtained from the Poultry Unit at ICAR Research Complex for Goa, Ela Old Goa or from the available sources.

2. The fertile eggs can be taken from the above Poultry Unit and hatched under desi hen to make the own stock.
3. The eggs obtained from the backyard Vanaraja unit where Vanaraja male is used for breeding can be hatched under desi hen to make the own stock.

Vaccination Schedule.

Age (days)	Name of the vaccine	Dosage	Route of Administration
1	Marek's Disease	0.20 ml	Subcutaneous
7	Ranikhet Disease (Lasota)	one drop	Eye drop
18	Ranikhet disease (Lasota)	one drop	Eye drop
28	Ranikhet Disease (R2B)	0.50 ml	Subcutaneous

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VANARAJA :
Parent stock at ICAR Research Complex Farm at Old Goa.