

**Species/Breeds/Varieties of poultry present in the Institutional Poultry farm, ICAR Research Complex for NEH Region, Umiam, Meghalaya :**

**a. Chicken:**

- i. **Local germ plasm:** Naked Neck and Normal feathered birds. The former is well known for heat tolerance. It is more productive, Disease resistant in comparison to normal feathered local chicken. They lay about 50-60nos. of egg annually. Average live body weight 1-1.5kg.



Fig. Naked Neck fowl



Fig. Normal feathered fowl

- ii. **Vanaraja:** Dual type bird, specially developed for backyard poultry production by PDP, Hyderabad. They can thrive well under backyard system of management. Their feather colour similar to local indigenous chicken. The taste of their meat and egg is like local chicken and with better quality meat and bigger egg size. Performance is better than the local chicken. They lay about 120-140 nos. of egg annually. Average live body weight at marketing age is 2.5-3.5kg



Fig. Vanaraja birds under free-range system



Fig. Vanaraja birds under deep-litter system

- iii. Gramapriya: Egg type bird specially developed for backyard poultry production by PDP, Hyderabad. They can thrive well under backyard system of management. They lay about 130-150 nos. of egg annually. Average live body weight at marketing age is 1.5-2.5kg.



Fig. Gramapriya birds under free-range system



Fig. Gramapriya birds under deep-litter system

**b. Japanese quail:**

Japanese quail is a diversified poultry species reared for commercial egg and meat production. It is blessed with the unique characteristics of fast growth, early sexual maturity, high rate of egg production, short generation interval and shorter incubation period that makes it suitable for diversified animal agriculture. Quails are hardy in nature, easy to handle and can adapt in variant environmental condition. It has fast growth rate, high rate of laying, requires less housing space and capital investment and almost quite resistant to diseases that generally occurs in chicken. Japanese quails are marketed at 4-5 weeks of age for meat with a body weight of 150-180 g. The females come into lay at about 6-7 weeks of age, reared for breeding up to 6-8 months of age and produce about 90-150 eggs with a weight of about 8-13 g.



Fig. A pair of Japanese quail



Fig. Japanese quail under deep-litter system

**c. Turkey:**

Turkey (*Meleagris Gallopavo*) is a large gallinaceous bird of the family *Meleagridae*. Commercial turkey farming is still at the stage of infancy and need to be popularized among farmers to provide diversified food and employment especially in India. Rearing turkeys can be an excellent family or youth project. They are quite suitable for upliftment of small and marginal farmers as the birds can be easily reared in free range or semi-intensive system with minimal investment for housing, equipment and management. They attain sexual maturity at the age of 200 days. Lay about 100 nos. of egg annually. Average egg weight 70g. Body weight at the age of marketing age ranges from 4.0 to 5.0 Kg.



Fig. A flock of Turkey under deep-litter system

**d. Emu:**

Emu (*Dromaius novaehollandiae*) farming is profitable mainly for its valued meat, fat and skin. Recently, emu farming is gaining popularity among farmers and scientists in India due to their appearance and propose economical value when they are kept in commercial conditions. Emus are generally viewed as essentially solitary or pair living or groups of more than three birds. They are able to run at a speed of 50 kmph and spent most of their time in standing (25-30%). Females can attain weight of 50kg and height of 1.8m compared to 38kg and 1.5m respectively for males. Identification of male and female can be by fiber optic proctoscope and by a reliable to-primer cleaved amplified polymorphism sequence assay. No oil gland is found. Emu has long neck, relatively small naked head. Legs are long covered with scaly

skin adoptable to hardy and dry soil. Body is covered with feathers useful to extreme type of hot and cold climatic conditions. Bird starts laying eggs by two years of age with average egg weight 550g. Egg shell is green and shape is like torpedo or ovoid.



Fig. Emu birds under intensive system