

VILLAGE CHICKEN PRODUCTION IN SRI LANKA

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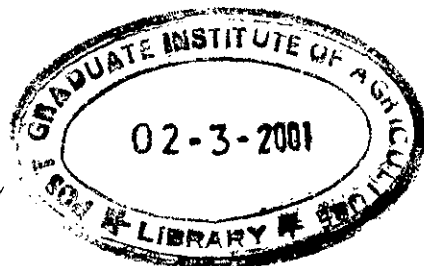
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ABSTRACT

Series of studies on village chicken production were conducted on farm and on station to evaluate their performance levels in three different locations namely, Peradeniya (Location 1), Ibbagamuwa (Location 2) and Galgamuwa (Location 3). A base line survey and flock monitoring information revealed that the growth rate at 8th week was 9.14 ± 2.6 g. The hen is matured at the age of 28.5 ± 2.7 weeks when a hen is 1127 ± 170 g weight. The weight of a cock bird at 28th week was 1587 ± 62 g. On an average, the egg production was 11.25 ± 0.6 g per hen per day. The number of laying days per clutch was 8 ± 3.0 and during that period hen lays 6 ± 4.0 eggs and the total number of clutches per year was 10 ± 2.0 .

The hatchability of eggs was generally high averaging about 80 ± 4 %. The number of eggs kept for hatching was 9 ± 2.0 . Mortality percentage during younger stage was high and during first 84 days it was 48 ± 6.0 %. The nutritional stress and predation were the main causes of death. There was a high correlation between feather colour and chick mortality indicating higher death among lighter feather coloured birds.

The scavenging feed resource base (SFRB) available to village chicken was found to be deficient in crude protein (9.7 - 11.8%). The estimated SFRB for the family flocks in location 2 and 3 was 591 kg dry weight per year and it had contributed 52 kg Crude protein (at 8.8%) although, high variation observed between locations and different seasons. Supplementation of deficient nutrients for chicks in a creep feeder showed a significant increase ($P < 0.05$) in growth rate and survival. However, there was no increase ($P < 0.05$) in subsequent egg production indicating limitations in genetic potential of present village hen.

When the village chicken was crossed with a layer hybrid and compared the performance with village chickens and the same layer hybrid under choice feeding regime, there was an

increase in growth rate and hen day production (53 %). The efficiency in nutrient utilization in village chicken under choice feeding was low compared to scavenging system. The effect of age on production potential of village hen was studied and found that the level of production was not different from first to fourth year of production suggesting no benefit in early culling.