**AZOLLA MEAL AS A PROTEIN SUPPLEMENT ON PRODUCTION PERFORMANCE OF VANARAJA LAYING HENS**

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Higher price and scarcity of conventional feed ingredients has compelled the researchers to find out the possibility of using alternate non competitive feed ingredients in poultry feeding. On such feed resources is Azolla (Azolla pinnata). The study was conducted to evaluate the effect of dietary incorporation of Azolla meal (AZM) on production performance of Vanaraja laying hens (32-44 wks). Ninety six, 32-weeks old Vanaraja laying hens were randomly distributed into four dietary treatment groups of 24 hens each and were reared in deep litter system. Each treatment contained 4 replicates of 6 hens each. Four experimental diets were formulated by incorporating Azolla meal (AZM) at 0, 2.5%, 5% and 10% levels. A measured quantity of feed was offered to each bird everyday during the experimental period. Egg production was recorded daily on individual pen basis and percent hen housed egg production (HHEP) was calculated. All the eggs laid during the last five consecutive days of each 28 days period were collected to measure the egg weight and egg quality. Dietary incorporation of AZM at either 5 or 10% level reduced the body weight of laying hens, however no such effect was noticed on 2.5% inclusion level. The egg production, egg weight, egg mass per day and feed conversion efficiency (g feed/g egg) was not affected due to dietary inclusion of AZM upto 10% in the diet. The egg quality indices like albumen, yolk and egg shell percentage, Haugh unit and shell thickness observed were similar across the different dietary treatment groups. It is concluded that AZM can be incorporated up to 10% in the diet of Vanaraja laying hens without affecting egg production and egg quality.

**Keywords:** Azolla meal, production performance, Vanaraja laying hens.