

The effect of force molting method on post molt performance of laying hens

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Abstract:

An experiment was conducted to investigate the effect of force molting methods on post molt performance of laying hens. To achieve this , 85 Hi - Line egg laying hens , 60 wk of age were exposed to one of the following molt treatments: treatment 1, full feed (FF) non -molted control ; treatment 2, feed withdrawal (FW) conventional molt ; treatment 3, rumen content (RC) molt ; treatment 4, rumen «content and alfalfa (50 : 50) molt. Each treatment was divided into two replicates in which 11 hens in each replicate were housed individually . A CRD design was implemented in the experiment. The results of this experiment indicated that hens subjected to feed withdrawal (FW), rumen content (RC),and rumen content mixed with alfalfa (RCAA) methods showed significantly greater ($P < 0.05$) percentage of body weight loss, (32.66 ,31.17 ,and 34.33 %) compared to those in the FF treatment . Organ weight loss occurred simultaneously with loss in body weight (BW) at the end of the experiments. No significant differences were noticed for hens in-terms of feed intake (FI) or feed conversion ratio (FCR) in all treatments in post molt experimental period that lasts 56 days. FF hens had significantly lower ($P < 0.05$) hen-day egg production when compared with all other treatments after 8 weeks. Also RCAA hens had numerically higher egg production than F W or RC hens. The egg weight was not different across treatments, but egg output was significantly lower for FF than the other treatments. Egg quality, (shell, albumin and yolk weight) were not influenced by the treatment, but numerically was in favor of FF. It is concluded that rumen content and rumen content with alfalfa provide a viable alternative to feed with - drawal for induction of molt and retention of post molt performance.

Key words: Force molting, laying hens, rumen content, alfalfa.

