

Abstract

A 2×4 factorial experiment in randomized complete block design with four replicates and 15 birds per replicate was performed in order to study the effects of replacement of corn with different levels of wheat and enzyme supplementation on performance and gastrointestinal parameters in quail chicks. 480 Japanese quail chicks fed with standard diet for 7 days and after 7 days assigned randomly to eight treatments included 4 levels of wheat (0, 18, 36 and 55%) and 2 enzyme levels (0 and 0/03%). With increasing wheat levels effect of that on daily gain, feed intake and feed conversion significantly was increased ($P < 0/01$). Enzyme supplementation significantly improved average daily gain and feed conversion ratio of chicks ($P < 0/01$). Relative weight of gizzard, liver and length of intestine with increasing wheat levels was increased ($P < 0/05$) but enzyme supplementation significantly decreased the relative weight of gizzard, length of intestine and liver ($P < 0/01$). The relative weight of carcass and ron with increasing wheat levels was increased ($P < 0/05$). Enzyme supplementation significantly increased the relative weight of carcass ($P < 0/01$) and ron ($P < 0/05$). The results of this study showed that the different levels of wheat enzyme supplementation improved performance of quail chicks.

Key words: wheat, Xylanase, Performance, Economic traits, Japanese quail



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**Effect of different levels of wheat grain
with xylanase on performance and
carcass characteristics of Japanese
quail**

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