

ABSTRACT

The experiment was carried out in the Rabbitry Farm of the Department of Animal Production, Faculty of Agriculture, Zagazig University, Zagazig, Egypt, during December, 2000 to January, 2001 (as winter season), and during July to August, 2001 (as summer season). One hundred and forty male New Zealand White rabbits, at 35 day old, with nearly equal live body weight at the beginning of the experiment were randomly allotted to 14 treatment groups, of 10 rabbits each. The seven rabbit groups were reared during the summer season conditions (as the heat stress season), while the other seven groups were reared during the winter season. Within each season, the first group was fed on the control diet (without supplementation), while the second group was fed on the diet supplemented with 100 μg thyroxin /kg diet, the third fed on diets supplemented with 50 μg thyroxin / kg diet, the fourth group fed on diets supplemented with 1.5 g methionine / kg diet, the fifth group fed on diets supplemented with 0.75 g methionine / kg diet, the sixth group fed on diets supplemented with 1.5 g lysine / kg diet, the seventh group fed on diets supplemented with 0.75 g lysine / kg diet. Exposed rabbits to heat stress reduced the growth rate and feed efficiency. Supplemented heat stressed rabbit diets with methionine, lysine and thyroxin improved the rabbit performance.

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