Prevalence of subclinical coccidiosis in broiler-chicken farms in the municipality of Mashhad, Khorasan, Iran

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Abstract

A survey of the prevalence of subclinical coccidiosis in broiler-chickens was conducted in the municipality of Mashhad, Khorasan, Iran. Eighty-four chicken farms were randomly selected; from each farm, five birds per 10 000 were sampled (as was litter). Serial scraping of the intestinal lining was done in chicks at 3rd and >6th week of age.

The farm-level prevalence of subclinical coccidiosis was 38% (95% CI: 28, 48.47%). Uni- and multi-variable associations were tested between each variable. An increased risk of infection in the broiler was associated with the larger farm, with older chickens, and if the chicken farm were sampled in the winter or spring, using coccidiostat in the food was not associated. The peak oocyst score in the litter occurred at >6th week of age. Most farms (97%) had E. acervulina; (41%) had E. maxima and (12%) had E. tenella. © 2000 Elsevier Science B.V. All rights reserved.

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1. Introduction

Coccidiosis is one of the most important disease of poultry worldwide and is characterized by enteritis. It is caused by protozoa of various Eimeria species. All important Eimeria species appear to be distributed throughout the world; E. acervulina and E. maxima are the most prevalent, and E. tenella is the commonest of the highly