Abstract
The objectives of this study were to determine the effect of risk factors on the occurrence of abortion and their impact on select reproductive efficiency parameters in dairy herds in Aguascalientes, Mexico. Three hundred and fifty three (353) serum samples from aborted or non-aborted cows in 23 dairies with records were collected. Herd/animal information was collected through interviews. In addition to herd condition-related factors, the influence of positive serology to bovine infectious rhinotracheitis (IBR), bovine viral diarrhea (BVD), neosporosis (Nc), and brucellosis (Br) was explored. ELISA tests were used for all diseases, with the exception of Br. Serology of the latter was analyzed using the Bengal pink, rivanol, and radial immunodiffusion tests. Results were subjected to chi2 analysis and significantly-different (P<0.10) variables were subjected to logistic regression analysis. Reproductive efficiency-related variables were evaluated using analysis of variance. Negative IBR serology was the only factor increasing the risk of abortion (odds ratio, OR=1.71). Abortion resulted in increased number of services per conception (3.09 ± 0.25 vs 2.36 ± 0.12, P<0.05), days open (149.8 ± 9.7 vs 262.3 ± 18.7, P<0.01), and average number of days in lactation (192.4 ± 9.1 vs 285.9 ± 19.2, P<0.01). Results were not enough to associate herd/animal abortion risk factors, but there is no doubt that abortion has a detrimental effect on herd reproductive efficiency.

Keywords
Dairy cattle, Abortion, Seroprevalence, Risk factors, Abortive diseases.