شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم

HANAA ALY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

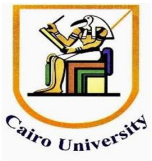
قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

HANAA ALY



Cairo University **Faculty of Veterinary Medicine**

Assessment of Environmental Risk Factors Associated with Emerged Infectious Bronchitis in Poultry Farms in Egypt

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B.V. Sc., Fac. Vet. Med. Cairo Univ.(2000).

For Master Degree in Animal, Poultry and Environment Hygiene

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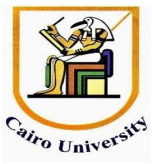

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Abstract: This work was carried out to evaluate the impact of indoor air quality **IAQ** (microclimate Ta.C, RH%, AVm/sec. & ammonia NH3 ppm), and the microbial load (**ML**) on humeral immune response **(HIR)** against infectious bronchitis virus and the vaccination index **(VI)** in cool and warm seasons in broiler farms. A structured questionnaire was used for recoding management, biosecurity indicators and level **(BSL**), vaccination programs and history of respiratory symptoms during cool and warm seasons. Onsite collecting air samples for IAQ (microclimate, NH3) and evaluation bacteria and fungi loads (**BL&FL**), blood samples for measuring HIR. Collected target organs samples for identifying IBV gene S1 using RT-PCR and sequencing .Results reveled, both of Ta.C and AVm/sec. had high significant difference in mean values between cool & warm seasons. In warm season the indoor microclimate showed significant correlations between each other (RH% with both Ta.C and AV m/sec.) Significant correlations were recorded between RH% and AV m/se .on broiler HIR. Cool season showed lower microclimate elements with higher NH3 Vs. warm season. The decreased HIR in cool season was associated with lower elements but increased NH3 Vs. warm season. The lowest CV % was in 20% of farms with the highest HIR. The lowest VI was associated with the highest coefficient of variance (CV %) and the lowest HIR in 33.3% of farms. IAML revealed highly significant mean differences between both seasons .The respiratory symptoms were observed in all farms during cool season .The reduction (Rd. %) for BL was associated the good BSL. The good BSL increased mean of HIR Vs. low BSL. In cool season recorded highly significant differences of IAML between seasons, increased means of BL& FL with respiratory symptoms. Significant differences were between mean of BL with different BSL. The good BSL increased mean of HIR against IBV Vs. low BSL. 16 / 18 (88.88%) of farms achieved more than 60% of biosecurity scoring **.**The bad BSL induced lower VI regardless kind of vaccine. The use of classic –variant vaccine associated with good BSL and the highest VI. Bad BSL with the use of classic-variant decreased the HIR and VI. Use of classic-variant vaccine was significantly increased mean value of HIR .The IBV geneS1 was identified by RT-PCR and associated with lower VI.
Key words: Coefficient of variance % (CV%), Humeral immune response (HIR), indoor air quality (IAQ), indoor air microbial load (IAML) , infectious bursa virus IBV, real-time

DEDICATION

I would like to dedicate this thesis to my family

Father, mother, husband & my children.