College: College of Veterinary **Students Name: Ali Jarad Lfta**
Dep.: Internal and Preventive Medicine **Supervisors Name: Prof. Dr. Kamal M. Alsaad**
Certificate: Master **Specialization: Internal and preventive medicine**

Title of Thesis:

Clinical, Hematological and Diagnostic Studies of *Mycoplasma wenyonii* Infection in Cattle of Basra Governorate

Abstract of Thesis:

The present work was conducted on (225) local cattle breeds of both sexes , and of different ages in Basarh governorate (Basrah –Iraq).Two hundred local cattle breeds were naturally infected with. *Mycoplasm wenyonii* and (25) clinically normal cattle breeds served as controls. According to age, diseased animals were divided into four age groups (50) animals for each. Animals were found clinically infected with *Mycoplasma wenyonii* which diagnosed based on Giemsa stain blood smears and confirmed with PCR test technique. Diseased cattle show signs of partial or complete loss of appetite ,anemia with pale and / or icteric mucous membranes , decrease milk production , rapid and difficult respiration, enlargement of superficial lymph nodes , rough coat , lethargy , weight loss and edema of lower hind limbs, In addition , body temperature ,respiratory rate ,heart rate and capillary refilling time were increased statistically , compared with controls ,Furthermore statistically significant decrease ($P<0.05$) were encountered in ruminal contractions .Results also indicated that TRBCs, Hb, and PCV values of diseased cattle significantly decrease than controls thereby macrocytic hypochromic type of anemia was indicated. Results also showed a significant increase in TLC as a result of significant increase lymphocytes. *Mycoplasma wenyonii* appear coccoid or rod shape, structures, However it might be found individually or in chains on the erythrocyte cell wall, Moreover diagnosis were confirmed by PCR, Since out of (96) blood samples (80) (83.3%) were found

positive. Results also revealed that animals of 2-3 years old were highly infected compared with other age groups. Changes of blood clotting factor indices were also noticed in diseased cattle compared with controls and the results showed significant decrease ($P<0.05$) in the mean values of total thrombocytes count and Fibrinogen time ,whereas significant increase ($P<0.05$) were detected in thrombocytes volume, thrombocytes distribution width, prothrombin time , clotting time, and activated partial thromboplastin time.