

CONTENTS

Title	Page
INTRODUCTION -----	1
REVIEW OF LETERATURE -----	4
MATERIALS AND METHODS -----	50
Materials-----	50
PART I-----	51
Experimental design-----	51
Methods-----	52
Blood chemistry-----	52
Immunological assay-----	69
Hematological assay-----	71
Microbiological assay-----	76
PART II-----	81
Effect of different temperature degrees on the residues of Ciprofloxacin --	81
RESULTS -----	83
DISCUSSION -----	110
CONCLUSION & RECOMMENDATION -----	123
SUMMARY -----	126
REFERENCES -----	129
ARABIC SUMMARY -----	2-1

LIST OF TABLES

Title	Page
Table (1) Determination of AST (U/L) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	84
Table (2) Determination of ALT (U/L) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days). -----	84
Table (3) Determination of Alkaline phosphatase (U/L) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	85
Table (4) Determination of Albumin (mg/dL) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	87
Table (5) Determination of Cholesterol (mg/dL) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	88
Table (6) Determination of Triglycerides (mg/dL) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	88
Table (7) Determination of Urea (mg/dL) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	89
Table (8) Determination of Creatinine (mg/dL) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	89
Table (9) Determination of Uric acid (mg/dL) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	91
Table (10) Determination of Sodium (mEq/L) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	92
Table (11) Determination of Potassium (mEq/L) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	92
Table (12) Determination of Calcium (mg/dL) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	93

Table (13) Determination of Phosphorous (mg/dL) in serum of broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -- -----	93
Table (14) Immunological studies (IgG and IgM) in serum of broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----	95
Table (15) Macrophage activity (Phagocytic % and Phagocytic Index) in serum of broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----	96
Table (16) Hematological criteria (PCV%, RBCs, Hb, MCV, MCH and MCHC) in serum of broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----	98
Table (17) Hematological criteria (PCV%, RBCs, Hb, MCV, MCH and MCHC) in serum of control broiler. -----	98
Table (18) Leucocytes (×10 ³ UL) count in blood of broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----	99
Table (19) Monocytes, Eosinophils and basophils percentage of blood of broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----	100
Table (20) Heterophils percentage in blood of broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----	102
Table (21) Lymphocytes percentage in blood of broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----	103
Table (22) Erythrocyte Sedimentation Rate (ESR) in blood of broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----	104
Table (23) Serum and tissues concentrations of ciprofloxacin (µg/gm) in chickens following oral administration of 10 mg/kg b wt. for 5 successive days.-	106
Table (24) Serum and tissues concentrations of ciprofloxacin (µg/gm) in chickens following IV 10 mg/kg b wt. for 5 successive days. -----	107
Table (25) Effect of freezing storage on the ciprofloxacin residue in chicken tissues and organs (Mean of three samples). -----	108
Table (26) Effect of heat treatment on ciprofloxacin treated chicken -----	109

LIST OF FIGURES

Title	Page
Fig (1) Determination of AST, ALT and Alkaline phosphatase (U/L) in serum of control and broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	85
Fig (2) Determination of Albumin (mg/dL) in serum of control and broiler after oral administration of 10mg/kg ciprofloxacin for five successive days.--	87
Fig. (3) Determination of Cholesterol and Triglycerides (mg/dL) in serum of control and broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	88
Fig. (4) Determination of Urea, Creatinine and Uric acid (mg/dL) in serum of control and broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	91
Fig. (5) Determination of Sodium and Potassium (mEq/L) in serum of control and broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	92
Fig. (6) Determination of Calcium and Phosphorous (mg/dL) in serum of control and broiler after oral administration of 10mg/kg ciprofloxacin for five successive days. -----	93
Fig. (7) Immunological studies (IgG and IgM) in serum of control and broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----	95

Fig. (8) Macrophage activity (Phagocytic % and Phagocytic Index) in serum of control and broiler after oral administration of 10mg/kg body weight ciprofloxacin for five successive days. -----96

Fig. (9) Hematological criteria (PCV%, RBCs, Hb, MCV, MCH and MCHC) in serum of control and broiler after oral administration of 10mg/kg body weight ciprofloxacin for five successive days. -----98

Fig. (10) Leucocytes ($\times 10^3$ UL) count in blood of control and broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----99

Fig. (11) Monocytes, Eosinophils and basophils percentage of blood of control and broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----100

Fig. (12) Heterophils percentage in blood of control and broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----102

Fig. (13) Lymphocytes percentage in blood of control and broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----103

Fig. (14) Erythrocyte Sedimentation Rate (ESR) in blood of control and broiler after oral administration of 10mg/kg b. wt. ciprofloxacin for five successive days. -----104