

TABLE OF CONTENTS

	Page
INTRODUCTION	1
MATERIALS AND METHODS	17
Animals	17
Macrostudy of lymphoid organs	17
Histological preparation	17
Raising of antilymphocyte serum	18
Determination of the percentage of lymphocytes in different lymphoid organs and cell population by ALS	19
Lytic reaction after absorption of ALS with bone marrow, brain, spleen and lymph node cells	22
Antigen and Immunization	22
Collection of complement	23
Preparation of spleen cell suspension	23
Plaque forming cell (PFC) assay	24
Secondary plaque forming cell assay	24
Hemagglutination test	25
Hemagglutination reaction in presence of 2-mercaptoethanol (2-ME)	26
Electrophoretic analysis of the serum and quantitation of different classes of serum proteins	26
Delayed type hypersensitivity test with 2,4-Dinitrofluoro benzene (DNFB)	28

	Page
One way mixed lymphocyte culture (MLC)	28
Statistical calculations	30
RESULTS	31
Study of the lymphoid organs	31
Spleen	31
Lymph node	33
Thymus	35
Susceptibility of the leukocytes from different sources to anti-lymphocyte serum (ALS)	37
Study of antibody mediated primary response	40
Antibody mediated secondary response	45
Analysis of the different classes of serum protein during antibody response	46
Cell mediated immune response	47
DISCUSSION	50
SUMMARY	67
APPENDIX (Plates, Figures and Tables)	72
BIBLIOGRAPHY	105