



**Ministry of Higher Education and
Scientific Research
University of Al-Qadisiyah
College of Veterinary Medicine**



Morphological study of placental Binucleate cells and syncytia in sheep and goats

A research
**Submitted to the Council of the College of Veterinary Medicine/
University of Al-Qadisiya in Partial Fulfillment of the
Requirements for the Degree of PH. of Science in Veterinary
Medicine Sciences / Veterinary Surgery**

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1438 AH

بسم الله الرحمن الرحيم
((وقل رب زدني علماً))
صدق الله العلي العظيم

Certificate of supervisor

I certify that **Mohammad Abbas Lafta** and **Rusul Abbas
abdul Amir** have completed the fulfillment of their graduation
project entitled **Morphological study of placental binucleate
cells and syncytia in sheep and goats** for the year 2016-2017 /
under my construction .

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March 2017

Certificate of instructor

We certify that **Mohammad Abbas Lafta** and **Rusul Abbas abdul Amir** have completed the fulfillment of their graduation project entitled **Morphological study of placental binucleate cells and syncytia in sheep and goats** for the year 2016-2017 / under my construction .

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March 2017

DEDICATION

Dedicate this search to

- My parents .
- All members of my family .
- My friend martyr lieutenant Youssef Al-Zamili and all martyrs of Iraq .
- All my teachers .
- My dear doctor Dr. Abbas Daham
- Anyone who helped me in this research .

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Summary

The present study was conducted to examine the morphological alterations in binucleate cells and syncytia structures of placenta of sheep and goats in throughout different stages of pregnancy. Placentoms were collected from 11 pregnant slaughtered sheep and goat at different gestation periods , from AL.Najaf slaughter house . Tissue specimens for microscopic examination were taken and examined under the microscope. The results revealed that there were morphological alterations in the formation , numbers, and the size of the binucleate cells and syncytia according to stage of gestation. Binucleate cells and syncytia were few in number in late pregnancy. While the syncytia were small in size in both early and late pregnancy.

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Chapter one

Introduction

Chapter two

Literatures review

Chapter three

Materials and methods

Chapter four

Results

Chapter five

Discussion

Chapter six

Conclusions and Recommendations

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