

بسم الله الرحمن الرحيم





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التوثيق الالكتروني والميكروفيلم



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بالرسالة صفحات لم ترد بالأصل



Cairo University
Faculty of Veterinary Medicine
Department of Virology

**STUDY ON GROWTH CURVE OF BOVINE CORONAVIRUS
(BCV) ON MDBK CELL CULTURE**

**Thesis
Presented by**

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وَمَا نُوَفِّقُكَ فِي الْعَمَلِ بِاللَّهِ

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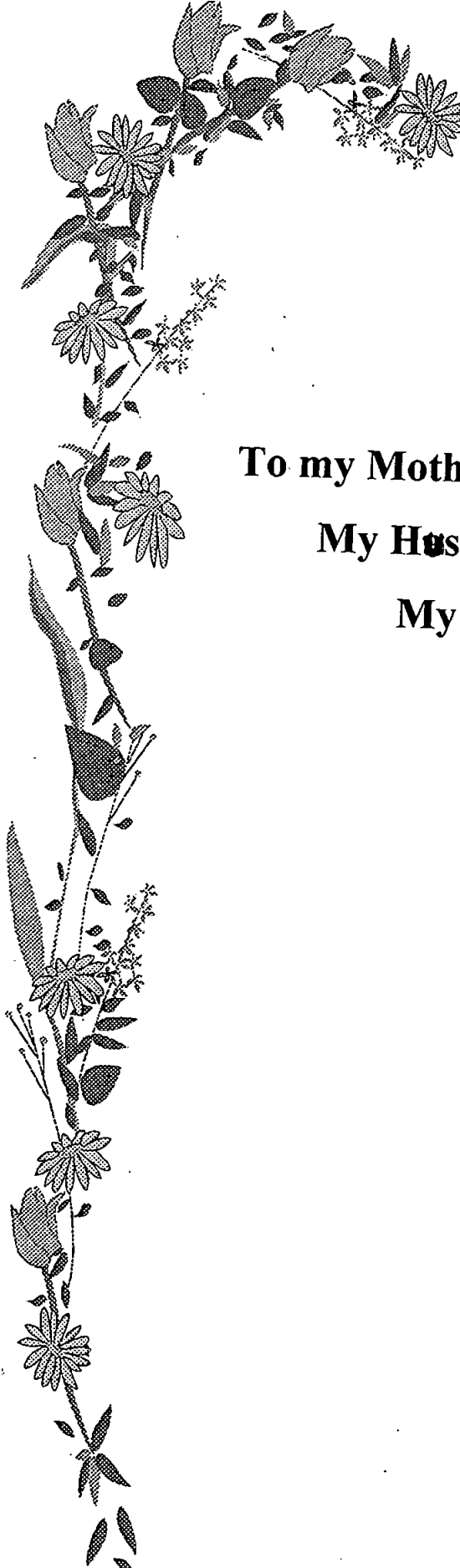
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To my Mother

My Husband

My Brather

Ahmed Said

And My Doughters

Ebtesam

And Shaimaa

With all My love



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LIST OF ABBREVIATION

Ab	Antibody.
Ag	Antigen.
BCV	Bovine Coronavirus.
BECV	Bovine Enteric Coronavirus.
BEK-1	Bovine embryonic kidney cell line.
BEL	Bovine embryonic lung cell line.
BFS	Bovine foetal spleen cells.
BRCV	Bovine respiratory Coronavirus.
BSA	Bovine serum albumin.
BVDV	Bovine viral diarrhea virus.
CCSC	Cell culture staining chamber.
CDCV	Calf diarrhea Coronavirus.
CPE	Cytopathic effect.
CV	Coronavirus.
DIF	Direct Immunofluorescence.
DPI	Day post inoculation.
ELISA	Enzyme linked immunosorbent Assay.
FCS	Foetal calf serum.
gm	Gram.
gp	Glycoprotein.
HA	Haemagglutination.
HCV-OC13	Human Coronavirus OC13.
HE	Haemagglutinin.
HI, HAI	Haemagglutination inhibition.
HRT-18	Human rectal adenocarcinoma cell line.
Hr	Hour.
IEM	Immunoelectron microscope.
IF	Immunofluorescence.
Ig	Immunoglobulin.
I-IF	Indirect Immunofluorescence.
IM	Intra-muscular.
KDa	Kilodalton.
L	Liter.
MAbs	Monoclonal antibodies.
MDBK	Madin Darby bovine kidney cell line.
MDCK	Madin Darby canine kidney.
MEM	Minimal Essential Medium.
Mg Cl₂	Magnesium chloride.
Min.	Minute.

ml	Milliliter.
NaCl	Sodium chloride.
C2 Neu 5, 9A	N-acetyl-9-0-acetyl neuraminic acid.
Nm	Nanometer.
NT	Neutralization test.
PAG-IEM	Protein A-gold immunoelectron microscope.
PCK	Primary calf kidney.
PBS	Phosphate buffer saline.
pH	Hydrogen ion concentration.
PK-15	Porcine kidney cell line.
RBCs	Red blood corpuscles.
RNA	Ribonucleic acid.
rpm	Revolution per minute.
RT	Room temperature.
RV	Rotavirus.
TC	Tissue culture.
TCID50	Tissue culture infective dose-50.
ug	Microgram.
ul	Microliter.
Vero	African green monkey cell line.

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