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## ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in the thesis:

ABEL	=	animal biotechnology-embryo laboratory
AI	=	artificial insemination
AV	=	artificial vagina
cAMP	=	cyclic adenosine 5-monophosphate
CG	=	cortical granules
cu	=	cumulus cells
co	=	corona cells
cy	=	cytoplasm
COC	=	cumulus-oocyte complex
CFO	=	cumulus-free oocyte
e.g.	=	exempli gratia (for example)
EM	=	electron microscope
ER	=	endoplasmic reticulum
ET	=	embryo transfer
FCS	=	foetal calf serum
FSH	=	follicle stimulating hormone
g	=	gram
GVBD	=	germinal vesicle breakdown
hr	=	hour
i.e.	=	id est (that is)
IVM	=	in vitro maturation
IVF	=	in vitro fertilization

IVC	=	in vitro culture
IVF-ET	=	in vitro fertilization and embryo transfer
IVMFC	=	in vitro maturation, fertilization and culture
J	=	junction
L	=	lipid bodies
LH	=	luteinizing hormone
LS	=	longitudinal section
M	=	Mole
MI	=	metaphase I
MII	=	metaphase II
mg	=	milligram
m	=	minutes
mi	=	mitochondria
ml	=	millilitre
mM	=	millimol
mm	=	millimetre
mv	=	microvilli
nm	=	nanometer
$\mu$ m	=	micrometer
$\mu$ l	=	microlitre
OL	=	oolemma
N	=	nucleus
Osm	=	osmol
P	=	cumulus cell processes
Pb1	=	polar body 1
Pb2	=	polar body 2

ps	=	perivitelline space
RNA	=	ribonucleic acid
TCM 199	=	tissue culture medium 199
TEM	=	transmission electron microscopy
TS	=	transverse section
V	=	vesicle
v/v	=	volume/volume
w/v	=	weight/volume
zp	=	zona pellucida
°C	=	degree celcius

## LIST OF PRESENTATIONS AND PUBLICATIONS

Parts of the thesis have been presented and published or to be published as follows:

1. Yusoff, M., Rajikin, M.H., Ragunathan, T. and Abdullah, R.B. (1993). Fine structure of goat oocytes matured in vitro. *3rd. Sci. Conf. Electr. Micr. Soc.*, Malaysia, Penang, Nov. pp. **1-4**.
2. Rajikin, M.H., Yusoff, M. and Abdullah, R.B. (1994). The effects of freezing on the ultrastructure of goat sperm. *3rd. Symp. Appl. Biol.*, Melaka, pp. **19-21**.
3. Rajikin, M.H., Yusoff, M. and Abdullah, R.B. (1994). Ultrastructural studies of developing goat oocytes in vitro. *Theriogenology* **42: 1003-1016**.
4. Rajikin, M.H., Embong, W.K.E. and Abdullah, R.B. (1995). Chromosomal studies of developing goat oocytes in vitro. *Anim. Reprod. Sci.* (submitted).

5. Rajikin, M.H. and Abdullah, R.B. (1995). In vitro studies of maturation and fertilization of oocytes and subsequent culture of embryos in vitro. *Theriogenology* (submitted).

(See Appendix 3)