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EFFECTS OF MATERNAL BROMOCRIPTINE AND MELATONIN TREATMENTS ON FETAL DEVELOPMENT

A thesis presented in partial fulfilment of the requirements for the degree of Master of Agricultural Science in Animal Science at Massey University Palmerston North New Zealand

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LIST OF ABBREVIATION

ACTH  adenocorticotropic hormone
BN    binucleate
°C    degree Celsius
CIDR  controlled internal drug releaser
CRL   crown rump length
cm    centimetre
d     day
DNA   deoxyribonucleic acid
EGF   epidermal growth factor
g     gram
GH    growth hormone
bGH   bovine growth hormone
hGH   human growth hormone
GH-V  placental growth hormone
GnRH  gonadotrophin releasing hormone
h     hour
IU    international units
IGF   insulin-like growth factor
IGF-I  insulin-like growth factor-1
IGF-II insulin-like growth factor-2
IGFs  insulin-like growth factors
IGFBPs insulin-like growth factor-binding proteins
kg    kilogram
LWT   live weight
MFD   mean fibre diameter
mg    milligram
ml    millilitre
mm    millimetre
μm    micrometre
mRNA  messenger ribonucleic acid
NaCl  sodium chloride
ng    nanogram
NZ    New Zealand
O₂    Oxygen
PGE   prostaglandin E
PIF   prolactin inhibitory factor
PL    placental lactogen
hPL   human placental lactogen
oPL   ovine placental lactogen
PMSG  pregnant mare serum gonadotropin
PRF   prolactin releasing factor
PRL   prolactin
oPRL  ovine prolactin
PRP   prolactin-related protein
S/E     starvation/exposure
SBCRU   sheep and beef cattle research unit
T₃      triiodothyronine
T₄      thyroxine
TSH     thyroid stimulating hormone
vs      versus

Statistical:

GLM     general linear model
LSM     leastsquare mean
SAS     statistical analysis system
s.e.m.   standard error of the mean
n       number of experimental units
*       P<0.05
**      P<0.01
***     P<0.001