

## Table of contents

<b>PART I - SHEEP INSEMINATION</b> .....	7
ESTRUS INDUCTION .....	8
ESTRUS SYNCHRONIZATION .....	9
BREED .....	10
REPRODUCTIVE FAILURE OF THE RAM .....	11
REPRODUCTIVE FAILURE OF THE EWE.....	12
COLLECTION OF SEMEN.....	15
EVALUATION OF SEMEN .....	16
EXTENSION OF SEMEN .....	16
STORAGE OF SEMEN .....	16
HISTORY OF ARTIFICIAL INSEMINATION OVER THE LAST 50 YEARS .....	17
ADVANTAGES OF AI.....	19
DISADVANTAGES OF AI .....	20
THE MAIN FACTORS AFFECTING AI .....	20
SEMEN COLLECTION AND PREPARATION.....	22
INSEMINATION TECHNIQUES .....	23
Vaginal:.....	23
Cervical: .....	23
Transcervical: .....	23
Intrauterine: .....	24
DETECTION OF EWES ON HEAT AND THE NUMBER ON INSEMINATIONS.....	24
THE COSTS OF ARTIFICIAL INSEMINATION IN HUNGARY.....	26
THE FARMS AND THE BREEDS KEPT .....	27
PROCESSING OF DATA.....	30
THE TOOLS OF ARTIFICIAL INSEMINATION .....	30
THE COST OF ARTIFICIAL INSEMINATION .....	44
SEMEN COLLECTION.....	46
SEMEN PROCESSING.....	46
FREEZING PROCEDURE .....	46
Methods: .....	47
Results and Conclusions: .....	47
INSEMINATION PROCEDURE.....	47
SEMEN EVALUATION USING DIFFERENTIAL STAINING.....	47

Methods: .....	48
Results and Conclusions: .....	48
RELATIONSHIP BETWEEN NON-RETURN RATES AND RESULTS FROM DIFFERENTIAL STAINING .....	48
Methods: .....	49
Results and Conclusions: .....	49
USE OF IVF FOR SEMEN EVALUATION .....	49
Methods: .....	49
Results and Conclusions: .....	49
<i>IN-VIVO</i> VALIDATION OF IVF TECHNIQUE FOR SEMEN EVALUATION .....	50
Methods: .....	50
SEMINAL PLASMA AS AN ADDITIVE TO FREEZING DILUENT.....	51
Methods: .....	51
Results and Conclusions: .....	51
THE EFFECT OF SEMEN SOURCE, SYNCHRONISATION AND INSEMINATOR ON CONCEPTION RATE.....	51
Methods: .....	52
Results and Conclusions: .....	52
EFFECT OF EWE BREED ON PREGNANCY RATE.....	52
Methods: .....	53
Results and Conclusions: .....	53
BREED DIFFERENCES IN TIMING OF OVULATION.....	53
Methods: .....	54
Results and Conclusions: .....	54
EFFECT OF INSEMINATION TIME ON CONCEPTION RATE.....	54
Methods: .....	54
Results and Conclusions: .....	55
THE CERVIX AND EFFICACY OF AI.....	55
Methods: .....	55
Results and Conclusions: .....	56
PRACTICAL IMPLICATIONS .....	56
EWE BREED EFFECT .....	56
VARIATION AMONG INDIVIDUAL RAMS .....	57
Methods: .....	57
Results and Conclusions: .....	57
CONCLUSIONS OF IRISH AND NORWEGIAN EXPERIENCES WITH SHEEP INSEMINATION.....	59

<b>PART 2 – GOAT INSEMINATION .....</b>	<b>61</b>
BASIC GOAT REPRODUCTION FACTS .....	61
Puberty and estrus in goat .....	61
Breeding soundness examination in goats .....	62
Breeding in goats .....	63
Induction of estrus in goats .....	64
Pregnancy detection in goats .....	65
Pregnancy of goat .....	66
Parturition in goats .....	67
EMBRYO-TRANSFER IN FARM ANIMALS GENERALLY .....	68
Embryo-transfer in sheep and goats .....	69
After this, you can answer, if AI is for you? .....	69
AI has some key advantages over natural breeding .....	70
Reproductive Organs and Functions .....	71
Purchase and Preparation of Semen .....	72
Thawing Procedures .....	76
INSEMINATING PROCEDURES .....	77
Materials needed for artificial insemination: .....	77
Preparing Ampules: .....	78
Preparing Straws: .....	78
ESTRUS IN GOATS IS POSSIBLE SYNCHRONIZED .....	80
REFERENCES .....	84
<b>PICTURES .....</b>	<b>85</b>