

CHAPTER 1	11
General introduction	11
1.1. Importance of sperm storage study	13
1.2. Spermatozoa indexes during <i>in vivo</i> and <i>in vitro</i> storage	14
1.2.1. Spermatozoa motility	15
1.2.2. Spermatozoa concentration	15
1.2.3. Generation of reactive oxygen species	16
1.2.4. Antioxidant action	16
1.2.5. Damage to DNA	17
1.3. Seminal plasma characteristics	17
1.3.1. Role of seminal plasma during sperm storage	17
1.3.2. Seminal plasma osmolality	18
1.3.3. Proteins composition of seminal plasma	18
CHAPTER 2	27
Evaluation of spermiation indices with multiple sperm collections in endangered sterlet (<i>Acipenser ruthenus</i>)	29
CHAPTER 3	35
Comparison of protein fractions in seminal plasma from multiple sperm collections in sterlet (<i>Acipenser ruthenus</i>)	37
CHAPTER 4	41
Spermatozoa motility and variation in the seminal plasma proteome of Eurasian perch (<i>Perca fluviatilis</i>) during the reproductive season	43
CHAPTER 5	53
Effect of short-term storage on quality parameters, DNA integrity, and oxidative stress in Russian (<i>Acipenser gueldenstaedtii</i>) and Siberian (<i>Acipenser baerii</i>) sturgeon sperm	55
CHAPTER 6	65
Spermatozoa motility, cryoresistance, and fertilizing ability in sterlet <i>Acipenser ruthenus</i> during sequential stripping	67
CHAPTER 7	75
General Discussion	77
English Summary	86
Czech Summary	88
Acknowledgements	90
List of Publications	92
Training and Supervision Plan During Study	94
<i>Curriculum Vitae</i>	96