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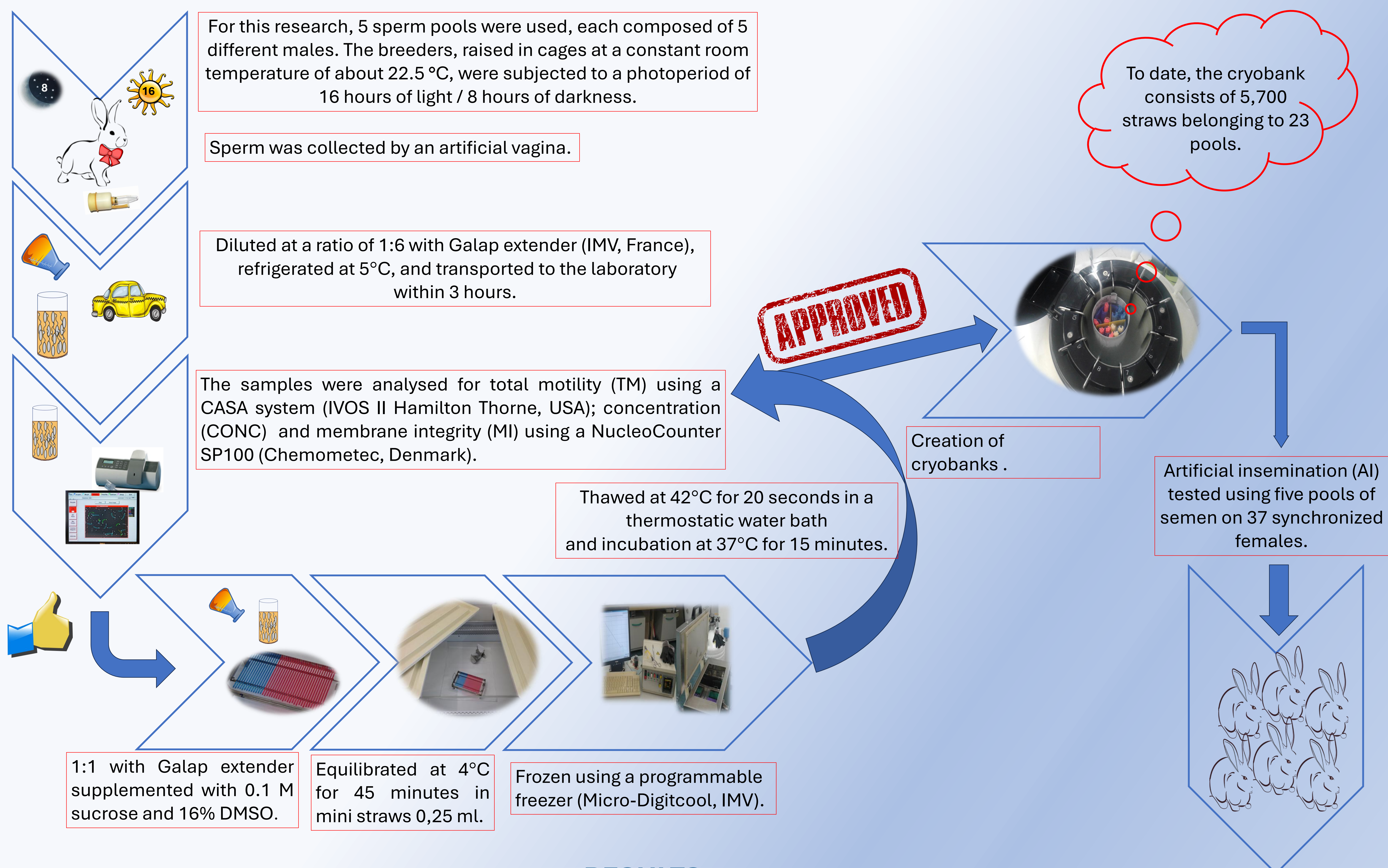
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INTRODUCTION

Thanks to their high feed conversion rate, rabbits represent an important species for meeting the nutritional needs of the growing global population. This has led to a demand for breeding programs focused on improving genetic selection, primarily for prolificacy and meat quality. To this end, the development of cryopreservation protocols for semen from selected males could facilitate the introduction of new genetics into farms and the creation of cryobanks for genetic preservation.

The objectives of this study included: the development of a cryopreservation protocol, using a programmable freezer, starting from refrigerated semen and the creation of a cryobank aimed at preserving the genetics of interest.

MATERIALS and METHODS



RESULTS

The protocol was artificial insemination (AI) tested using five pools of semen with an average number of viable sperm per straw (NSV), calculated by CONC and the lowest value between TM and MI, of 2.8×10^6 per straw (min 0.63, max 9.07) on 37 synchronized females. Pregnancy diagnosis revealed that 33 females (89%) were pregnant, 32 of which completed gestation. A total of 329 offspring were born, of which 318 were live births (an average of 9.93 live births per doe).

DISCUSSION and CONCLUSION

The results show the feasibility of using refrigerated semen for the subsequent cryopreservation thus expanding the applicability of cryobanking, not only for biodiversity preservation, but also for breeding programs based on artificial insemination that currently use only fresh or refrigerated semen.

Furthermore, the obtained findings lay the foundation for further challenges and insights for the development of increasingly efficient cryopreservation protocols.