

Management of reproduction of Red Deer under conditions of intensive farming.

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Red Deer farming



- TOP industry in many countries of the World
 - Meat, Velvet antler, Bones, Furs, Glands
- Level of intensity is based by reproduction and reproduction cycle
- Farm vs. Game Park
- Marketing

The Aim



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- Analysis of reproduction cycle
 - Use of reproduction biotechnology
 - Application of results

Material and Methods

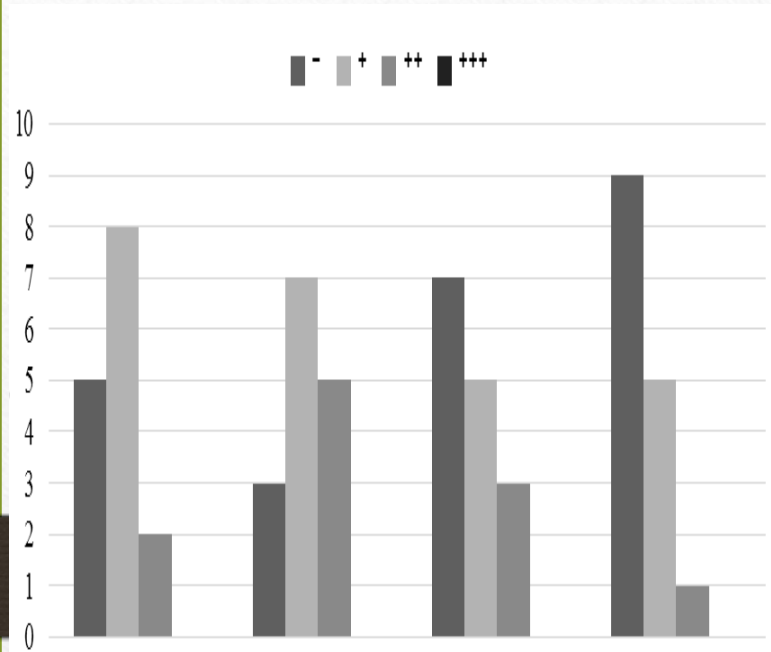


- 60 Red Deer females; 3 males
 - Farm of Xcell Slovakia Breeding Services SK - ISJ 001
- Age 2 – 5 years (after first calving)
- Individual identification
- Standard farm management protocol

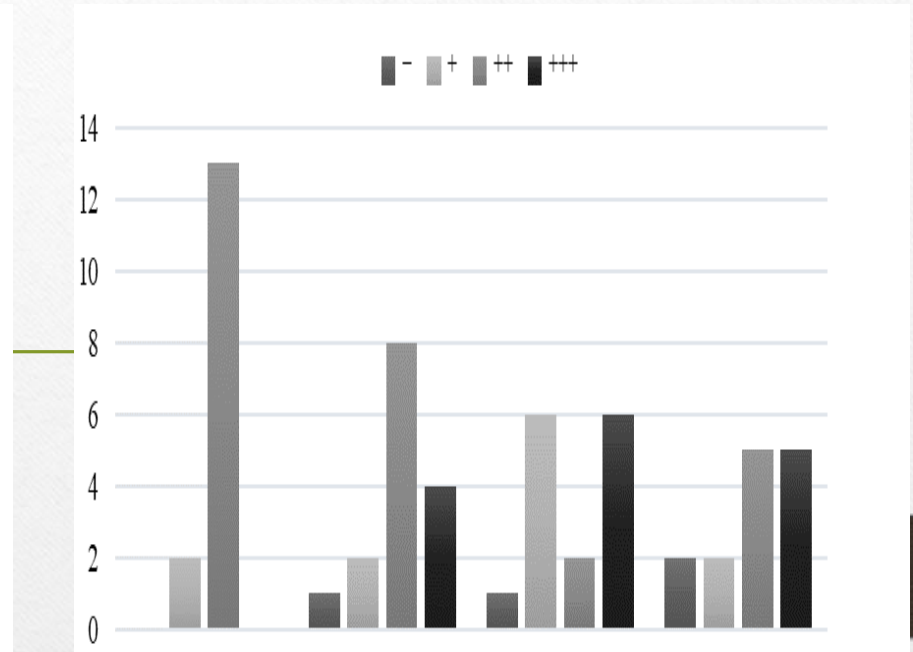
Results



- Hormonal preparation of females
 - Intravaginal progesterone tampon with application of PMSG
 - CIDR – 14 days
 - Optimisation of level of gonadotropins FSH and LH to ensure efficiency of artificial insemination
 - Two groups (30): 100 IU vs. 200 IU PMSG intramuscularly



Ovaries reaction – presence of CL Patency of cervix – openness Hyperaemia of vulva Vulva effluence (viscosity/volume)



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Signs of ovulation	Symbol			
	-	+	++	+++
Ovaries reaction – presence of CL	no reaction, no CL	low follicular activity, small CL	identified CL	
Patency of cervix – openness	non-patent, closed cervix	hardly patent cervix	patent cervix – open cervix	easy patent – open cervix
Hyperaemia of vulva	no reaction, without hyperaemia	low hyperaemia	mean heperaemia	high hyperaemia
Vulva effluence (viscosity/volume)	no reaction, not effluent	low efflux	mean efflux clear a medium viscosity	massive efflux and very viscose

Results Group I.

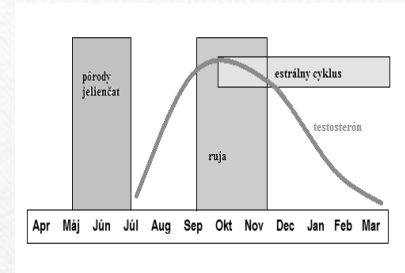
Signs of ovulation	-	+	++	+++
Ovaries reaction – presence of CL	33	53	66	
Patency of cervix – openness	20	47	33	
Hyperaemia of vulva	47	33	20	
Vulva effluence (viscosity/volume)	60	33	6	

Results Group II.

Signs of ovulation	-	+	++	+++
Ovaries reaction – presence of CL		13	87	
Patency of cervix – openness	6	13	33	47
Hyperaemia of vulva	6	40	13	40
Vulva effluence (viscosity/volume)	13	13	33	41

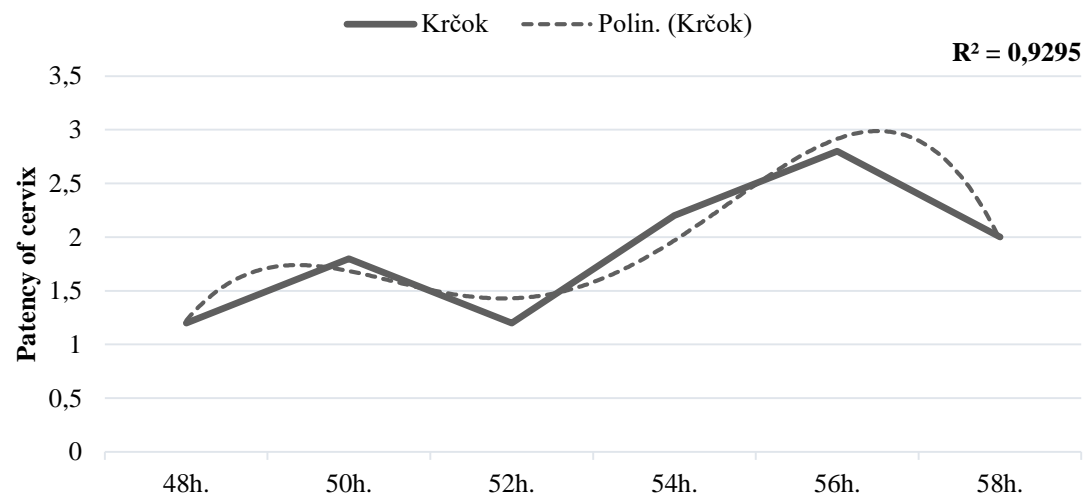
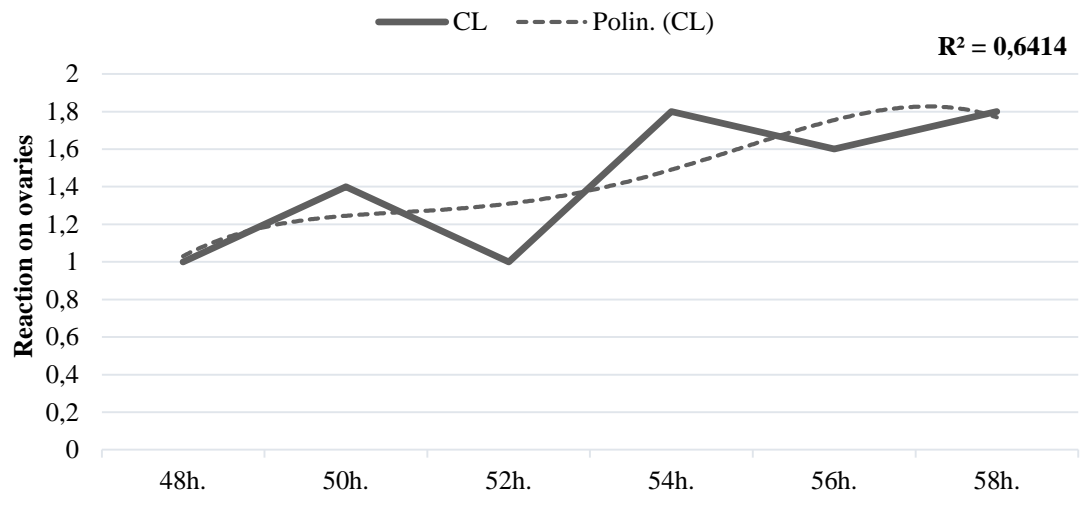


Results

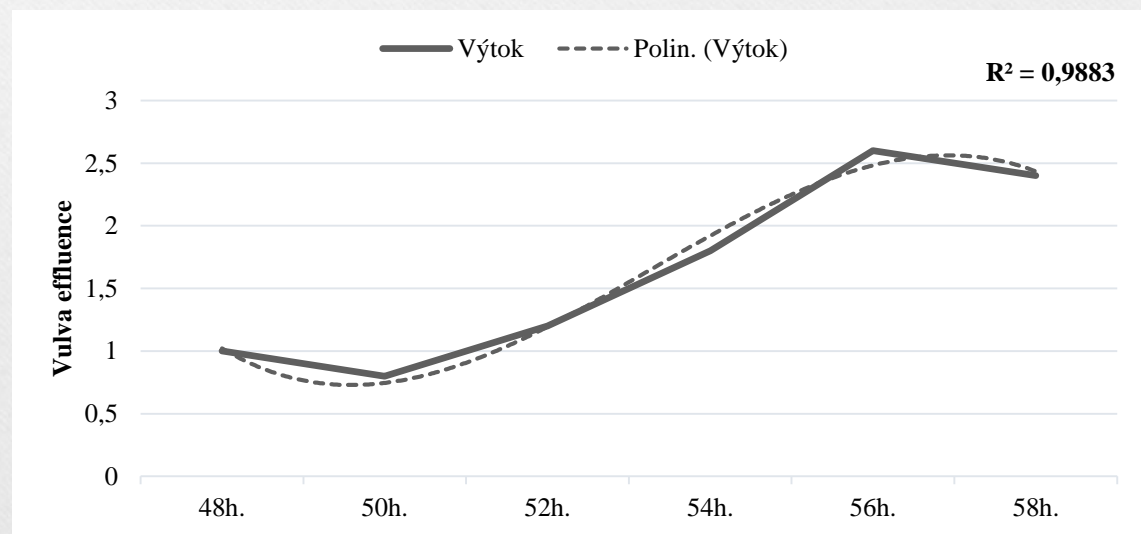
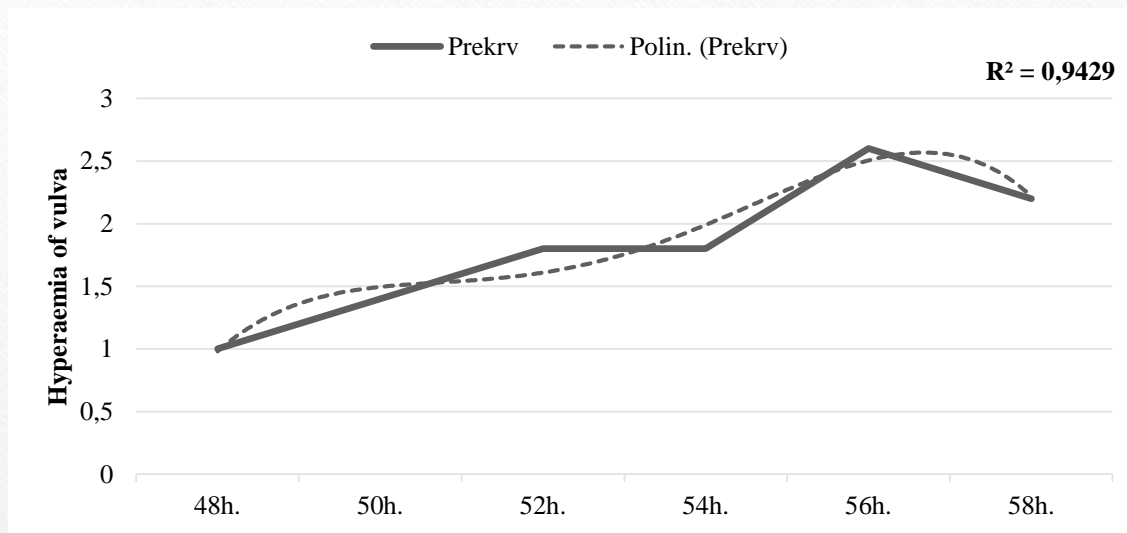


- Exact time of ovulation
 - After synchronisation 48 – 58 hours
 - Visually, palpation
 - Two groups according to PMSG

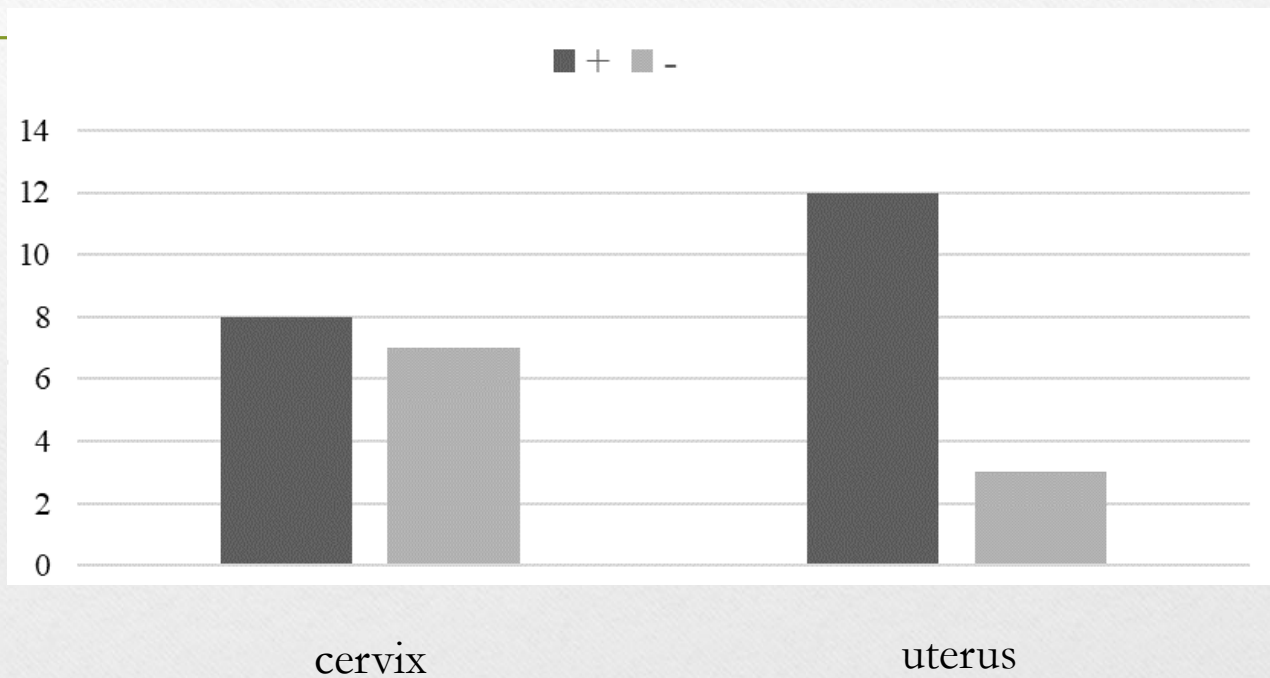
200 IU PMSG



200 IU PMSG



Deponation of AI



Conclusion

- Optimisation of management under intensive farming is important
- AI and individual mating plan is the way
 - Use of proven sires of known origin
 - Known breeding value
 - Prevention of inbreeding
 - Increase of daily gain and live weight
 - Profitability of production

Thank You for your attention!

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