

Sorting of sperm cells to obtain offspring with the desired sex in domestic sheep (*Ovis aries*)

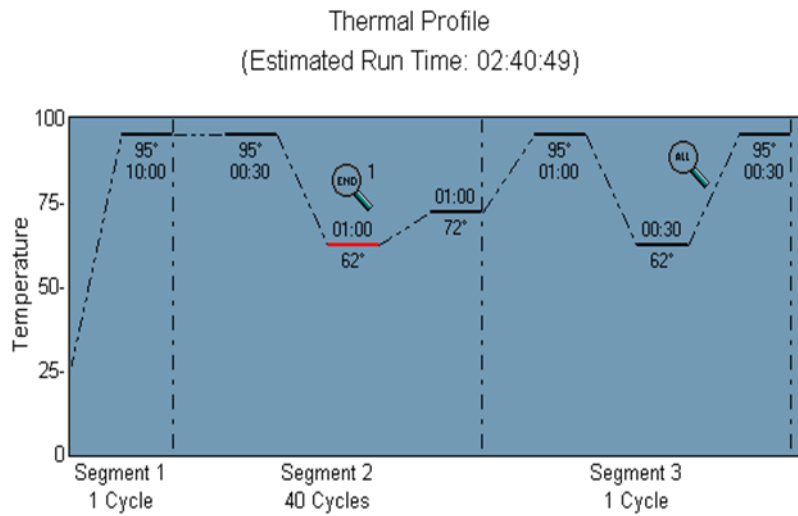
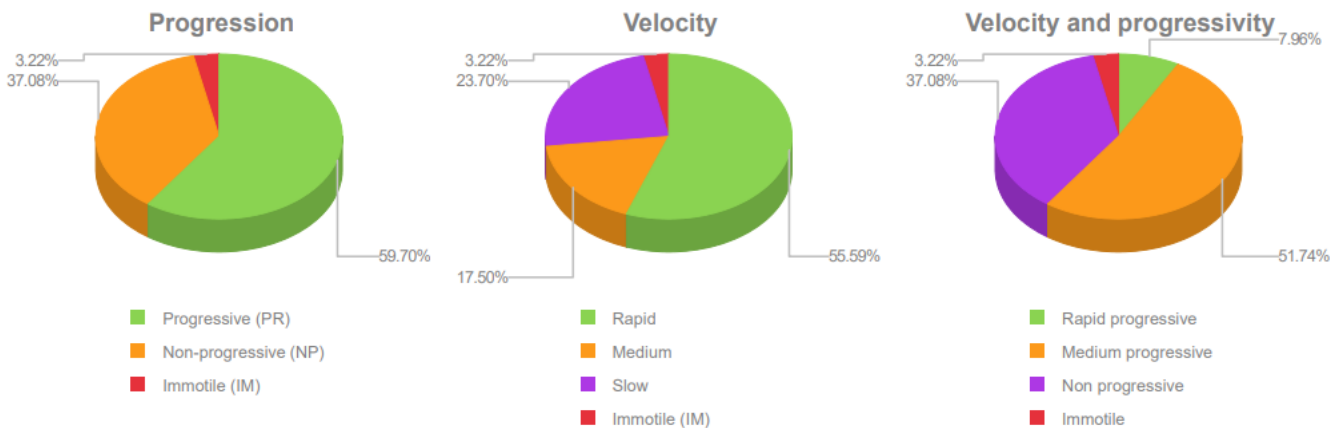


figure 1. Thermal profile of PCR cycles

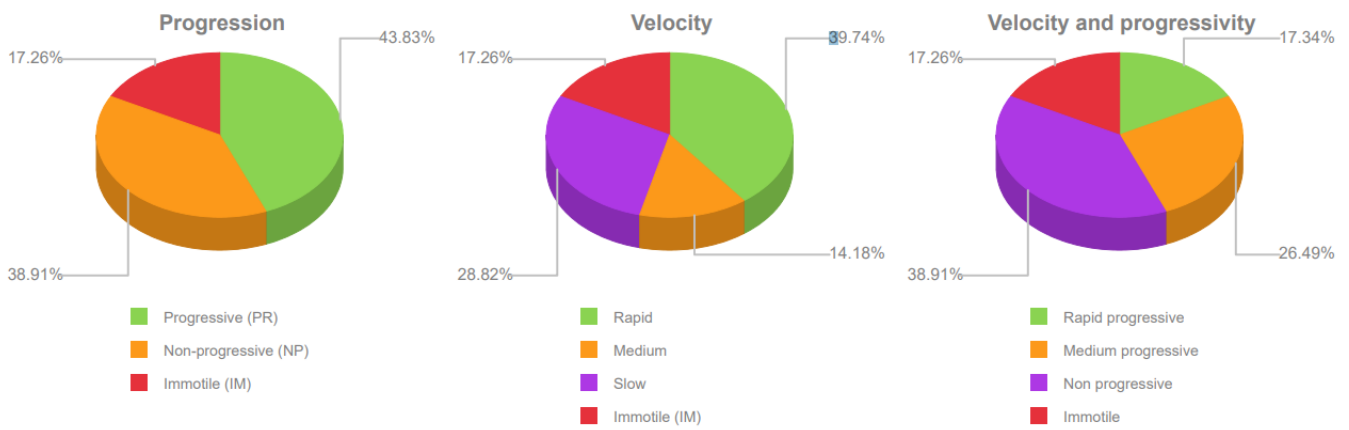


	Average	Immotile (IM)	Slow	Medium	Rapid	Units
Head area	29.86	23.92	24.67	33.60	32.05	μm^2

	Concentration
Round cells	1.78 M/mL

	Total	%
Circular tracks	2,931	77.25 %

figure 2. Spermogram before sorting

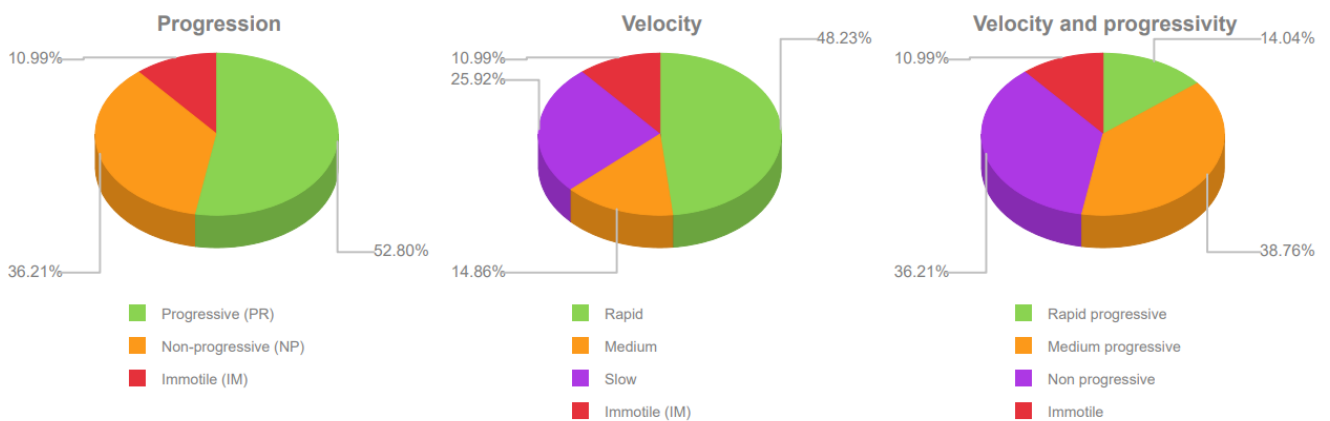


	Average	Immotile (IM)	Slow	Medium	Rapid	Units
Head area	32.40	22.59	26.44	36.39	49.43	μm^2

	Concentration	
Round cells	2.59	M/mL

	Total	%
Circular tracks	1,301	48.82 %

figure 3. Spermogram of the X-chromosome carrying fraction



	Average	Immotile (IM)	Slow	Medium	Rapid	Units
Head area	31.17	22.33	24.09	34.97	45.84	μm^2

	Concentration	
Round cells	2.32	M/mL

	Total	%
Circular tracks	1,876	62.10 %

figure 4. Spermogram of the Y-chromosome carrying fraction

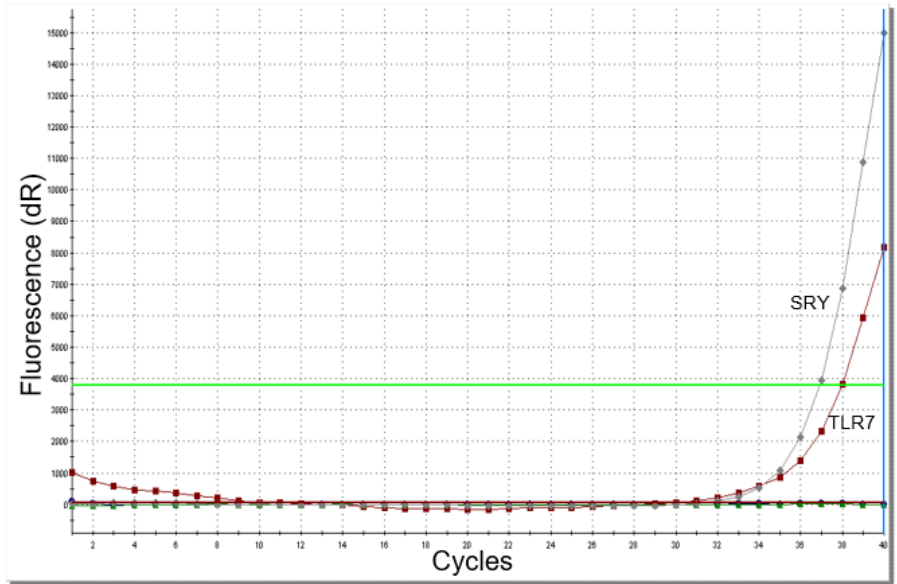


figure 5. Amplification curve of a sample with predominant SRY (Y-chromosome)

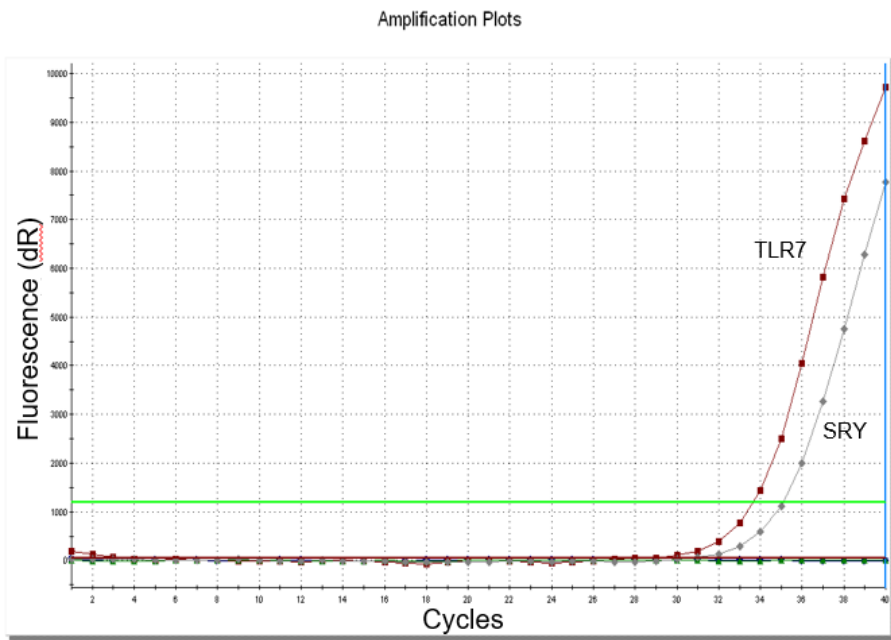


figure 6. Amplification curve of a sample with predominant TLR7 (X-chromosome)

1X	57,40 ± 17	42,6 ± 17
2X	70,87 ± 17	29,13 ± 17
3Y	25,24 ± 8	74,76 ± 8
4Y	21,15 ± 14	78,85 ± 14

table 1. Percentage of X- and Y-bearing sperm in analyzed samples

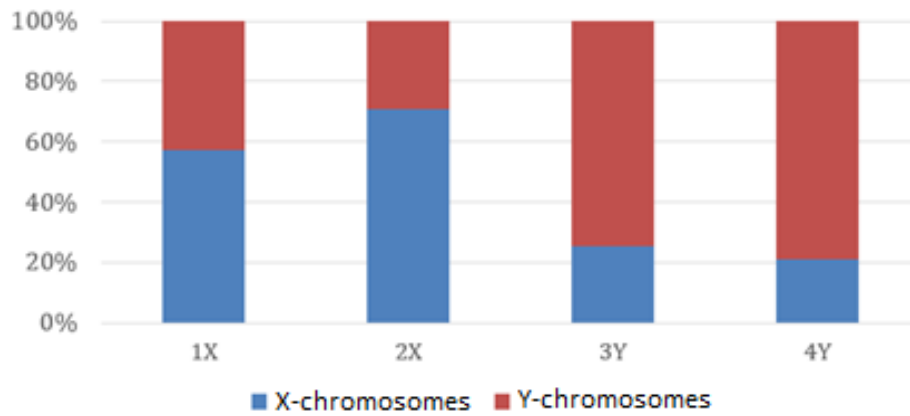


figure 7. Percentage of X and Y chromosomes in the samples