

**TABLE S1**

**Measurement of total chromosome lengths, unsynapsed regions (US), numbers of 180 degree coils and average distance between coils of three late zygotene nuclei and three late pachytene nuclei**

Samples	Total length of chromosomes (um)	US/total length	Numbers of 180 degree coils	Distance between coils (um)
late-zygotene cell 1	868	9.1%	242	3.26±1.85
late-zygotene cell 2	689	6.1%	240	2.70±1.18
late-zygotene cell 3	632	2.3%	290	2.13±1.11
<b>Average for late-zygotene nuclei</b>	<b>729.6</b>	<b>5.8%</b>	<b>257.3</b>	<b>2.66±1.48</b>
late-pachytene cell 1	434	0%	335	1.29±0.34
late-pachytene cell 2	421	0%	315	1.33±0.45
late-pachytene cell 3	472	0%	340	1.38±0.48
<b>Average for late pachytene nuclei</b>	<b>442.3</b>	<b>0%</b>	<b>330</b>	<b>1.34±0.43</b>