



Supplementary Material

Genetic Diversity Analysis of the Only White-Red Deer Population in China

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Supplementary Table SI. The Hardy Weinberg test of white red deer population.

| Locus | Chi-square | P-value |
|--------|------------|---------|
| BM203 | 91.918476 | 0.0000 |
| BM5004 | 35.249267 | 0.0000 |
| T123 | 89.921862 | 0.0000 |
| T156 | 79.674475 | 0.0000 |
| T172 | 43.472431 | 0.0000 |
| T193 | 12.6440 | 0.0004 |
| T507 | 43.566662 | 0.0000 |
| C143 | 12.6440 | 0.0004 |
| C180 | 96.453968 | 0.0000 |
| C217 | 80.586395 | 0.0000 |

Supplementary Table SII. Ewens watterson test for neutrality of 10 microsatellite locus in 10 white red deer population.

| Locus | Obs. F | Min F | Max F | Mean* | SE* | L95* | U95* |
|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | | | | 95% | 95% |
| BM203 | 0.2490 | 0.1250 | 0.7743 | 0.2860 | 0.0082 | 0.1694 | 0.5137 |
| BM5004 | 0.1779 | 0.1429 | 0.8087 | 0.3333 | 0.0118 | 0.1920 | 0.6276 |
| T123 | 0.1971 | 0.1250 | 0.7812 | 0.2921 | 0.0086 | 0.1741 | 0.5255 |
| T156 | 0.2175 | 0.1250 | 0.7812 | 0.2896 | 0.0090 | 0.1735 | 0.5491 |
| T172 | 0.1971 | 0.1000 | 0.7302 | 0.2327 | 0.0054 | 0.1390 | 0.4286 |
| T193 | 0.2825 | 0.2000 | 0.8673 | 0.4497 | 0.0210 | 0.2564 | 0.7717 |
| T507 | 0.1687 | 0.1429 | 0.8025 | 0.3286 | 0.0117 | 0.1934 | 0.6152 |
| C143 | 0.2991 | 0.2500 | 0.8986 | 0.5298 | 0.0255 | 0.2978 | 0.8642 |
| C180 | 0.2041 | 0.1667 | 0.8262 | 0.3681 | 0.0135 | 0.2226 | 0.6642 |
| C217 | 0.3299 | 0.2500 | 0.8951 | 0.5207 | 0.0254 | 0.3011 | 0.8594 |

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Supplementary Table SIII. Genetic distance of white red deer Individuals.

| Individuals | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 | D9 | D10 | D11 | D12 | D13 | D14 | D15 | D16 | D17 | D18 | D19 | D20 | D21 | D22 | D23 | D24 | D25 | D26 | D27 | D28 | D29 | D30 | D31 | D32 | D33 |
|-------------|----------|----------|----------|---------|---------|----------|----------|----------|---------|---------|----------|---------|----------|-----------|----------|----------|---------|----------|----------|---------|----------|---------|---------|----------|---------|----------|---------|-----|-----|-----|-----|-----|-----|
| | 0.99999 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D2 | 0.99999 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D3 | 0.99999 | 1.00000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D4 | 0.94376 | 2.95948 | 1.22133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D5 | 1.20790 | 1.98379 | 1.20397 | 1.81386 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D6 | 1.20790 | 1.98379 | 1.20397 | 1.81386 | 1.80944 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D7 | 1.20790 | 1.98379 | 1.20397 | 1.81386 | 1.80944 | 1.70709 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D8 | 1.24064 | 1.93111 | 1.40377 | 1.28878 | 1.28435 | 0.64467 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D9 | 1.087 | 1.335 | 0.667501 | 1.27833 | 1.27833 | 1.97009 | 1.91741 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D10 | 0.86734 | 2.83311 | 1.4755 | 1.19459 | 2.36865 | 0.559207 | 1.01114 | 1.22371 | | | | | | | | | | | | | | | | | | | | | | | | | |
| D11 | 1.4811 | 2.27694 | 1.40377 | 1.22133 | 1.20397 | 1.84444 | 2.87009 | 0.913882 | | | | | | | | | | | | | | | | | | | | | | | | | |
| D12 | 1.82905 | 0.648588 | 1.06861 | 1.40377 | 2.3972 | 2.1972 | 2.88179 | 1.30401 | 2.74632 | 1.50408 | | | | | | | | | | | | | | | | | | | | | | | |
| D13 | 0.801712 | 0.80334 | 1.4656 | 1.06388 | 1.4656 | 0.77245 | 0.627409 | 1.45903 | 0.61064 | 1.75318 | 1.665 | | | | | | | | | | | | | | | | | | | | | | |
| D14 | 1.87546 | 2.94444 | 1.40377 | 1.59253 | 1.02418 | 1.34065 | 1.30397 | 1.55814 | 1.7456 | 2.27664 | 2.86179 | 3.51939 | | | | | | | | | | | | | | | | | | | | | |
| D15 | 1.20418 | 1.20397 | 1.81386 | 1.20397 | 1.10477 | 1.84444 | 1.77833 | 1.76313 | 2.3025 | 0.0103 | 1.75328 | 1.1783 | | | | | | | | | | | | | | | | | | | | | |
| D16 | 1.79239 | 2.83311 | 1.4755 | 1.38484 | 1.4755 | 1.76318 | 2.802 | 1.615989 | 1.60944 | 2.88179 | 1.40377 | 1.44662 | 2.16865 | | | | | | | | | | | | | | | | | | | | |
| D17 | 1.78785 | 2.27694 | 1.30259 | 0.96861 | 2.30259 | 1.30259 | 1.55676 | 1.36565 | 1.2535 | 2.3025 | 2.36723 | 1.4656 | 0.890644 | 0.912591 | 0.913882 | | | | | | | | | | | | | | | | | | |
| D18 | 2.35067 | 1.50253 | 1.52818 | 1.22371 | 2.91447 | 1.10477 | 1.35772 | 1.97254 | 2.0749 | 2.22133 | 2.83184 | 1.51787 | 1.79001 | 1.52818 | 1.26465 | 0.968543 | | | | | | | | | | | | | | | | | |
| D19 | 1.31953 | 1.4722 | 1.9101 | 0.85891 | 2.8946 | 1.0624 | 2.0333 | 1.4722 | 0.89883 | 1.49787 | 1.665 | 0.94556 | 1.94222 | 2.8946 | 1.34884 | 1.49787 | 1.5004 | | | | | | | | | | | | | | | | |
| D20 | 0.98991 | 1.25235 | 1.40377 | 0.88857 | 2.972 | 1.54408 | 1.79287 | 1.52533 | 1.50408 | 1.40377 | 1.55238 | 1.4755 | 2.1972 | 1.64371 | 0.81093 | 1.18977 | 1.15528 | | | | | | | | | | | | | | | | |
| D21 | 1.1247 | 1.09707 | 1.12271 | 0.88730 | 2.91447 | 1.19447 | 1.10477 | 0.88685 | 1.14066 | 1.52118 | 0.81330 | 1.87202 | 2.88813 | 0.8350311 | 1.40377 | 2.22133 | 2.14047 | 1.15546 | 1.18977 | | | | | | | | | | | | | | |
| D22 | 1.40455 | 2.94444 | 1.38379 | 0.80938 | 1.83879 | 1.31379 | 2.91741 | 1.55814 | 1.22373 | 2.97095 | 1.76313 | 1.13377 | 1.44662 | 1.87147 | 2.16865 | 1.15528 | 1.15528 | 0.809385 | | | | | | | | | | | | | | | |
| D23 | 1.40455 | 2.94444 | 1.38379 | 0.80938 | 1.83879 | 1.31379 | 2.91741 | 1.55814 | 1.22373 | 2.97095 | 1.76313 | 1.13377 | 1.44662 | 1.87147 | 2.16865 | 1.15528 | 1.15528 | 0.809385 | | | | | | | | | | | | | | | |
| D24 | 0.892912 | 1.81819 | 2.2499 | 1.25235 | 1.53219 | 1.33361 | 1.59408 | 0.973495 | 1.45661 | 1.84444 | 1.4755 | 2.36375 | 0.673949 | 1.59576 | 0.804676 | 0.997142 | 1.65930 | 1.95319 | 1.75387 | 1.76313 | 0.837944 | | | | | | | | | | | | |
| D25 | 1.36601 | 1.41313 | 1.94303 | 1.18465 | 1.10477 | 2.1499 | 2.1972 | 2.91741 | 1.76429 | 1.15126 | 0.85557 | 1.81292 | 2.22404 | 1.84444 | 2.10291 | 1.40377 | 2.16865 | 0.957678 | 1.46518 | 1.67003 | 0.971465 | 1.6761 | | | | | | | | | | | |
| D26 | 0.845818 | 1.315 | 1.17833 | 1.18465 | 1.17833 | 1.27694 | 2.03111 | 1.55814 | 1.22373 | 1.40377 | 1.76313 | 1.1215 | 1.315 | 1.02483 | 1.10477 | 1.38605 | 2.18563 | 1.7599 | 1.4755 | 1.50253 | 1.355 | 2.2634 | 2.9741 | | | | | | | | | | |
| D27 | 0.790215 | 1.09707 | 1.91447 | 0.88730 | 1.81593 | 1.81386 | 1.79316 | 1.30324 | 1.16119 | 2.22133 | 1.40377 | 0.97322 | 1.08787 | 1.25288 | 1.07748 | 1.39303 | 1.73465 | 1.53014 | 0.528893 | 1.23778 | 1.09707 | 1.76313 | 1.07003 | 0.808133 | | | | | | | | | |
| D28 | 0.954312 | 1.44902 | 2.16865 | 0.85891 | 2.16865 | 0.913882 | 1.79426 | 1.23271 | 0.73772 | 1.2525 | 1.40377 | 0.97322 | 1.44662 | 1.4755 | 0.76214 | 0.664651 | 0.88838 | 1.16109 | 0.543093 | 2.02975 | 1.22378 | 1.19346 | 2.1029 | 1.44662 | 0.87872 | | | | | | | | |
| D29 | 1.22269 | 2.36588 | 1.36303 | 1.22371 | 1.81593 | 1.51818 | 2.18865 | 1.69707 | 1.3484 | 1.52118 | 2.18314 | 1.06588 | 1.40377 | 2.91447 | 1.16346 | 2.22133 | 3.5265 | 0.981699 | 1.41392 | 1.23778 | 0.949016 | 1.35712 | 1.4755 | 1.76313 | 2.34007 | 0.978872 | | | | | | | |
| D30 | 1.40545 | 1.315 | 1.17833 | 1.97154 | 2.27694 | 1.31379 | 2.13266 | 0.84497 | 0.81303 | 1.27694 | 0.915882 | 1.32217 | 1.55814 | 0.773861 | 1.7246 | 1.02418 | 1.26021 | 1.24908 | 1.76311 | 1.50253 | 2.94444 | 1.30797 | 1.51111 | 1.44056 | 1.30253 | 1.22378 | 2.19546 | | | | | | |