Table S4 Model comparison using the Latitudinal Overdominant Selection model (LOS). To simulate latitudinal overdominant selection, the value of the two selection coefficients against homozygotes are drawn from the same prior distribution (Table 1) and attributed to the northern and southern deme, respectively. Then the strength of the selection coefficient is computed from a linear regression between those two values, regarding the latitude of the corresponding deme. Proportions of simulations (%) under each of the three models among 600 and 1200 best simulations retained from 120,000 simulations (40,000 for each model under LOS) are listed.

<table>
<thead>
<tr>
<th>Number of retained simulations</th>
<th>Locus</th>
<th>Southern-origin model</th>
<th>Pincer model</th>
<th>Overlapping model</th>
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<td>A</td>
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<td>43.2</td>
<td>56.3</td>
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<td>B</td>
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<td>30.0</td>
<td>70.0</td>
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<td>DRB1</td>
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<td>36.7</td>
<td>63.3</td>
</tr>
<tr>
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<td>A</td>
<td>0.6</td>
<td>46.7</td>
<td>52.7</td>
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<tr>
<td></td>
<td>B</td>
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<td>39.0</td>
<td>61.0</td>
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<td>0</td>
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