Supplementary Table 1. Summary of Hardy-Weinberg results for 9 polymorphic microsatellite markers for each ESU. Observed heterozygosity, $H_O$, and expected heterozygosity, $H_E$. Microsatellite markers deviating from Hardy-Weinberg Equilibrium expectations indicated in bold; * indicates non-significance after Bonferroni correction for multiple tests.

<table>
<thead>
<tr>
<th>ESU</th>
<th>Locus</th>
<th>$H_O$</th>
<th>$H_E$</th>
<th>$P$-value</th>
<th>s.d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brynderwyn Range</td>
<td>Lhoc05</td>
<td>0.526</td>
<td>0.626</td>
<td>0.0191*</td>
<td>0.0001</td>
</tr>
<tr>
<td></td>
<td>Lhoc07</td>
<td>0.368</td>
<td>0.462</td>
<td>0.6075</td>
<td>0.0005</td>
</tr>
<tr>
<td></td>
<td>Lhoc08</td>
<td>0.053</td>
<td>0.053</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lhoc11</td>
<td>0.263</td>
<td>0.235</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lhoc13</td>
<td>0.211</td>
<td>0.193</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lhoc15</td>
<td>0.158</td>
<td>0.235</td>
<td>0.2588</td>
<td>0.0004</td>
</tr>
<tr>
<td></td>
<td>Lhoc19</td>
<td>0.737</td>
<td>0.738</td>
<td>0.1099</td>
<td>0.0003</td>
</tr>
<tr>
<td></td>
<td>Lhoc23</td>
<td>0.263</td>
<td>0.422</td>
<td>0.1246</td>
<td>0.0003</td>
</tr>
<tr>
<td></td>
<td>Lhoc25</td>
<td>0.368</td>
<td>0.371</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Northern Coromandel</td>
<td>Lhoc07</td>
<td>0.203</td>
<td>0.347</td>
<td>0.0033*</td>
<td>0.0001</td>
</tr>
<tr>
<td></td>
<td>Lhoc08</td>
<td>0.119</td>
<td>0.113</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lhoc11</td>
<td>0.034</td>
<td>0.034</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lhoc13</td>
<td>0.136</td>
<td>0.160</td>
<td>0.3390</td>
<td>0.0005</td>
</tr>
<tr>
<td></td>
<td>Lhoc15</td>
<td>0.102</td>
<td>0.159</td>
<td>0.0284*</td>
<td>0.0002</td>
</tr>
<tr>
<td></td>
<td>Lhoc19</td>
<td>0.153</td>
<td>0.249</td>
<td>0.0113*</td>
<td>0.0001</td>
</tr>
<tr>
<td></td>
<td>Lhoc23</td>
<td>0.017</td>
<td>0.017</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lhoc25</td>
<td>0.203</td>
<td>0.321</td>
<td>0.0071*</td>
<td>0.0001</td>
</tr>
<tr>
<td>Central Coromandel</td>
<td>Lhoc05</td>
<td>0.310</td>
<td>0.376</td>
<td>0.2406</td>
<td>0.0004</td>
</tr>
<tr>
<td></td>
<td>Lhoc07</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc08</td>
<td>0.103</td>
<td>0.160</td>
<td>0.1703</td>
<td>0.0004</td>
</tr>
<tr>
<td></td>
<td>Lhoc11</td>
<td>0.345</td>
<td>0.336</td>
<td>0.1193</td>
<td>0.0003</td>
</tr>
<tr>
<td></td>
<td>Lhoc13</td>
<td>0.172</td>
<td>0.160</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lhoc15</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc19</td>
<td>0.172</td>
<td>0.195</td>
<td>0.2516</td>
<td>0.0005</td>
</tr>
<tr>
<td></td>
<td>Lhoc23</td>
<td>0.172</td>
<td>0.163</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lhoc25</td>
<td>0.552</td>
<td>0.635</td>
<td>0.4946</td>
<td>0.0005</td>
</tr>
<tr>
<td>Southern Coromandel</td>
<td>Lhoc05</td>
<td>0.429</td>
<td>0.581</td>
<td>0.0915</td>
<td>0.0003</td>
</tr>
<tr>
<td></td>
<td>Lhoc07</td>
<td>0.029</td>
<td>0.029</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lhoc08</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc11</td>
<td>0.057</td>
<td>0.056</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lhoc13</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc15</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc19</td>
<td>0.029</td>
<td>0.086</td>
<td>0.0150*</td>
<td>0.0001</td>
</tr>
<tr>
<td></td>
<td>Lhoc23</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc25</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otawa</td>
<td>Lhoc05</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc07</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc08</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc11</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc13</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc15</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc19</td>
<td>0.654</td>
<td>0.491</td>
<td>0.1140</td>
<td>0.0003</td>
</tr>
<tr>
<td></td>
<td>Lhoc23</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lhoc25</td>
<td>Monomorphic</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Supplementary Table 2. Supertype membership of *Leiopelma hochstetteri* MHC class II-DAB alleles

<table>
<thead>
<tr>
<th>Supertype</th>
<th>LehoDAB allele</th>
<th>Supertype</th>
<th>LehoDAB allele</th>
</tr>
</thead>
<tbody>
<tr>
<td>LehoDAB*03</td>
<td></td>
<td>LehoDAB*42</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*04</td>
<td></td>
<td>LehoDAB*44</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*09</td>
<td></td>
<td>LehoDAB*45</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*11</td>
<td></td>
<td>LehoDAB*46</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*12</td>
<td></td>
<td>LehoDAB*48</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*13</td>
<td></td>
<td>LehoDAB*49</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*20</td>
<td></td>
<td>LehoDAB*50</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*49</td>
<td></td>
<td>LehoDAB*51</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*57</td>
<td></td>
<td>LehoDAB*52</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*68</td>
<td></td>
<td>LehoDAB*53</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*69</td>
<td></td>
<td>LehoDAB*54</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*08</td>
<td></td>
<td>LehoDAB*55</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*14</td>
<td></td>
<td>LehoDAB*56</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*16</td>
<td></td>
<td>LehoDAB*57</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*22</td>
<td></td>
<td>LehoDAB*58</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*27</td>
<td></td>
<td>LehoDAB*59</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*40</td>
<td></td>
<td>LehoDAB*60</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*41</td>
<td></td>
<td>LehoDAB*61</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*43</td>
<td></td>
<td>LehoDAB*62</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*47</td>
<td></td>
<td>LehoDAB*63</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*60</td>
<td></td>
<td>LehoDAB*64</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*65</td>
<td></td>
<td>LehoDAB*65</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*07</td>
<td></td>
<td>LehoDAB*66</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*10</td>
<td></td>
<td>LehoDAB*67</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*15</td>
<td></td>
<td>LehoDAB*71</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*17</td>
<td></td>
<td>LehoDAB*72</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*18</td>
<td></td>
<td>LehoDAB*73</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*19</td>
<td></td>
<td>LehoDAB*74</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*21</td>
<td></td>
<td>LehoDAB*01</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*24</td>
<td></td>
<td>LehoDAB*02</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*26</td>
<td></td>
<td>LehoDAB*05</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*28</td>
<td></td>
<td>LehoDAB*06</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*31</td>
<td></td>
<td>LehoDAB*23</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*19</td>
<td></td>
<td>LehoDAB*25</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*15</td>
<td></td>
<td>LehoDAB*29</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*17</td>
<td></td>
<td>LehoDAB*30</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*18</td>
<td></td>
<td>LehoDAB*32</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*21</td>
<td></td>
<td>LehoDAB*33</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*24</td>
<td></td>
<td>LehoDAB*34</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*26</td>
<td></td>
<td>LehoDAB*35</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*28</td>
<td></td>
<td>LehoDAB*36</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*31</td>
<td></td>
<td>LehoDAB*37</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*33</td>
<td></td>
<td>LehoDAB*38</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*35</td>
<td></td>
<td>LehoDAB*39</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*36</td>
<td></td>
<td>LehoDAB*40</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*37</td>
<td></td>
<td>LehoDAB*41</td>
<td></td>
</tr>
<tr>
<td>LehoDAB*38</td>
<td></td>
<td>LehoDAB*42</td>
<td></td>
</tr>
</tbody>
</table>
Supplementary Table 3. Summary of Mantel test results of isolation by distance at microsatellite markers, the MHC class II-DAB gene and the DAB supertypes

<table>
<thead>
<tr>
<th>Marker type</th>
<th>$R^2$</th>
<th>$P$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsatellites</td>
<td>0.224</td>
<td>0.329</td>
</tr>
<tr>
<td>DAB</td>
<td>0.356</td>
<td>0.199</td>
</tr>
<tr>
<td>DAB supertypes</td>
<td>0.445</td>
<td>0.107</td>
</tr>
</tbody>
</table>
Supplementary Table 4. Population differentiation across 5 ESUs at MHC class II-DAB supertypes generated from cluster analysis based on positively selected sites predicted only from Mixed Effect Model of Evolution (MEME)

<table>
<thead>
<tr>
<th></th>
<th>Brynderwyn Range</th>
<th>Northern Coromandel</th>
<th>Central Coromandel</th>
<th>Southern Coromandel</th>
<th>Otawa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brynderwyn Range</td>
<td>0.175</td>
<td>0.026</td>
<td>0.327</td>
<td>0.808</td>
<td></td>
</tr>
<tr>
<td>Northern Coromandel</td>
<td>0.077</td>
<td>0.029</td>
<td>0.011</td>
<td>0.313</td>
<td></td>
</tr>
<tr>
<td>Central Coromandel</td>
<td>0.013</td>
<td>0.011</td>
<td>0.127</td>
<td>0.544</td>
<td></td>
</tr>
<tr>
<td>Southern Coromandel</td>
<td>0.129</td>
<td>0.004</td>
<td>0.045</td>
<td>0.190</td>
<td></td>
</tr>
<tr>
<td>Otawa</td>
<td>0.513</td>
<td>0.234</td>
<td>0.357</td>
<td>0.149</td>
<td></td>
</tr>
</tbody>
</table>

$D_{est}$ above diagonal (Jost 2008); $G_{ST}$ below diagonal (Hedrick 2005)