Supplementary Material

New populations of the black-flanked rock-wallaby (*Petrogale lateralis*) from the Little Sandy Desert and Murchison, Western Australia

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Table S1: Details of primers used in this study.

<table>
<thead>
<tr>
<th>Gene Region</th>
<th>Primer identification</th>
<th>Primer Sequence (5’ - 3’)</th>
<th>Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>CytB</td>
<td>Wallaby1</td>
<td>Forward: GACACCCCTAACACGCTCAGTAC Reverse: CGGTAGCTCCTCAAGATGATTTT</td>
<td>Haouchar et al. (2013)</td>
</tr>
<tr>
<td>CytB</td>
<td>Wallaby2</td>
<td>Forward: AAATATCATTTCTGAGGTGCGTCCCC Reverse: GAGAAGTTGTGTGCGTCGCC</td>
<td>Haouchar et al. (2013)</td>
</tr>
<tr>
<td>CytB</td>
<td>Wallaby3</td>
<td>Forward: GGCGACCCAGACAATCTCCTA Reverse: GGCTGAAGGTTAGAATTAGGAT</td>
<td>Haouchar et al. (2013)</td>
</tr>
<tr>
<td>CR</td>
<td>DL1</td>
<td>Forward: CCACAAACATCAACTATGTTTGG Reverse: TTCTTTTTATGTATTACGTA</td>
<td>Haouchar et al. (2013)</td>
</tr>
</tbody>
</table>

Table S2: Sample description, location, mitochondrial genes amplified and species assignment of scat collected from two locations in Western Australia. The PCR amplification success and species assignment are described for each sample and primer set. * Indicates the GenBank reference for the CytB and CR sequences generated by Haouchar et al. (2013) from museum specimen M5233 and this study. † Indicates the blast match of the scat DNA sequences with the NCBI nucleotide database. ★ Indicates the nucleotide match of the scat samples with *Petrogale lateralis* reference samples from the Western Australian Museum (M5233 and M50268).
<table>
<thead>
<tr>
<th>Sample description and location collected</th>
<th>Species assignment</th>
<th>Species assignment</th>
<th>Species assignment</th>
<th>Species assignment</th>
<th>Species assignment</th>
<th>Species assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scat: AWFS-12-253; Desert Queen Baths, WA; 51K, 423271E, 7515150N</strong></td>
<td>Failed to amplify</td>
<td>Failed to amplify</td>
<td>100% Petrogale l. lateralis JN898804</td>
<td>100% Petrogale l. lateralis M5233</td>
<td>99% Petrogale l. lateralis M50268</td>
<td>100% Homo sapiens</td>
</tr>
<tr>
<td><strong>Scat: AWFS-12-273; Desert Queen Baths, WA; 51K, 423911E, 7515365N</strong></td>
<td>Failed to amplify</td>
<td>Failed to amplify</td>
<td>Failed to amplify</td>
<td>Failed to amplify</td>
<td>Failed to amplify</td>
<td>100% Petrogale l. lateralis M50268</td>
</tr>
<tr>
<td><strong>Scat: AWFS-12-274; Desert Queen Baths, WA; 51K, 423911E, 7515365N</strong></td>
<td>99.6% Petrogale l. lateralis JQ042130</td>
<td>99.6% Petrogale l. lateralis M5233</td>
<td>99.6% Petrogale l. lateralis M50268</td>
<td>Failed to amplify</td>
<td>Failed to amplify</td>
<td>100% Homo sapiens</td>
</tr>
<tr>
<td><strong>Scat: AWFS-12-275; Desert Queen Baths, WA; 51K, 423911E, 7515365N</strong></td>
<td>Failed to amplify</td>
<td>100% Petrogale l. lateralis M5233</td>
<td>99.7% Petrogale l. lateralis JQ042127</td>
<td>99.7% Petrogale l. lateralis M50268</td>
<td>Failed to amplify</td>
<td>100% Homo sapiens</td>
</tr>
<tr>
<td><strong>Scat: WF15-01-1; Barr Smith Range, WA; 51J, 247522E, 6984286N</strong></td>
<td>Failed to amplify</td>
<td>Failed to amplify</td>
<td>98.7% Petrogale l. lateralis AF348679</td>
<td>98.7% Petrogale l. lateralis M50268</td>
<td>97.4% Petrogale l. lateralis JQ042130</td>
<td>97.4% Petrogale l. lateralis M50268</td>
</tr>
<tr>
<td>*<em>Bone: Petrogale l. lateralis; Accession No., M5233 (<em>JN898804 and JN898805); Depuch Island, WA</em></em></td>
<td>100% Petrogale l. lateralis M50268</td>
<td>99.7% Petrogale l. lateralis M50268</td>
<td>99.1% Petrogale l. lateralis M50268</td>
<td>98% Petrogale l. MacDonnell ranges race AF348694</td>
<td>97.5% Petrogale l. MacDonnell ranges race AF348694</td>
<td>100% Petrogale l. lateralis M50268</td>
</tr>
<tr>
<td><strong>Tissue: Petrogale l. lateralis; Accession No., M50268; WA</strong></td>
<td>100% Petrogale l. lateralis JN898804</td>
<td>99.7% Petrogale l. lateralis JN898804</td>
<td>99.1% Petrogale l. lateralis JN898804</td>
<td>98.7% Petrogale l. lateralis AF348679</td>
<td>97.4% Petrogale l. lateralis AF348679</td>
<td>100% Petrogale l. lateralis M50268</td>
</tr>
</tbody>
</table>
Table S3: Details of GenBank accessioned references samples used in this study for comparative purposes (see Table S2).

<table>
<thead>
<tr>
<th>GenBank Accession No.</th>
<th>Species</th>
<th>Gene</th>
<th>Sample Identification and Location</th>
<th>Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>JQ042130</td>
<td><em>Petrogale l. West Kimberley race</em></td>
<td>CytB</td>
<td>S1256, Erskine Range, WA</td>
<td>Potter et al. (2012)</td>
</tr>
<tr>
<td>JN898804</td>
<td><em>Petrogale l. lateralis</em></td>
<td>CytB</td>
<td>M5233, Depuch Island, WA</td>
<td>Haouchar et al. (2013)</td>
</tr>
<tr>
<td>JQ042127</td>
<td><em>Petrogale l. lateralis</em></td>
<td>CytB</td>
<td>S972, Wheatbelt region, WA</td>
<td>Potter et al. (2012)</td>
</tr>
<tr>
<td>AF348678</td>
<td><em>Petrogale l. lateralis</em></td>
<td>CR</td>
<td>S972, Wheatbelt region, WA</td>
<td>Eldridge et al. (2001)</td>
</tr>
<tr>
<td>AF348679</td>
<td><em>Petrogale l. lateralis</em></td>
<td>CR</td>
<td>S1161, Barrow Island, WA</td>
<td>Eldridge et al. (2001)</td>
</tr>
<tr>
<td>JN898805</td>
<td><em>Petrogale l. lateralis</em></td>
<td>CR</td>
<td>M5233, Depuch Island, WA</td>
<td>Haouchar et al. (2013)</td>
</tr>
<tr>
<td>AF348694</td>
<td><em>Petrogale l. MacDonnell Ranges race</em></td>
<td>CR</td>
<td>S1490, Sentinel Hill, SA</td>
<td>Browning et al. (2001)</td>
</tr>
<tr>
<td>JQ042134</td>
<td><em>Petrogale rothschildi</em></td>
<td>CytB</td>
<td>CM15324, Rosemary Island, WA</td>
<td>Potter et al. (2012)</td>
</tr>
</tbody>
</table>

References:

