

# Population genetics and abundance of the Endangered grey-headed lemur *Eulemur cinereiceps* in south-east Madagascar: assessing risks for fragmented and continuous populations

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APPENDIX 1 Primer sequences with fluorescent dye labels, repeat motif, optimized annealing temperature (°C), number of alleles (*k*), size range of alleles, polymorphic information content (PIC), and GenBank accession number for five novel *Eulemur rufifrons* specific microsatellite loci.

Locus	Primer Sequence (5'–3')	Repeat Motif	°C	<i>k</i>	Size range	PIC	Accession no.
111HDZ12	F: <sup>FAM</sup> ATT TCT GTA TTG GGT TTT TAT TGA C.R: CTG ATG ATT TTT TAG AGC CTT AGT G	(GT) <sub>17</sub> CT(GT) <sub>6</sub>	56	18	212–230	0.77	HM148726
111HDZ26	F: <sup>FAM</sup> TCA GAA GAG GGG AGA GGC T.R: ATG GCA GCA TTT TAG AAA CAA	(GT) <sub>3</sub> AC(GT) <sub>10</sub>	58	7	203–217	0.79	HM148727
111HDZ33	F: <sup>FAM</sup> GAT GAG GAA GGA AGT CTG AAC A.R: TGG AGG AAG TAG GGA AGC C	(CACG) <sub>2</sub> (CA) <sub>4</sub> GA(CA) <sub>14</sub>	54	6	166–176	0.73	HM148729
111HDZ37	F: <sup>FAM</sup> GAG TTT GAG GTT GCT GTG AGC.R: TCA GGC AGG GAA GCG AC	(CA) <sub>3</sub> TACA(CG) <sub>2</sub> (CA) <sub>11</sub>	58	6	213–221	0.53	HM148728
111HDZ68	F: <sup>HEX</sup> AAC CAG GGC AGA CAG ACT T.G.R: GGC AAA TCG GCA CAT CAG	(CA) <sub>14</sub> GA(CA) <sub>2</sub>	54	12	143–169	0.81	HM148730

APPENDIX 2 Population genetic characteristics for the 26 loci including number of alleles (*k*), Hardy–Weinberg P-values (HW), expected heterozygosities (HE), polymorphic information content (PIC) and Wright's F-statistics for intra-population deviation (FIS), inter-population differentiation (FST), and overall fixation index (FIT).

Locus	<i>k</i>	HW	HO	HE	PIC	FIS	FST	FIT
104HDZ11	4	0.163	0.491	0.514	0.460	0.044	0.015	0.059
104HDZ107	5	0.367	0.698	0.662	0.588	-0.057	-0.011	-0.068
104HDZ109	6	0.332	0.623	0.637	0.890	0.026	0.042	0.067
104HDZ127	6	0.01	0.736	0.767	0.802	0.042	0.058	0.098
104HDZ132	5	0.628	0.698	0.687	0.670	-0.016	0.070	0.055
104HDZ137	6	0.938	0.660	0.716	0.694	0.081	0.052	0.129
104HDZ161	3	0.868	0.264	0.301	0.294	0.123	0.097	0.209
104HDZ224	8	0.952	0.566	0.577	0.564	0.023	0.066	0.088
104HDZ230	5	0.932	0.302	0.280	0.272	-0.092	0.056	-0.031
104HDZ294	7	0.054	0.642	0.740	0.713	0.138	0.023	0.157
44HDZ5	7	0.176	0.774	0.700	0.707	-0.112	0.093	-0.009
44HDZ14	5	0.977	0.547	0.586	0.609	0.068	0.174	0.230
44HDZ35	5	0.836	0.604	0.639	0.624	0.060	0.079	0.133
44HDZ38	4	0.995	0.404	0.374	0.360	-0.091	0.171	0.096
44HDZ40	4	0.95	0.528	0.486	0.446	-0.092	0.046	-0.042
44HDZ42	6	0.61	0.642	0.586	0.542	-0.102	-0.010	-0.113
44HDZ83B	7	0.958	0.736	0.669	0.672	-0.103	0.106	0.013

## APPENDIX 2 (Continued)

Locus	<i>k</i>	HW	HO	HE	PIC	FIS	FST	FIT
44HDZ91	3	0.864	0.642	0.581	0.506	-0.110	0.045	-0.060
44HDZ193	3	0.814	0.132	0.153	0.150	0.146	0.042	0.182
44HDZ475	5	0.09	0.302	0.348	0.312	0.142	-0.011	0.133
111HDZ12	4	0.341	0.260	0.251	0.253	-0.026	0.083	0.059
111HDZ33	5	0.48	0.245	0.284	0.273	0.140	0.059	0.191
111HDZ68	7	0.774	0.491	0.521	0.498	0.064	0.040	0.101
EFR24	6	0.391	0.321	0.356	0.363	0.107	0.102	0.198
EFR37	5	0.002	0.615	0.715	0.700	0.145	0.055	0.192
EFR88	3	0.572	0.587	0.545	0.461	-0.085	0.036	-0.046
Overall	134	—	0.520	0.526	0.516	0.013	0.061	0.074