

Supplementary Material

Table S1. Specimens examined. Museums abbreviations are: USNM - National Museum of Natural History, Smithsonian Institution, CAS - California Academy of Sciences, and SMW - The State Museum, Windhoek, Namibia.

Species	Museum	Specimen numbers [sample size]	Locality data
<i>Chondrodactylus angulifer</i>	CAS	167722,167725,167731, 167733, 175326, 175407 129633-129634, 193304, 201935 [10]	Namibia S. Africa, Cape Province
<i>Chondrodactylus bibronii</i>	CAS	193305-1993308, 193378-193379, 193381-193382 [10]	S. Africa, Cape Province
<i>Chondrodactylus fitzsimonsi</i>	CAS	214614-214615, 214617-214618, 214620 [9]	NW Namibia
<i>Chondrodactylus turneri</i>	CAS	193835-195327, 196491, 206984 200025, 200052, 201852, 203492 206930, 214532 [11]	N. Namibia S. Africa. N. Cape Province C. Namibia
<i>Pachydactylus austeni</i>	CAS	186317-186318, 206769, 206777, 206884-206885, 206989, 223884 [8]	S. Africa, Cape Province
<i>Pachydactylus bicolor</i>	CAS	175348, 175350, 175361-175364, 175369-175371 [10]	NE Namibia
<i>Pachydactylus capensis</i>	CAS	125655-125656, 125678-125681, 125683, 125757-125758 125984 [10]	S. Africa, Transvaal Botswana
<i>Pachydactylus fasciatus</i>	CAS	214672, 214674, 214676, 214690, 223930-223931 [6]	Namibia
<i>Pachydactylus geitje</i>	CAS	173907, 173910, 175281, 175285, 175313, 175410-175411, 175413, 180352 [9]	S. Africa, Cape Province
<i>Pachydactylus maculatus</i>	CAS	175250, 175252-175254,175257-175259, 175264, 175269-175270 [10]	S. Africa, Cape Province
<i>Pachydactylus punctatus</i>	CAS	176143-176146, 214664-214665, 214667, 214669 125955-125957 [11]	Namibia S. Africa, Cape Province
<i>Pachydactylus rangei</i>	CAS	201903, 214560, 214773-214778, 214781 126149 [10]	Namibia S. Africa
<i>Pachydactylus scutatus</i>	CAS	176081, 176112, 193672-193673, 193733 [6]	NW Namibia

<i>Pachydactylus serval</i>	CAS	126037, 126036, 203492, 203488-203489 [10]	S. Africa, N. Cape Province
<i>Pachydactylus weberi</i>	CAS	186369, 186378, 193325, 193330, 206904 [10]	S. Africa, Cape Province
<i>Rhoptropus afer</i>	CAS or SMW	167677-167678, 167680-167685, 167687-167688, 193865-193873, 193875-193882, 223/1872, 223/1869, 220/1666, 220/1859, 243/1882, 242/1864, 244/1888, 243/1881, 242/1865, 220/1822, 224/1883, 242/1878, 224/1880, 221/1868[44]	Namibia
<i>Rhoptropus barnardi</i>	CAS	167663-167664, 167666, 167670, 193674, 193678, 193691-193692, 193716, 193718, 193741, 193762-193763, 193775-193781, 193783, 193800-193801.	Namibia
	SMW	235/4073, 210/1632, 214/1646, 210/1630, 213/1642, 214/1644, 210/1633, 235/1587, 238/1722, 213/1613, 213/1639, 211/1590, 238/1634, 210/1629, 233/4072, 213/1638, 238/1637, 211/1589, 318/1588, 233/4035, 210/1631, 235/4074, 214/1648, 327/4036 [51]	
<i>Rhoptropus biporosus</i>	CAS	193818, 193820, 193822-193826, 193838-193844.	Namibia
	SMW	239/1745, 239/1749, 240/1776, 218/1743, 240/1781, 329/1744, 219/1783, 218/1742, 218/1748[28]	
<i>Rhoptropus boultoni</i>	CAS	167662, 167672, 193660-193661, 193664, 193671, 193687, 193742-193743, 193765, 193784-193792.	Namibia
	SMW	236/1658, 237/1659,	

		237/1661, 217/1656, 225/1660, 236/1622, 216/1654, 215/1652, 212/1692, 234/4065, 217/1657, 234/4021, 216/1655, 212/1593, 215/1653 [34]	
<i>Rhoptropus bradfieldi</i>	CAS	167673-167674, 167676, 193892-193897, 193899- 193906, 193908-193909, 193911-193917.	Namibia
	SMW	246/1906, 230/1903, 241/1824, 226/1827, 227/1894, 343/1916, 228/1895, 246/1910, 342/1912, 229/1899, 232/1917, 228/1896, 231/1905, 241/1825, 245/1896, 227/1828, 229/1897, 245/1902, 310/1914, 230/1904, 231/1907, 226/1826, 232/1911 [49]	
<i>Tarentola annularis</i>	USNM	226737-226739 124686, 130588, 133544, 133562 133563 199662-199663 [10]	Gambia Egypt Mauritania
<i>Tarentola mauritanica</i>	USNM	165870, 195377-195380 532412, 532416, 532418 196419-196420 [10]	Morocco Tunisia Spain

Table S2. Eigenvectors and component correlations for the first three principal components of a) the size-free PCAs performed on external measurements, b) the size-free PCAs performed on a complete set of skeletal measurements, with *Rhoptropus* not included, and c) the size-free PCAs performed on a reduced set of skeletal measurements, with *Rhoptropus* included. (For measurement abbreviations see Table 2).

(a) Measurement	Eigenvectors			Component Correlations		
	1	2	3	1	2	3
LogBRL	0.087	0.217	0.292	0.308	0.542	0.365
LogABL	0.248	0.306	0.316	0.636	0.555	0.286
LogMCL	0.271	0.41	-0.289	0.536	0.574	-0.202
LogD3ML	-0.449	0.205	-0.223	-0.86	0.278	-0.151
LogD4ML	-0.483	0.197	-0.243	-0.885	0.255	-0.157

LogTHL	0.017	0.182	-0.368	0.056	0.423	-0.428
LogCRL	0.151	0.269	-0.177	0.484	0.61	-0.201
LogMTL	0.224	0.495	-0.54	0.42	0.656	-0.358
LogD3PL	-0.468	0.204	0.167	-0.9	0.277	0.114
LogD4PL	-0.35	0.301	0.271	-0.751	0.457	0.206
LogFLL	0.085	0.264	0.177	0.339	0.745	0.25
LogHLL	0.02	0.241	0.177	0.089	0.758	0.278

(b)	Eigenvectors			Component Correlations		
Measurement	1	2	3	1	2	3
LogHUL	0.014	0.146	-0.285	0.102	0.508	-0.649
LogUNL	0.068	0.307	-0.472	0.303	0.654	-0.659
LogRAL	0.058	0.367	-0.525	0.23	0.698	-0.654
LogCAL	0.043	0.064	0.143	0.251	0.179	0.262
LogMC3L	0.072	0.237	0.118	0.435	0.686	0.223
LogMC4L	0.079	0.234	0.193	0.45	0.638	0.344
LogD3MLS	-0.137	0.087	0.117	-0.808	0.246	0.216
LogD4MLS	-0.164	0.119	0.114	-0.849	0.295	0.185
LogP1D3ML	0.091	0.249	0.124	0.433	0.568	0.185
LogP12D4ML	0.052	0.251	0.156	0.287	0.663	0.27
LogP23D3ML	-0.333	0.035	0.071	-0.955	0.048	0.064
LogP34D4ML	-0.591	0.102	-0.08	-0.979	0.081	-0.04
LogFEL	0.01	0.095	-0.05	0.042	0.382	-0.121
LogTIL	0.028	0.171	0	0.213	0.623	-0.02
LogACL	0.084	0.255	0.291	0.346	0.504	0.376
LogDT4L	-0.03	0.162	0.246	-0.127	0.394	0.391
LogMT3L	0	0.115	0.133	-0.02	0.502	0.38
LogMT4L	0.087	0.254	0.169	0.475	0.665	0.29
LogD3PLS	-0.139	0.116	0.089	-0.784	0.313	0.157
LogD4PLS	-0.1	0.158	0.08	-0.664	0.508	0.168
LogP1D3PL	0.084	0.274	0.076	0.372	0.582	0.106
LogP12D4PL	0.087	0.307	0.088	0.428	0.724	0.136
LogP23D3PL	-0.354	0.088	0.071	-0.96	0.114	0.06
LogP34D4PL	-0.526	0.094	-0.06	-0.982	0.084	-0.04
LogFLLS	0.02	0.169	-0.2	0.174	0.704	-0.545
LogHLLS	0	0.124	0.033	-0.05	0.664	0.116

(c)	Eigenvectors			Component Correlations		
Measurement	1	2	3	1	2	3
LogHUL	0.01	0.143	0.071	0.03	0.631	0.187
LogUNL	-0.04	0.206	0.055	-0.147	0.627	0.099

LogMC3L	-0.03	0.273	0.178	-0.122	0.833	0.323
LogMC4L	-0.05	0.146	0.154	-0.211	0.478	0.3
LogD3MLS	0.125	0.057	0.218	0.62	0.213	0.484
LogD4MLS	0.135	-0.06	0.164	0.598	-0.214	0.325
LogP1D3ML	0	0.423	0.158	-0.02	0.88	0.195
LogP12D4ML	0.023	0.154	-0.258	0.096	0.478	-0.476
LogP23D3ML	0.371	0	-0.05	0.926	-0.01	-0.06
LogP34D4ML	0.593	-0.09	-0.02	0.967	-0.104	-0.01
LogFEL	0.012	0.155	0.164	0.069	0.66	0.413
LogTIL	0.01	0.272	0.242	0.041	0.808	0.427
LogMT3L	0.057	0.349	0.274	0.178	0.82	0.383
LogMT4L	-0.05	0.194	0.187	-0.242	0.675	0.386
LogD3PLS	0.132	0.129	0.284	0.549	0.406	0.529
LogD4PLS	0.086	0.046	0.205	0.49	0.195	0.523
LogP1D3PL	0.073	0.506	-0.525	0.156	0.814	-0.502
LogP12D4PL	0.025	0.3	-0.415	0.079	0.713	-0.586
LogP23D3PL	0.378	0.03	-0.05	0.938	0.056	-0.06
LogP34D4PL	0.54	-0.03	0.01	0.974	-0.04	0.01
