**APPENDIX 4. Loadings resulting from the Principal Component Analyses conducted with the SVL and 15 morphometric ratios (scaled) from all individuals of *Scinax ruberoculatus* sp. nov. (males and females).** Abbreviations: (PC) Principal Component, (SVL) snout-vent length, (HL) head length, (HW) head width, (ED) horizontal eye diameter, (UEW) upper eyelid width, (IND) internarial distance, (IOD) interorbital distance, (TD) horizontal tympanum diameter, (TL) tibia length, (FL) foot length, (END) eye-nostril distance, (4FD) fourth finger disk diameter, (4TD) fourth toe disk diameter, (TAL) tarsus length, (HAL) hand length, (THL) length thigh.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   | **PC1** | **PC2** | **PC3** | **PC4** | **PC5** | **PC6** | **PC7** | **PC8** | **PC9** | **PC10** | **PC11** | **PC12** | **PC13** | **PC14** | **PC15** | **PC16** |
| **SVL** | -0.0893 | -0.1496 | 0.3909 | -0.2586 | 0.5376 | -0.1056 | 0.1056 | -0.1006 | 0.0975 | -0.1870 | 0.0545 | -0.4160 | 0.0686 | 0.0007 | 0.3974 | 0.2132 |
| **HL/SVL** | 0.3441 | 0.0051 | -0.2137 | 0.0545 | -0.0986 | -0.3473 | -0.0987 | -0.5343 | -0.2891 | 0.0586 | 0.1956 | -0.0191 | 0.2651 | -0.0687 | 0.3892 | -0.2352 |
| **HW/SVL** | 0.2861 | 0.0832 | 0.0570 | 0.4527 | 0.0261 | -0.4649 | 0.2130 | 0.1719 | 0.4198 | 0.0203 | 0.3106 | -0.0201 | 0.1485 | 0.0116 | -0.1763 | 0.2907 |
| **ED/SVL** | 0.1392 | 0.3383 | -0.2736 | 0.1724 | 0.3136 | -0.0491 | -0.0836 | 0.2758 | -0.3681 | 0.4141 | -0.2420 | -0.1967 | -0.2048 | -0.0776 | 0.1782 | 0.3064 |
| **TD/SVL** | -0.0126 | 0.1895 | -0.2892 | 0.2256 | 0.5878 | 0.3617 | -0.2288 | -0.0016 | 0.1479 | -0.1829 | 0.2116 | 0.0527 | 0.3037 | -0.0292 | -0.1282 | -0.2972 |
| **UEW/SVL** | 0.1364 | 0.3118 | -0.1863 | -0.5267 | 0.1413 | -0.2197 | 0.0872 | 0.1673 | 0.1163 | -0.0894 | 0.3570 | 0.2926 | -0.4199 | 0.1601 | 0.0972 | -0.1492 |
| **IOD/SVL** | 0.1912 | -0.2863 | -0.3110 | 0.0864 | -0.0362 | -0.1298 | -0.4978 | 0.0232 | 0.1063 | -0.5316 | -0.2260 | -0.0629 | -0.2513 | 0.1953 | 0.0529 | 0.2403 |
| **IND/SVL** | 0.1057 | 0.2180 | -0.3703 | 0.0096 | -0.1459 | 0.3239 | 0.4895 | -0.3507 | 0.3481 | -0.0658 | -0.1840 | -0.3274 | -0.1339 | 0.1324 | 0.0938 | 0.0671 |
| **TAL/SVL** | 0.3480 | -0.2266 | 0.1433 | 0.1971 | -0.0071 | 0.4536 | 0.1154 | -0.0124 | -0.1105 | -0.1008 | 0.3259 | 0.2291 | -0.3366 | -0.4191 | 0.2101 | 0.1865 |
| **FL/SVL** | 0.3657 | 0.2125 | 0.0626 | -0.3316 | -0.0661 | 0.0755 | -0.0449 | 0.1637 | 0.2236 | -0.0913 | -0.4140 | 0.2978 | 0.4604 | -0.2974 | 0.1528 | 0.1616 |
| **HAL/SVL** | 0.3608 | -0.0244 | 0.1980 | 0.1127 | 0.2602 | -0.1543 | 0.3836 | -0.0032 | -0.3192 | -0.3075 | -0.3786 | 0.0369 | -0.1337 | 0.0485 | -0.3128 | -0.3456 |
| **4FD/SVL** | 0.1848 | 0.3404 | 0.3673 | 0.1521 | -0.1744 | 0.2766 | -0.0979 | 0.0852 | -0.1931 | -0.1210 | 0.1177 | 0.0305 | 0.1316 | 0.6605 | 0.2019 | 0.0839 |
| **4TD/SVL** | 0.0380 | 0.4475 | 0.2735 | 0.0647 | -0.2481 | -0.0477 | -0.3048 | 0.0633 | 0.1203 | -0.1816 | 0.0357 | -0.4553 | -0.2190 | -0.4008 | -0.0239 | -0.3055 |
| **END/SVL** | 0.3900 | -0.0346 | 0.0818 | -0.3644 | 0.0657 | 0.1393 | -0.2311 | -0.2879 | -0.0618 | 0.2311 | 0.1635 | -0.2325 | 0.0169 | 0.0588 | -0.5855 | 0.2502 |
| **TL/SVL** | 0.3136 | -0.3098 | 0.1453 | 0.0629 | 0.0852 | 0.0734 | -0.1694 | 0.1022 | 0.4153 | 0.4891 | -0.1780 | -0.0321 | -0.1670 | 0.1999 | 0.2000 | -0.4201 |
| **THL/SVL** | 0.1864 | -0.2884 | -0.2649 | -0.1846 | -0.1962 | 0.0998 | 0.1799 | 0.5619 | -0.1874 | -0.0893 | 0.2283 | -0.4268 | 0.2735 | 0.0128 | 0.0288 | -0.1679 |
| **Variance (%)** | **23.01** | **16.35** | **13.78** | **8.298** | **7.55** | **5.231** | **4.953** | **4.927** | **3.797** | **3.516** | **2.148** | **2.002** | **1.675** | **1.171** | **0.917** | **0.685** |
| **Cumulative (%)** | **23.01** | **39.36** | **53.13** | **61.429** | **68.98** | **74.209** | **79.163** | **84.09** | **87.886** | **91.403** | **93.551** | **95.553** | **97.228** | **98.398** | **99.315** | **100** |