

# REDESCRIPTION OF ‘*PERLEIDUS*’ (OSTEICHTHYES, ACTINOPTERYGII) FROM THE EARLY TRIASSIC OF NORTHWESTERN MADAGASCAR

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## SUPPLEMENTARY DATA

| SPECIMEN       | Labeling                   | SL    | HL   | HD   | MBD  | DFB  | AFB  | CPD  | CPL  | PPEC | PDOR | PEEL | PANA | PREO | POSTO | OD  | MSD  |
|----------------|----------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-----|------|
| MNHM F.MAE1023 | <i>P. sp</i>               | ?     | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?     | ?   | ?    |
| MNHM F.MAE361  | <i>P. madagascariensis</i> | 90.6  | 27.8 | 14.8 | 26.6 | 10.1 | 7.9  | 13.9 | ?    | 24   | 66   | 51.3 | 72   | ?    | 13.7  | 6   | 6.2  |
| MNHM F.MAE652  | <i>P. sp</i>               | 79    | 21.5 | 15.7 | 20.9 | 9.3  | 6.9  | 9.5  | 11.1 | 20.1 | 58.3 | 46.3 | 59.5 | 2.2  | 12.9  | 4.5 | 4.5  |
| MNHM F.MAE111  | <i>P. madagascariensis</i> | 129.3 | 37.9 | 23.7 | 36.5 | 17.2 | ?    | 14.1 | ?    | 36.4 | 91.3 | ?    | ?    | 3.6  | 24.6  | 6.7 | 9.4  |
| MNHM F.MAE1111 | <i>P. sp</i>               | ?     | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?     | ?   | ?    |
| MNHM F.MAE112  | <i>P. madagascariensis</i> | 94.3  | 26.5 | 16.8 | 26.8 | 13.4 | 11.5 | 13.9 | 15.3 | 25.3 | 60.2 | 50.5 | 68.4 | 2.3  | 15.5  | 5.6 | 7.4  |
| MNHM F.MAE113  | <i>P. madagascariensis</i> | 72.1  | 20.3 | 14.1 | 23.9 | 11.6 | 7.2  | 11.3 | 9.8  | 19.2 | 54.5 | 38.5 | 56.6 | 3.4  | 11    | 4.8 | 5.2  |
| MNHM F.MAE125  | <i>P. madagascariensis</i> | 88    | 24.7 | 15   | 26.2 | 11.6 | 6.8  | 11.6 | 13.1 | 24.6 | 62.7 | 47.4 | 64.7 | 2.8  | 13.9  | 5.1 | 5.8  |
| MNHM F.MAE1282 | <i>P. madagascariensis</i> | 105.6 | 34   | 26.2 | 25.8 | 12   | 9.2  | 13.6 | 17   | 32.6 | 81.7 | 65.4 | 85.4 | 3.1  | 21.1  | 6.7 | 8    |
| MNHM F.MAE1283 | <i>P. madagascariensis</i> | 104   | 29.3 | 19.7 | 28   | 13.1 | 9.5  | 13.5 | 16   | 26.6 | 70.4 | 57.5 | 78.2 | 3    | 17.7  | 6.9 | 6.5  |
| MNHM F.MAE1284 | <i>P. madagascariensis</i> | 109.8 | 33.9 | 23.2 | 32.7 | 9.6  | 8.7  | 14.5 | 20.6 | 34.2 | 80.7 | 64.2 | 84.3 | 5.4  | 19.1  | 6.6 | 9.1  |
| MNHM F.MAE1371 | <i>P. madagascariensis</i> | 93.6  | 23.3 | 16.2 | 25.6 | 7.8  | 6.3  | 14.8 | 19.4 | 23.8 | 61.4 | 51   | 67   | 3.5  | 14.2  | 5   | 6.4  |
| MNHM F.MAE364  | <i>P. madagascariensis</i> | 78    | 21.7 | 15.5 | 22.3 | 10.2 | 8.7  | 10.9 | 15.4 | 21.8 | 54   | 40   | 56   | 3    | 11.8  | 5.7 | 5.1  |
| MNHM F.MAE365  | <i>P. madagascariensis</i> | 51.1  | 16.4 | 12.1 | 16.1 | 5.8  | 4.6  | 8.1  | 8.2  | 16.1 | 32.9 | 29.8 | 40.7 | 2.1  | 8.9   | 3.4 | 3.1  |
| MNHM F.MAE366  | <i>P. sp</i>               | 94    | 31.1 | 19.6 | 28   | ?    | 10.4 | ?    | ?    | 29.5 | 74.1 | 53.9 | 69.9 | 3.7  | 18.7  | 6   | 7.3  |
| MNHM F.MAE371  | <i>P. madagascariensis</i> | ?     | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?     | ?   | ?    |
| MNHM F.MAE378  | <i>P. madagascariensis</i> | 90    | 33.6 | 24.2 | 30   | 11.4 | 10.1 | 15.4 | ?    | 31.9 | 74.9 | 55.4 | 72.2 | 5.5  | 19.2  | 7.1 | 7.4  |
| MNHM F.MAE379  | <i>P. madagascariensis</i> | 77.8  | 30   | 16.5 | 22.3 | 8.2  | ?    | 12   | 13.1 | 27.4 | 62.3 | 48   | ?    | 4.6  | 17.6  | 4.8 | 4.7  |
| MNHM F.MAE51   | <i>P. madagascariensis</i> | ?     | 29.8 | 19   | 22.7 | ?    | ?    | ?    | ?    | 28.2 | ?    | 50   | ?    | 3.2  | 18    | 5.9 | 6.3  |
| MNHM F.MAE526  | <i>P. madagascariensis</i> | 81.6  | 20.7 | 15.2 | 23.6 | 8.5  | 6.6  | 11.5 | 12.2 | 20.1 | 58.1 | 48.1 | 64.6 | 2.5  | 13.1  | 4.5 | 4.7  |
| MNHM F.MAE646  | <i>P. piveteaui</i>        | 89.1  | 26.9 | 18   | 24.6 | 11.9 | 9    | 11.8 | 12.8 | 27.4 | 67.5 | 51.2 | 66.2 | 2.4  | 15.7  | 5.7 | 10   |
| MNHM F.MAE847  | <i>P. sp</i>               | 126.8 | 38.7 | 25.8 | 36.5 | 14.3 | 11.6 | 15   | 19.8 | 37.3 | 97   | 78.2 | 99.6 | 5.7  | 22.1  | 7.8 | 9.8  |
| MPUM 11585     | <i>P. sp</i>               | 61.5  | 19.9 | 12   | 18.3 | 8.3  | 5.2  | 8.9  | ?    | 18.9 | 42.4 | 32.8 | 48.7 | 2.8  | 10.3  | 4.5 | 3.6  |
| MPUM 11586     | <i>P. sp</i>               | 74.8  | 20.7 | 14.1 | 24.5 | 9.5  | 7.3  | 11   | 11.5 | 18.6 | 53   | 40.7 | 56.6 | 3    | 11.9  | 5   | 5.8  |
| MSNM V1266     | <i>piveteaui</i>           | 63.2  | 18.2 | 13.7 | 18.4 | 7.6  | 6    | 9.3  | 9.8  | 18   | 41.2 | 39   | 50   | 2.5  | 9.6   | 4   | 3.4  |
| MSNM V1356     | <i>P. sp</i>               | 73.1  | 20.1 | 13.8 | 18   | 8.3  | 6.6  | 9.6  | 10.3 | 20   | 54.6 | 40.1 | 57.3 | 2    | 11.5  | 4.9 | 7.2  |
| MSNM V1369     | <i>P. madagascariensis</i> | 59.3  | 17.3 | 10.9 | 18.1 | 6.9  | 5.7  | 8.9  | 9.2  | 16.7 | 42.6 | 35   | 44.7 | 2.1  | 9.5   | 3.5 | 3.2  |
| MSNM V1705     | <i>P. madagascariensis</i> | 87.4  | 24.6 | 16.9 | 26.3 | 9.5  | 7.6  | 10.8 | 13   | 25.4 | 62.3 | 52   | 67.6 | 3.4  | 13.9  | 5.5 | 6.1  |
| MSNM V1708     | <i>P. piveteaui</i>        | 86.3  | 22.6 | 17.5 | 21.4 | 9.7  | 7.3  | 10.5 | 11.9 | 23.3 | 62.2 | 51   | 68.5 | 3.4  | 12.6  | 5.3 | 8.8  |
| MSNM V1723     | <i>P. madagascariensis</i> | 90.8  | 27.8 | 19.3 | 26.3 | 10.3 | 7    | 12.4 | 8    | 25.1 | 66.8 | 52.7 | ?    | 3.7  | 14.9  | 5.8 | 10.8 |
| MSNM V1730     | <i>P. piveteaui</i>        | 77.4  | 24.1 | 15   | 25.1 | 8.5  | 9.4  | 12.2 | 11.8 | 21   | 55.2 | 40.5 | 56.4 | 3.4  | 13.5  | 5.6 | 5.1  |
| MSNM V1765     | <i>P. piveteaui</i>        | 93.7  | 27.2 | 19.6 | 26.2 | 9.1  | 6.7  | 12.1 | 14.8 | 25.8 | 72.2 | 53.9 | 73   | 4    | 15.3  | 5.3 | 10.9 |
| MSNM V1769     | <i>P. sp</i>               | 83.8  | 23.6 | 15.3 | 23.6 | 9.8  | 9    | 9.8  | 13   | 24.2 | 55   | 44.3 | 60.4 | 3.5  | 13.3  | 5.2 | 7.1  |
| MSNM V1777     | <i>P. piveteaui</i>        | 82.4  | 24.9 | 16.5 | 27.3 | 10.1 | 8.7  | 12   | 13.2 | 25.2 | 55.6 | 40.8 | 59.8 | ?    | ?     | ?   | 5.6  |
| MSNM V1782     | <i>P. madagascariensis</i> | 93.7  | 30.2 | 21.3 | 26.6 | 12.1 | ?    | 13.8 | ?    | ?    | 66.5 | 50.3 | 74.5 | 5    | 16.9  | ?   | 9.9  |
| MSNM V1845     | <i>P. piveteaui</i>        | 91.5  | 25.1 | 18.9 | 24.6 | 9.5  | 6.9  | 10.3 | 18.6 | 22.4 | 64.7 | 49.6 | 68.4 | 3.1  | 14.2  | 4.1 | 9.3  |
| MSNM V1862     | <i>P. madagascariensis</i> | 64.5  | 19.9 | 13.6 | 19   | 7.2  | 4.8  | 9    | 9.3  | 16.5 | 44.3 | 37.1 | 50   | 2.3  | 11.5  | 4.4 | 3.4  |
| MSNM V1925     | <i>P. piveteaui</i>        | 92.4  | 22.2 | 17.3 | 28.3 | ?    | 9.6  | 12.5 | 15.4 | 21.2 | 65.1 | 48.5 | 67.5 | ?    | 13.9  | ?   | 6.8  |
| MSNM V1945     | <i>P. madagascariensis</i> | 101.8 | 29.6 | 19.5 | 32.2 | 13.6 | 11   | ?    | ?    | 28.5 | 76.3 | ?    | ?    | ?    | ?     | ?   | ?    |
| MSNM V3191     | <i>P. sp</i>               | ?     | 27.9 | 18.6 | ?    | ?    | ?    | ?    | ?    | 29.3 | ?    | ?    | ?    | 2.8  | 15.9  | 7   | 8.9  |
| MSNM V7116     | <i>P. madagascariensis</i> | ?     | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?    | ?     | ?   | ?    |
| MSNM V7117     | <i>P. piveteaui</i>        | 110   | 34.1 | 24.1 | 32   | ?    | 10   | ?    | ?    | 31.6 | ?    | 68.8 | 87   | 3.3  | 20    | 6.5 | 7    |
| MSNM V7118     | <i>P. piveteaui</i>        | 93.9  | 25   | 17.1 | 29.1 | 8.7  | 8.5  | 12.5 | 18.3 | 23.1 | 64   | 54.7 | 66.7 | ?    | ?     | ?   | 6.7  |
| NHM 19580      | <i>P. piveteaui</i>        | ?     | 22.8 | 15.7 | 21   | ?    | ?    | ?    | ?    | 18.1 | ?    | ?    | ?    | 2.4  | 13.6  | 4.4 | 5.9  |
| NHM 19591/2    | <i>P. piveteaui</i>        | 89.1  | 23.9 | 16.1 | 27   | 10.7 | 8.6  | 12.2 | 17.6 | 20.5 | 60   | 45.6 | 64   | 3.5  | 13.7  | 5.3 | 5.9  |

Table S1 - Measurements (in mm) for all the 45 specimens examined in the study. Abbreviations: AFB, anal-fin base; CPD, caudal peduncle depth; CPL, caudal peduncle length; DFB, dorsal-fin base; HD, head depth; HL, head length; MBD, maximum body depth; MSD, maximum scale depth; OD, orbit diameter; PANA, preanal distance; PDOR, predorsal distance; POSTO, postorbital length; PPEC, prepectoral distance; PEEL, prepelvic distance; PREO, preorbital length; SL, standard length.

| SPECIMEN       | Labeling                   | VSR | HSR | DFI | AFI | PFI | PFR | DFR | AFR | PVFR | CFR |
|----------------|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|
| MNHM F.MAE1023 | <i>P. sp</i>               | 40  | ?   | 25  | 20  | 14  | ?   | 16  | 11  | ?    | 20  |
| MNHM F.MAE361  | <i>P. madagascariensis</i> | ?   | 13  | 25  | 22  | 13  | 12  | 14  | ?   | 8    | ?   |
| MNHM F.MAE652  | <i>P. sp</i>               | 40  | ?   | 25  | 21  | 12  | ?   | ?   | 11  | ?    | ?   |
| MNHN F.MAE111  | <i>P. madagascariensis</i> | ?   | 12  | 24  | 19  | 10  | 13  | 15  | 11  | 8    | ?   |
| MNHN F.MAE1111 | <i>P. sp</i>               | 40  | 13  | 24  | 21  | 11  | ?   | 14  | 11  | ?    | ?   |
| MNHN F.MAE112  | <i>P. madagascariensis</i> | 41  | 12  | 26  | 22  | 12  | 12  | 15  | 11  | 7    | ?   |
| MNHN F.MAE113  | <i>P. madagascariensis</i> | ?   | 13  | 27  | ?   | 10  | ?   | 15  | ?   | ?    | ?   |
| MNHN F.MAE125  | <i>P. madagascariensis</i> | 40  | 13  | 26  | 22  | 13  | ?   | 14  | ?   | 8    | 20  |
| MNHN F.MAE1282 | <i>P. madagascariensis</i> | ?   | ?   | 26  | 21  | 13  | 11  | 14  | ?   | ?    | ?   |
| MNHN F.MAE1283 | <i>P. madagascariensis</i> | 40  | 12  | 25  | 21  | 13  | 12  | 15  | 15  | 9    | ?   |
| MNHN F.MAE1284 | <i>P. madagascariensis</i> | ?   | 13  | 26  | 21  | 13  | 14  | 15  | 14  | 8    | ?   |
| MNHN F.MAE1371 | <i>P. madagascariensis</i> | 41  | ?   | ?   | ?   | 13  | ?   | ?   | ?   | ?    | 20  |
| MNHN F.MAE364  | <i>P. madagascariensis</i> | 40  | 14  | 25  | 21  | 12  | ?   | 17  | 13  | ?    | ?   |
| MNHN F.MAE365  | <i>P. madagascariensis</i> | ?   | ?   | ?   | 18  | 9   | ?   | ?   | 12  | 7    | ?   |
| MNHN F.MAE366  | <i>P. sp</i>               | ?   | 13  | ?   | ?   | 13  | 14  | ?   | ?   | 9    | ?   |
| MNHN F.MAE371  | <i>P. madagascariensis</i> | ?   | 13  | ?   | 21  | 13  | ?   | ?   | 13  | 9    | ?   |
| MNHN F.MAE378  | <i>P. madagascariensis</i> | ?   | ?   | 25  | 22  | 13  | ?   | ?   | ?   | ?    | ?   |
| MNHN F.MAE379  | <i>P. madagascariensis</i> | 41  | ?   | 26  | ?   | 13  | 13  | ?   | ?   | 8    | ?   |
| MNHN F.MAE51   | <i>P. madagascariensis</i> | ?   | ?   | ?   | ?   | 11  | 15  | ?   | ?   | 9    | ?   |
| MNHN F.MAE526  | <i>P. madagascariensis</i> | 39  | 15  | 25  | 22  | 12  | ?   | 16  | 13  | 8    | 20  |
| MNHN F.MAE646  | <i>P. piveteaui</i>        | ?   | 12  | 26  | 20  | 13  | ?   | 14  | ?   | ?    | ?   |
| MNHN F.MAE847  | <i>P. sp</i>               | ?   | ?   | 24  | 21  | 13  | ?   | 14  | 10  | ?    | ?   |
| MPUM 11585     | <i>P. sp</i>               | 39  | 13  | 24  | ?   | 11  | ?   | 14  | ?   | 7    | ?   |
| MPUM 11586     | <i>P. sp</i>               | 39  | 13  | 26  | 23  | 14  | ?   | 13  | ?   | 6    | ?   |
| MSNM V1266     | <i>piveteaui</i>           | ?   | 12  | ?   | 18  | 11  | ?   | 11  | ?   | ?    | ?   |
| MSNM V1356     | <i>P. sp</i>               | 42  | 12  | 25  | 20  | 12  | ?   | 15  | 11  | ?    | ?   |
| MSNM V1369     | <i>P. madagascariensis</i> | 39  | 14  | ?   | 20  | 10  | 12  | 13  | ?   | 7    | ?   |
| MSNM V1705     | <i>P. madagascariensis</i> | ?   | 15  | 24  | 20  | 12  | ?   | 14  | 12  | 7    | ?   |
| MSNM V1708     | <i>P. piveteaui</i>        | ?   | 12  | 25  | ?   | ?   | ?   | ?   | ?   | ?    | ?   |
| MSNM V1723     | <i>P. madagascariensis</i> | ?   | ?   | 25  | 20  | 12  | ?   | ?   | ?   | ?    | ?   |
| MSNM V1730     | <i>P. piveteaui</i>        | ?   | ?   | 25  | 20  | ?   | ?   | 15  | 12  | ?    | ?   |
| MSNM V1765     | <i>P. piveteaui</i>        | 41  | 12  | 27  | 21  | 14  | 13  | 15  | ?   | 7    | 20  |
| MSNM V1769     | <i>P. sp</i>               | 40  | 14  | 26  | 23  | 14  | 13  | 12  | 11  | ?    | ?   |
| MSNM V1777     | <i>P. piveteaui</i>        | 41  | 14  | 26  | 23  | 11  | ?   | 12  | 13  | 6    | ?   |
| MSNM V1782     | <i>P. madagascariensis</i> | 40  | 13  | 26  | 23  | 15  | 13  | ?   | ?   | ?    | ?   |
| MSNM V1845     | <i>P. piveteaui</i>        | ?   | 13  | 25  | 22  | 11  | 14  | 16  | 12  | 9    | ?   |
| MSNM V1862     | <i>P. madagascariensis</i> | 39  | ?   | 25  | 20  | 11  | ?   | ?   | 11  | ?    | ?   |
| MSNM V1925     | <i>P. piveteaui</i>        | ?   | 13  | ?   | ?   | ?   | ?   | ?   | 12  | ?    | ?   |
| MSNM V1945     | <i>P. madagascariensis</i> | 40  | 13  | 24  | ?   | ?   | ?   | 14  | ?   | ?    | ?   |
| MSNM V3191     | <i>P. sp</i>               | ?   | ?   | 25  | ?   | 12  | 12  | ?   | ?   | 7    | ?   |
| MSNM V7116     | <i>P. madagascariensis</i> | 40  | 16  | 26  | ?   | 14  | 12  | 16  | ?   | ?    | ?   |
| MSNM V7117     | <i>P. piveteaui</i>        | ?   | 14  | ?   | 23  | 15  | 12  | ?   | 10  | 9    | ?   |
| MSNM V7118     | <i>P. piveteaui</i>        | 38  | 13  | 25  | 21  | 13  | 11  | 13  | 10  | 7    | ?   |
| NHM 19580      | <i>P. piveteaui</i>        | ?   | 13  | ?   | ?   | 12  | ?   | ?   | ?   | ?    | ?   |
| NHM 19591/2    | <i>P. piveteaui</i>        | 40  | 14  | 25  | 21  | 12  | 12  | 18  | ?   | ?    | ?   |

Table S2 - Meristic count for all the 45 specimens examined in the study. Abbreviations: AFI, anal-fin insertion; AFR, anal-fin rays; CFR, caudal-fin rays; DFI, dorsal-fin insertion; DFR, dorsal-fin rays; HSR, horizontal scale rows; PFI, pelvic-fin insertion; PFR, pectoral-fin rays; PVFR, pelvic-fin rays; VSR, vertical scale rows.

|                | X1       | Y1       | X2       | Y2       | X3       | Y3       | X4       | Y4       | X5       | Y5       | X6       | Y6       |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| MNHN F.MAE111  | -0.00083 | -0.00179 | -0.00543 | -0.00476 | 0.00183  | 0.00076  | 0.00476  | 0.00443  | -0.00407 | -0.00297 | 0.00464  | 0.00853  |
| MNHN F.MAE112  | -0.00022 | -0.00024 | -0.00189 | 0.00246  | 0.00022  | 0.00171  | 0.00447  | 0.00072  | -0.0028  | -0.00005 | 0.00824  | 0.00003  |
| MNHN F.MAE113  | 0.00197  | 0.00089  | 0.0015   | -0.00054 | 0.00129  | -0.00187 | -0.00049 | 0.0022   | -0.00036 | -0.00035 | 0.001    | 0.00277  |
| MNHN F.MAE125  | -0.00065 | -0.00089 | 0.00039  | 0.00339  | -0.00011 | -0.00187 | -0.00005 | 0.00031  | -0.00042 | 0.0009   | -0.00047 | -0.00361 |
| MNHN F.MAE1282 | -0.00197 | -0.00191 | 0.00042  | -0.00124 | -0.00324 | -0.00282 | -0.00015 | -0.00047 | 0.00278  | 0.00244  | -0.0039  | 0.00238  |
| MNHN F.MAE1283 | -0.00171 | -0.00203 | 0.00124  | -0.00157 | -0.00091 | 0.00352  | -0.00217 | 0.00049  | 0.00065  | -0.00179 | -0.00337 | -0.00058 |
| MNHN F.MAE1284 | 0.0002   | 0.00029  | -0.00229 | -0.00216 | 0.00039  | 0.00242  | -0.00097 | -0.00033 | 0.00002  | -0.00116 | -0.0025  | 0.00156  |
| MNHN F.MAE1371 | 0.0012   | 0.00114  | 0.00234  | -0.00376 | 0.00089  | 0.00116  | -0.00308 | 0.00233  | 0.00061  | -0.00234 | -0.00212 | 0.00545  |
| MNHN F.MAE365  | -0.00049 | -0.00023 | 0.00048  | -0.00114 | 0.00085  | -0.00109 | 0.00065  | 0.00105  | 0.00001  | -0.00135 | 0.00192  | 0.00259  |
| MNHN F.MAE366  | 0.00042  | 0.00065  | -0.00049 | 0.00446  | -0.00047 | -0.00199 | 0.00103  | -0.00442 | -0.00023 | 0.00352  | 0.00155  | -0.00291 |
| MNHN F.MAE378  | -0.00107 | -0.00097 | 0.00003  | 0.00411  | -0.00046 | -0.00177 | 0.00002  | -0.00624 | 0.00008  | 0.00356  | 0.00146  | -0.00422 |
| MNHN F.MAE379  | -0.00144 | -0.00073 | 0.00363  | 0.00331  | -0.00128 | -0.00439 | -0.00261 | -0.00491 | 0.00383  | 0.00206  | -0.00318 | -0.00342 |
| MNHN F.MAE51   | 0.00172  | 0.00182  | 0.00289  | 0.0046   | -0.00264 | -0.00128 | -0.0014  | -0.00315 | 0.00342  | 0.00312  | -0.0004  | -0.00218 |
| MNHN F.MAE526  | 0.00173  | 0.00099  | 0.00034  | -0.00137 | 0.00226  | 0.00134  | -0.0002  | 0.00472  | -0.00305 | -0.00155 | -0.00132 | 0.00119  |
| MNHN F.MAE652  | 0.0009   | 0.0007   | 0.0006   | 0.00058  | 0.00119  | -0.00219 | 0.00099  | 0.00221  | -0.00045 | -0.00099 | -0.00045 | -0.0011  |
| MNHN F.MAE847  | 0.00085  | 0.00062  | -0.00011 | 0.00203  | 0.00068  | 0.00194  | -0.00046 | -0.00174 | -0.00228 | 0.00194  | 0.00053  | 0.0003   |
| MSNM V1266     | -0.00182 | -0.00136 | 0.00092  | -0.00456 | -0.00265 | 0.00102  | 0.00126  | 0.00833  | 0.00056  | -0.00309 | -0.00465 | 0.0058   |
| MSNM V1369     | -0.00299 | -0.00173 | 0.00029  | 0.00111  | -0.00164 | 0.00136  | -0.00034 | -0.00133 | 0.00161  | 0.00019  | -0.001   | -0.00442 |
| MSNM V1705     | 0.00057  | 0.00022  | -0.00061 | 0.00166  | 0.00013  | -0.0022  | -0.00023 | -0.00314 | 0.00085  | 0.00167  | -0.00033 | -0.00367 |
| MSNM V1730     | 0.00026  | 0.00033  | -0.00022 | -0.0017  | 0.00122  | 0.00111  | -0.00178 | -0.00163 | -0.00066 | -0.00035 | 0.00009  | 0.00184  |
| MSNM V1862     | 0.00115  | 0.00086  | -0.00158 | 0.0013   | -0.00082 | -0.00241 | 0.00179  | -0.00067 | 0.00074  | 0.00117  | -0.00046 | -0.0018  |
| MSNM V1925     | 0.00247  | 0.00144  | 0.0003   | 0.00461  | 0.00141  | -0.0021  | 0.00043  | -0.00476 | -0.00039 | 0.00226  | 0.001    | -0.00404 |
| MSNM V7116     | -0.00043 | -0.00058 | 0.00325  | -0.00142 | -0.00147 | 0.00437  | -0.00482 | 0.00202  | 0.00009  | 0.00082  | -0.00702 | -0.00035 |
| MNHN F.MAE364  | -0.00281 | -0.00128 | 0.00245  | -0.00043 | -0.00019 | 0.00032  | -0.00319 | -0.00141 | 0.00158  | -0.00135 | -0.00076 | -0.00057 |
| MNHN F.MAE361  | 0.00106  | 0.0009   | 0.00365  | 0.00236  | -0.00071 | 0.00125  | -0.00271 | -0.00175 | 0.00207  | -0.00043 | -0.00109 | -0.00324 |
| MNHN F.MAE646  | 0.00137  | 0.00112  | -0.00648 | -0.00312 | 0.00033  | 0.00256  | 0.00103  | -0.00206 | -0.00041 | 0.00079  | 0.00027  | -0.00135 |
| NHM 19580      | 0.00147  | 0.00101  | -0.00076 | -0.00123 | 0.00183  | 0.00134  | 0.00252  | 0.00348  | -0.00331 | -0.0015  | 0.00583  | 0.0024   |
| NHM 19591      | 0.00089  | 0.0013   | -0.00121 | -0.00111 | 0.00242  | 0.00139  | 0.00072  | 0.00014  | -0.00267 | -0.00155 | 0.00419  | 0.00197  |
| MSNM V1356     | 0.00045  | 0.00104  | -0.00253 | 0.00193  | 0.00351  | -0.00032 | 0.00268  | -0.00353 | -0.00207 | -0.00164 | 0.00622  | -0.00246 |
| MSNM V1723     | -0.00087 | -0.00041 | 0.0012   | -0.00268 | -0.00162 | -0.0032  | 0.00065  | 0.00235  | 0.00326  | -0.001   | -0.00059 | 0.0043   |
| MSNM V1765     | 0.00209  | 0.00175  | -0.00107 | -0.00479 | 0.00081  | -0.00101 | 0.00192  | 0.00455  | 0.00005  | -0.00174 | 0.00241  | 0.00665  |
| MSNM V1845     | -0.00113 | -0.00071 | 0.00012  | -0.00132 | -0.00159 | 0.00064  | -0.00005 | 0.00126  | 0.00133  | -0.00062 | -0.00083 | -0.00024 |
| MSNM V3191     | -0.00162 | -0.00193 | -0.00068 | -0.0002  | -0.00133 | 0.00093  | -0.00024 | 0.00248  | -0.00082 | 0.00092  | -0.00482 | -0.00243 |
| MSNM V1708     | -0.00069 | -0.0003  | -0.00071 | 0.00121  | -0.00016 | 0.00138  | 0.00002  | -0.00154 | 0.00045  | 0.00045  | -0.0001  | -0.00517 |

Table S3 - Landmark and semilandmark coordinates for the 34 specimens included in the morphospace analyses (continue).

|                | X7       | Y7       | X8       | Y8       | X9       | Y9       | X10      | Y10      | X11      | Y11      | X12      | Y12      |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| MNHN F.MAE111  | 0.00575  | 0.00461  | 0.00124  | 0.00348  | 0.00049  | -0.00391 | 0.00315  | 0.00289  | 0.00409  | 0.0053   | -0.00176 | -0.00659 |
| MNHN F.MAE112  | 0.00738  | 0.00298  | -0.00011 | -0.00004 | -0.00063 | -0.0014  | 0.00427  | -0.00293 | 0.00658  | 0.0029   | -0.00688 | 0.00056  |
| MNHN F.MAE113  | -0.00012 | -0.00165 | 0        | 0.00037  | -0.00123 | -0.00042 | -0.00308 | 0.00027  | -0.00172 | -0.00081 | -0.00387 | -0.01108 |
| MNHN F.MAE125  | 0.00124  | -0.00723 | 0.0022   | -0.00058 | 0.0011   | -0.0039  | -0.00189 | -0.00317 | 0.00092  | -0.00268 | -0.00055 | -0.00482 |
| MNHN F.MAE1282 | 0.00107  | 0.00231  | 0.00437  | -0.00057 | 0.00066  | 0.00459  | -0.00073 | 0.00454  | 0.00563  | -0.00188 | 0.00031  | 0.00542  |
| MNHN F.MAE1283 | -0.00245 | 0.00377  | -0.00015 | -0.00104 | -0.00358 | 0.00263  | -0.00531 | -0.00054 | -0.00369 | -0.00211 | -0.00264 | 0.00346  |
| MNHN F.MAE1284 | -0.00168 | 0.00169  | 0.00376  | 0.00316  | 0.00295  | -0.00552 | -0.00359 | -0.00004 | 0.00313  | 0.00585  | 0.00374  | -0.00053 |
| MNHN F.MAE1371 | -0.00364 | 0.0056   | 0.00017  | 0.00022  | 0.00098  | 0.00356  | 0.00022  | 0.00655  | -0.00103 | 0.00048  | 0.00376  | 0.00026  |
| MNHN F.MAE365  | 0.00247  | 0.00111  | 0        | 0.00091  | 0.00044  | -0.00163 | -0.00057 | -0.00014 | 0.00092  | 0.00302  | -0.0012  | -0.0077  |
| MNHN F.MAE366  | 0.00277  | -0.00451 | 0.0002   | -0.00195 | 0.00057  | 0.00142  | 0.00354  | -0.00531 | 0.00246  | -0.00428 | -0.00108 | 0.00348  |
| MNHN F.MAE378  | 0.0032   | -0.00252 | -0.00056 | -0.00139 | -0.00033 | 0.00239  | 0.00464  | -0.00416 | -0.0009  | -0.00566 | -0.0013  | 0.00952  |
| MNHN F.MAE379  | -0.00396 | -0.00194 | -0.00186 | -0.00085 | -0.00087 | -0.00032 | -0.00146 | -0.00473 | -0.00648 | -0.0019  | 0.00456  | -0.00207 |
| MNHN F.MAE51   | 0.00009  | -0.00068 | -0.00003 | 0.00015  | 0.00141  | -0.00172 | -0.00047 | -0.0023  | -0.00109 | -0.00259 | 0.00111  | 0.00404  |
| MNHN F.MAE526  | -0.00483 | -0.00237 | -0.00085 | 0.00223  | -0.00103 | -0.00469 | -0.0056  | 0.00048  | -0.00137 | -0.00011 | 0.0035   | -0.00121 |
| MNHN F.MAE652  | 0.00018  | -0.00454 | 0.0007   | -0.00123 | 0.00016  | 0.00245  | -0.0006  | 0.00064  | -0.00187 | -0.00035 | -0.00152 | -0.00556 |
| MNHN F.MAE847  | 0.00148  | -0.00258 | 0.00072  | -0.00052 | 0.00127  | 0.00211  | 0.00269  | -0.00094 | -0.00086 | -0.00424 | 0.00143  | 0.0053   |
| MSNM V1266     | 0.00037  | 0.0063   | 0.00015  | 0.00187  | -0.00016 | -0.00135 | -0.0054  | 0.00422  | -0.0037  | 0.00576  | 0.00196  | -0.00598 |
| MSNM V1369     | -0.00079 | 0.00289  | 0.00199  | -0.00302 | 0.0001   | 0.0029   | 0.00054  | 0.00135  | -0.00243 | -0.00432 | -0.00026 | 0.00932  |
| MSNM V1705     | -0.00061 | -0.00578 | -0.00002 | 0.00005  | 0.00029  | -0.0022  | 0.00193  | -0.00101 | 0.00204  | -0.00258 | -0.00042 | 0.00307  |
| MSNM V1730     | -0.00066 | 0.00128  | -0.0029  | -0.00072 | -0.00137 | 0.005    | 0.00146  | 0.00106  | -0.00217 | -0.0008  | 0.00146  | 0.00249  |
| MSNM V1862     | 0.00194  | -0.00654 | -0.00006 | 0.00056  | 0.00042  | -0.00286 | 0.00095  | -0.00205 | -0.00072 | -0.00135 | -0.00276 | -0.00061 |
| MSNM V1925     | 0.00069  | -0.0075  | -0.00005 | -0.00224 | 0.0002   | 0.0022   | -0.00018 | -0.00565 | 0.00468  | -0.00703 | -0.0004  | 0.00879  |
| MSNM V7116     | -0.00482 | 0.00264  | 0.001    | -0.00292 | 0.00014  | 0.006    | -0.00675 | 0.00313  | 0        | -0.00032 | 0.0028   | -0.00295 |
| MNHN F.MAE364  | -0.00251 | 0.00269  | -0.00388 | 0.00097  | -0.00327 | -0.00073 | 0.00215  | -0.00047 | -0.00638 | 0.00298  | 0.00078  | -0.00059 |
| MNHN F.MAE361  | -0.00356 | 0.0003   | -0.00512 | -0.00063 | -0.00145 | -0.00132 | -0.00418 | -0.00086 | -0.00165 | 0        | 0.00383  | 0.00316  |
| MNHN F.MAE646  | -0.00156 | 0.00016  | -0.00167 | 0.00004  | -0.00136 | -0.00043 | -0.00061 | 0.00069  | -0.00063 | 0        | -0.00304 | 0.00183  |
| NHM 19580      | 0.00393  | 0.00096  | 0.00066  | 0.00004  | 0.00214  | 0.00103  | 0.00481  | 0.0047   | 0.00418  | 0.00115  | -0.00102 | -0.00112 |
| NHM 19591      | 0.00014  | 0.002    | -0.00002 | -0.00014 | 0.00226  | -0.00045 | 0.00216  | -0.00091 | 0.00419  | 0.00409  | -0.00045 | -0.0049  |
| MSNM V1356     | -0.00018 | -0.00228 | 0.00185  | 0.00036  | 0.00282  | -0.00291 | 0.00426  | -0.00391 | 0.00228  | -0.0018  | 0.00061  | 0.00352  |
| MSNM V1723     | 0.00045  | 0.00469  | -0.00261 | 0.00276  | -0.00222 | -0.00097 | 0.0014   | 0.00128  | -0.00441 | 0.00404  | 0.00232  | -0.00354 |
| MSNM V1765     | 0.00109  | 0.00416  | 0.00072  | 0.00168  | -0.00017 | 0.00082  | 0.00275  | 0.00618  | 0.00198  | 0.00382  | -0.00465 | -0.00856 |
| MSNM V1845     | 0.00069  | 0.00275  | -0.00008 | -0.00017 | 0.00027  | 0.00077  | 0.00267  | 0.00275  | -0.00087 | 0.00436  | -0.00363 | -0.00217 |
| MSNM V3191     | -0.00059 | -0.00231 | -0.00025 | -0.00057 | -0.00016 | 0.00077  | -0.00028 | 0.00096  | -0.00056 | 0.00204  | 0.00357  | 0.0025   |
| MSNM V1708     | -0.00297 | -0.00045 | 0.00049  | -0.00027 | -0.00082 | -0.0019  | -0.00289 | -0.00255 | -0.00053 | -0.00097 | 0.0017   | 0.00325  |

Table S3 - Landmark and semilandmark coordinates for the 34 specimens included in the morphospace analyses (continue).

|                | X13      | Y13      | X14      | Y14      | X15      | Y15      | X16      | Y16      | X17      | Y17      | X18      | Y18      |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| MNHN F.MAE111  | -0.00227 | -0.00208 | 0.00233  | -0.00235 | 0.00126  | 0.00472  | 0.00834  | 0.0061   | -0.00113 | -0.00668 | -0.00474 | -0.02099 |
| MNHN F.MAE112  | -0.01375 | 0.00099  | 0.00024  | -0.00518 | 0.00619  | -0.00222 | -0.00153 | 0.00418  | -0.01612 | 0.00248  | -0.01785 | -0.01219 |
| MNHN F.MAE113  | -0.00237 | -0.00747 | -0.00227 | 0.00101  | 0.00395  | 0.00613  | 0.00611  | 0.01148  | 0.00473  | 0.02039  | -0.0028  | -0.00565 |
| MNHN F.MAE125  | -0.00319 | 0.00193  | 0.00336  | 0.00231  | 0.00314  | -0.00018 | 0.00094  | 0.00029  | -0.00367 | 0.01527  | -0.00276 | 0.00209  |
| MNHN F.MAE1282 | 0.00142  | -0.00363 | 0.0037   | 0.00509  | -0.00207 | -0.00094 | 0.00674  | -0.0024  | 0.00533  | 0.00477  | 0.00197  | 0.00992  |
| MNHN F.MAE1283 | 0.00815  | -0.00289 | -0.00113 | -0.00373 | -0.00266 | 0.01004  | 0.00261  | 0.00208  | 0.0062   | -0.00249 | -0.00753 | -0.00837 |
| MNHN F.MAE1284 | 0.00402  | 0.00025  | 0.00021  | -0.01012 | -0.00192 | 0.00073  | 0.00064  | -0.00162 | 0.00203  | -0.01007 | -0.0028  | -0.00576 |
| MNHN F.MAE1371 | 0.0053   | -0.00753 | -0.0046  | 0.0036   | -0.00817 | 0.00086  | -0.0016  | -0.00716 | 0.00608  | -0.0177  | 0.00069  | -0.00356 |
| MNHN F.MAE365  | -0.01077 | -0.00151 | 0.00074  | -0.0009  | 0.0057   | 0.00002  | 0.00147  | 0.00589  | -0.01727 | -0.00423 | -0.00194 | -0.01484 |
| MNHN F.MAE366  | -0.00568 | 0.01061  | -0.00018 | 0.00113  | 0.00496  | -0.00728 | -0.00187 | -0.00383 | -0.00696 | 0.00045  | -0.00308 | 0.00118  |
| MNHN F.MAE378  | -0.00335 | 0.0097   | 0.00043  | 0.00528  | 0.00015  | -0.00822 | -0.00428 | -0.00401 | -0.00794 | 0.00468  | 0.00185  | 0.01663  |
| MNHN F.MAE379  | 0.0015   | 0.00852  | -0.00194 | 0.00414  | -0.0011  | -0.00918 | -0.00081 | -0.00073 | 0.01016  | 0.00728  | 0.0129   | 0.00093  |
| MNHN F.MAE51   | -0.00172 | 0.00225  | 0.00139  | -0.00535 | 0.00224  | -0.00447 | -0.00359 | 0.00129  | -0.00886 | -0.00028 | 0.00345  | -0.00418 |
| MNHN F.MAE526  | 0.00424  | -0.00224 | 0.00254  | 0.00363  | -0.00393 | 0.00926  | 0.00782  | -0.0015  | 0.00833  | 0.00446  | 0.00398  | 0.0008   |
| MNHN F.MAE652  | -0.00164 | -0.00029 | -0.00645 | -0.00053 | -0.00306 | -0.0039  | -0.00294 | 0.0062   | -0.00256 | 0.0024   | -0.00468 | -0.00879 |
| MNHN F.MAE847  | -0.00076 | 0.00565  | 0.00356  | 0.00283  | 0.00385  | -0.00562 | -0.00087 | -0.00434 | -0.01159 | -0.00907 | 0.00697  | 0.00179  |
| MSNM V1266     | 0.00694  | -0.00717 | 0.00585  | -0.00455 | -0.00711 | 0.01231  | 0.00192  | 0.00151  | 0.01277  | -0.00977 | 0.00964  | -0.00784 |
| MSNM V1369     | 0.00262  | 0.00023  | 0.00197  | 0.00279  | -0.00228 | -0.0003  | -0.00109 | -0.01099 | -0.00398 | -0.00695 | -0.00758 | 0.01449  |
| MSNM V1705     | -0.00219 | 0.00201  | 0.00334  | 0.00597  | 0.00265  | -0.00295 | -0.0028  | -0.00298 | -0.00384 | 0.00889  | 0.00412  | 0.0129   |
| MSNM V1730     | 0.0024   | -0.00034 | -0.00362 | 0.00274  | -0.0017  | -0.00165 | -0.00282 | -0.00182 | -0.00242 | -0.01625 | -0.00328 | -0.00275 |
| MSNM V1862     | -0.00254 | 0.00197  | 0.00416  | -0.00354 | 0.00487  | 0.00044  | -0.00067 | 0.00448  | -0.00809 | 0.00482  | -0.00269 | -0.00063 |
| MSNM V1925     | -0.00427 | 0.00953  | -0.00208 | 0.00416  | 0.00529  | -0.00711 | -0.00021 | -0.00486 | -0.01238 | 0.00414  | -0.0071  | 0.00616  |
| MSNM V7116     | 0.0086   | -0.00544 | 0.00044  | -0.002   | -0.00211 | 0.00457  | 0.00648  | 0.00027  | 0.00526  | -0.00495 | 0.00948  | -0.00184 |
| MNHN F.MAE364  | 0.00489  | -0.00036 | -0.00336 | 0.00039  | -0.00156 | -0.00257 | -0.00434 | 0.00006  | 0.00203  | -0.00799 | -0.0052  | -0.00587 |
| MNHN F.MAE361  | 0.00057  | -0.0014  | 0.0019   | -0.00092 | -0.00244 | -0.00601 | 0.00168  | 0.00206  | -0.00119 | 0.00268  | 0.00681  | -0.00332 |
| MNHN F.MAE646  | 0.00023  | -0.00375 | -0.00083 | 0.00011  | 0.00237  | 0.00558  | -0.00086 | -0.00255 | 0.00411  | 0.00079  | -0.00606 | 0.00751  |
| NHM 19580      | -0.00764 | -0.00742 | 0.00284  | 0.00301  | 0.00368  | -0.00132 | -0.00352 | -0.00102 | -0.01403 | -0.00131 | 0.0024   | 0.00404  |
| NHM 19591      | -0.00189 | 0.00134  | -0.00128 | -0.00258 | 0.00304  | 0.0006   | -0.00635 | -0.00218 | 0.00537  | -0.00204 | 0.00104  | 0.00584  |
| MSNM V1356     | -0.00318 | 0.00508  | 0.00202  | -0.00321 | 0.00452  | -0.00276 | 0.00321  | -0.00016 | -0.00172 | 0.00939  | 0.00747  | 0.00519  |
| MSNM V1723     | 0.00372  | 0.00124  | -0.00336 | 0.00255  | -0.00302 | 0.00339  | -0.00146 | 0.00601  | 0.01623  | -0.00057 | 0.00653  | -0.00587 |
| MSNM V1765     | -0.00257 | -0.01098 | -0.00534 | 0.00337  | -0.00379 | 0.00679  | -0.00031 | -0.00032 | 0.01674  | 0.002    | 0.00146  | 0.00807  |
| MSNM V1845     | 0.00198  | -0.00472 | -0.00309 | -0.00594 | -0.00648 | -0.0004  | -0.00626 | 0.00257  | 0.00244  | -0.00194 | -0.00178 | 0.00587  |
| MSNM V3191     | 0.01079  | 0.00344  | 0.00094  | -0.003   | -0.00489 | -0.001   | -0.00493 | -0.00222 | 0.00975  | -0.00021 | 0.00446  | 0.00629  |
| MSNM V1708     | 0.00238  | 0.00448  | -0.00242 | -0.00018 | 0.0004   | 0.00265  | 0.00518  | 0.00024  | 0.00621  | 0.00761  | -0.00334 | 0.00273  |

Table S3 - Landmark and semilandmark coordinates for the 34 specimens included in the morphospace analyses (continue).

|                | X19      | Y19      | X20      | Y20      | X21      | Y21      | X22      | Y22      | X23      | Y23      | X24      | Y24      |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| MNHN F.MAE111  | 0.00773  | 0.00801  | -0.00476 | -0.00605 | -0.0208  | 0.00316  | -0.01013 | 0.01842  | 0.0344   | 0.0224   | 0.0062   | -0.00732 |
| MNHN F.MAE112  | 0.00453  | 0.00603  | 0.00224  | -0.01416 | -0.01065 | -0.00933 | -0.00785 | -0.01184 | -0.02443 | -0.01562 | 0.01269  | 0.01551  |
| MNHN F.MAE113  | -0.00595 | 0.00601  | -0.01935 | 0.01243  | -0.00348 | -0.00086 | 0.00309  | -0.0215  | -0.02608 | -0.03571 | 0.02331  | -0.04415 |
| MNHN F.MAE125  | -0.00676 | -0.00611 | -0.00608 | -0.00118 | -0.00063 | 0.00526  | -0.00668 | -0.00753 | -0.01759 | -0.03022 | -0.01617 | -0.01193 |
| MNHN F.MAE1282 | -0.01057 | 0.0008   | -0.01353 | 0.01225  | -0.00764 | 0.01645  | 0.02001  | 0.0145   | -0.01042 | -0.01808 | -0.02613 | -0.0378  |
| MNHN F.MAE1283 | 0.00357  | -0.01528 | -0.00474 | -0.02261 | -0.00972 | -0.0027  | -0.01636 | 0.01     | 0.03665  | -0.04691 | -0.05264 | -0.00664 |
| MNHN F.MAE1284 | 0.00981  | -0.0006  | 0.00148  | -0.02135 | -0.0286  | -0.00859 | 0.01502  | 0.00482  | 0.01357  | -0.01198 | 0.03528  | 0.03954  |
| MNHN F.MAE1371 | 0.0044   | -0.00095 | 0.00508  | 0.0062   | -0.00252 | -0.00935 | -0.00545 | -0.00593 | 0.0071   | 0.00449  | -0.01242 | 0.02116  |
| MNHN F.MAE365  | 0.00244  | 0.00134  | -0.00374 | 0.00995  | -0.01394 | -0.00913 | 0.01659  | 0.01398  | -0.00227 | -0.01834 | 0.01972  | 0.04766  |
| MNHN F.MAE366  | -0.00486 | -0.006   | 0.0077   | 0.01189  | 0.00783  | -0.00271 | -0.02536 | -0.01728 | -0.03453 | 0.0181   | 0.00027  | 0.0066   |
| MNHN F.MAE378  | -0.00644 | 0.00316  | -0.0037  | 0.00977  | 0.01134  | 0.0119   | 0.00766  | 0.00492  | -0.02643 | 0.01493  | 0.01329  | -0.00408 |
| MNHN F.MAE379  | -0.00469 | 0.00022  | 0.00602  | 0.00282  | 0.01558  | -0.00579 | -0.00452 | -0.02814 | -0.02399 | 0.01916  | -0.01528 | -0.0192  |
| MNHN F.MAE51   | -0.00932 | -0.0146  | 0.00794  | 0.01455  | 0.00376  | -0.00771 | 0.0057   | 0.00044  | -0.00346 | 0.01327  | -0.00519 | 0.01454  |
| MNHN F.MAE526  | 0.00206  | 0.005    | -0.02149 | 0.01612  | -0.00249 | 0.00335  | -0.013   | -0.01085 | -0.01164 | -0.00749 | 0.00165  | -0.01013 |
| MNHN F.MAE652  | 0.00027  | 0.0111   | -0.00044 | 0.00805  | -0.00661 | -0.00781 | -0.0032  | -0.00798 | 0.00194  | -0.00039 | -0.0051  | 0.00822  |
| MNHN F.MAE847  | 0.00461  | -0.00466 | 0.02173  | -0.0064  | -0.00336 | 0.00854  | 0.02401  | 0.00873  | -0.01377 | -0.01046 | -0.02817 | -0.01645 |
| MSNM V1266     | -0.009   | -0.00377 | 0.00471  | -0.01084 | 0.01477  | -0.00284 | 0.00091  | 0.00591  | 0.00822  | 0.02923  | -0.00064 | -0.00884 |
| MSNM V1369     | -0.00372 | -0.0087  | 0.00604  | -0.0079  | 0.03293  | 0.00943  | -0.02857 | -0.00071 | 0.00873  | 0.0343   | -0.00195 | -0.03108 |
| MSNM V1705     | -0.00121 | 0.00633  | -0.00665 | 0.01817  | -0.00798 | 0.00285  | 0.00884  | 0.00364  | -0.00339 | 0.00789  | -0.0416  | -0.00128 |
| MSNM V1730     | -0.00605 | -0.00845 | 0.01364  | 0.00536  | 0.01284  | 0.00355  | -0.00663 | 0.01159  | 0.01056  | -0.03127 | 0.00328  | 0.00023  |
| MSNM V1862     | -0.00289 | -0.00282 | 0.0071   | 0.00124  | -0.00204 | 0.00681  | 0.00751  | 0.01172  | 0.00061  | 0.02249  | 0.02619  | -0.03201 |
| MSNM V1925     | 0.01137  | -0.00301 | -0.0052  | 0.01915  | -0.01494 | 0.00902  | 0.01525  | 0.02206  | -0.02385 | -0.00717 | 0.01721  | 0.02239  |
| MSNM V7116     | 0.00165  | -0.01331 | 0.00715  | -0.01378 | -0.005   | 0.00017  | 0.00157  | -0.00318 | 0.02113  | -0.02376 | -0.02168 | -0.02118 |
| MNHN F.MAE364  | -0.00109 | -0.00351 | 0.00337  | -0.00867 | 0.00196  | -0.02272 | 0.00339  | -0.01276 | 0.02794  | 0.0084   | -0.0009  | 0.03055  |
| MNHN F.MAE361  | 0.00873  | -0.00074 | 0.00673  | -0.01103 | -0.00072 | 0.00232  | 0.01331  | 0.00044  | -0.00953 | -0.03467 | -0.02863 | 0.01157  |
| MNHN F.MAE646  | 0.00874  | -0.00268 | -0.00316 | -0.00651 | 0.00533  | -0.00015 | -0.02145 | 0.00171  | 0.00407  | 0.00572  | 0.00419  | 0.01974  |
| NHM 19580      | 0.00736  | 0.0121   | 0.00629  | 0.00484  | 0.00438  | 0.00317  | 0.02261  | 0.00189  | -0.0028  | -0.0152  | -0.00091 | 0.03769  |
| NHM 19591      | 0.00128  | 0.00188  | 0.01418  | -0.00741 | 0.00526  | 0.00253  | -0.01264 | 0.0009   | 0.03052  | 0.00508  | 0.0093   | 0.01816  |
| MSNM V1356     | 0.00315  | 0.00503  | 0.01318  | -0.01974 | -0.00383 | 0.00477  | 0.01594  | -0.01472 | -0.02468 | 0.05276  | 0.03649  | -0.03102 |
| MSNM V1723     | -0.00208 | 0.01239  | -0.00946 | 0.01199  | 0.0186   | -0.00271 | -0.00449 | 0.00075  | 0.01379  | 0.00077  | -0.00608 | -0.00837 |
| MSNM V1765     | -0.0012  | 0.01102  | -0.01616 | 0.00874  | 0.00302  | -0.00333 | -0.01561 | -0.00115 | -0.00785 | 0.03049  | 0.03274  | 0.00123  |
| MSNM V1845     | -0.0041  | 0.00431  | -0.00566 | -0.00481 | 0.01356  | -0.00401 | -0.01634 | -0.00693 | 0.00994  | 0.00448  | 0.01214  | 0.01682  |
| MSNM V3191     | -0.0031  | 0.00257  | -0.00175 | -0.00468 | 0.00458  | 0.00496  | 0.02114  | 0.00933  | 0.03286  | 0.00712  | -0.00764 | -0.02385 |
| MSNM V1708     | 0.00134  | -0.00212 | -0.00871 | -0.00639 | -0.0108  | 0.00149  | -0.00429 | 0.00471  | 0.00468  | 0.00622  | 0.01718  | 0.0037   |

Table S3 - Landmark and semilandmark coordinates for the 34 specimens included in the morphospace analyses (continue).

Table S3 - Landmark and semi-landmark coordinates for the 34 specimens included in the morphospace analyses.

|                | X25      | Y25      | X26      | Y26      | UniX     | UniY     |
|----------------|----------|----------|----------|----------|----------|----------|
| MNHN F.MAE111  | 0.04034  | 0.041    | -0.08309 | -0.05894 | -0.07678 | 0.05044  |
| MNHN F.MAE112  | 0.00997  | -0.02612 | -0.01796 | 0.0042   | -0.05354 | 0.00963  |
| MNHN F.MAE113  | -0.01029 | -0.01764 | 0.00607  | 0.07928  | 0.07184  | -0.01686 |
| MNHN F.MAE125  | 0.04475  | 0.01882  | 0.02197  | -0.00817 | -0.06732 | 0.03004  |
| MNHN F.MAE1282 | 0.00464  | -0.02644 | -0.00146 | 0.08283  | -0.00527 | 0.03574  |
| MNHN F.MAE1283 | 0.02582  | 0.00626  | 0.0255   | -0.03617 | 0.00706  | 0.06901  |
| MNHN F.MAE1284 | -0.01141 | -0.00599 | 0.02217  | -0.04383 | 0.00866  | 0.00606  |
| MNHN F.MAE1371 | -0.0069  | -0.00663 | -0.05261 | 0.03192  | 0.01935  | -0.02666 |
| MNHN F.MAE365  | -0.03415 | -0.01662 | 0.08538  | -0.03752 | -0.00603 | -0.06969 |
| MNHN F.MAE366  | -0.03447 | -0.0121  | -0.00885 | 0.01767  | -0.09717 | -0.02589 |
| MNHN F.MAE378  | 0.02476  | -0.02799 | -0.01369 | -0.01104 | 0.03541  | -0.00785 |
| MNHN F.MAE379  | 0.00061  | 0.0259   | 0.01704  | 0.04081  | -0.09668 | 0.03322  |
| MNHN F.MAE51   | -0.00223 | -0.00964 | 0.03049  | -0.01442 | -0.07098 | -0.00015 |
| MNHN F.MAE526  | -0.00095 | -0.01944 | 0.01871  | -0.01975 | 0.05009  | -0.01549 |
| MNHN F.MAE652  | 0.00445  | -0.02418 | 0.02788  | 0.02353  | 0.0114   | -0.02302 |
| MNHN F.MAE847  | -0.00949 | -0.00097 | -0.04992 | 0.03896  | -0.05351 | -0.0186  |
| MSNM V1266     | -0.00896 | -0.00197 | 0.04603  | -0.06237 | 0.05516  | 0.01957  |
| MSNM V1369     | 0.0321   | 0.04496  | 0.04078  | -0.07154 | 0.08728  | 0.0007   |
| MSNM V1705     | -0.00839 | -0.04339 | -0.01867 | -0.02702 | 0.02641  | 0.00849  |
| MSNM V1730     | 0.03137  | -0.01237 | -0.00153 | -0.0008  | -0.00668 | -0.02707 |
| MSNM V1862     | 0.03482  | -0.0084  | 0.00412  | -0.03491 | 0.0064   | 0.00273  |
| MSNM V1925     | -0.0318  | 0.02637  | -0.04696 | 0.00987  | -0.03374 | -0.04063 |
| MSNM V7116     | -0.00324 | -0.01721 | -0.00234 | -0.02517 | 0.00053  | 0.04457  |
| MNHN F.MAE364  | 0.00119  | 0.03022  | 0.04359  | 0.00749  | 0.04015  | -0.02737 |
| MNHN F.MAE361  | 0.0121   | -0.01169 | -0.10325 | 0.07504  | -0.0127  | -0.03537 |
| MNHN F.MAE646  | -0.00898 | 0.01887  | 0.04601  | -0.03374 | 0.05188  | 0.01364  |
| NHM 19580      | -0.03355 | -0.01273 | -0.03823 | -0.00314 | -0.04554 | -0.05549 |
| NHM 19591      | 0.01063  | 0.01067  | -0.03932 | 0.05986  | -0.00649 | -0.00948 |
| MSNM V1356     | -0.02321 | 0.04266  | -0.08139 | 0.05966  | -0.04709 | -0.01047 |
| MSNM V1723     | -0.01366 | 0.00188  | 0.01818  | 0.01741  | 0.04335  | 0.00529  |
| MSNM V1765     | 0.00475  | 0.02482  | 0.03218  | -0.03059 | 0.08967  | 0.02405  |
| MSNM V1845     | -0.01002 | 0.03209  | 0.04536  | -0.02576 | 0.0315   | -0.03952 |
| MSNM V3191     | -0.00733 | -0.00774 | -0.03839 | -0.01141 | -0.00795 | 0.06436  |
| MSNM V1708     | -0.02326 | -0.01524 | 0.06621  | 0.00779  | 0.05134  | 0.03208  |

| ANOSIM                       |                              |                 |                       |
|------------------------------|------------------------------|-----------------|-----------------------|
| Permutation N                | 9999                         |                 |                       |
| Mean rank within             | 501.0                        |                 |                       |
| Mean rank between            | 492.3                        |                 |                       |
| R                            | -0.01754                     |                 |                       |
| p (same)                     | 0.6077                       |                 |                       |
| <b>p-value</b>               |                              |                 |                       |
|                              | <i>"P." madagascariensis</i> | <i>"P." sp.</i> | <i>"P." piveteaui</i> |
| <i>"P." madagascariensis</i> |                              | 0.6274          | 0.4254                |
| <i>"P." sp.</i>              | 0.6274                       |                 | 0.8045                |
| <i>"P." piveteaui</i>        | 0.4254                       | 0.8045          |                       |
| <b>R-value</b>               |                              |                 |                       |
|                              | <i>"P." madagascariensis</i> | <i>"P." sp.</i> | <i>"P." piveteaui</i> |
| <i>"P." madagascariensis</i> |                              | -0.03271        | 0.008416              |
| <i>"P." sp.</i>              | -0.03271                     |                 | -0.0524               |
| <i>"P." piveteaui</i>        | 0.008416                     | -0.0524         |                       |

Table S4 - Analysis of similarities (ANOSIM) performed on the entire dataset of morphometric and meristic parameters showing no significant differences between groups defined a priori (all  $p > 0.05$ ).

| ANOSIM                       |                              |                       |                 |
|------------------------------|------------------------------|-----------------------|-----------------|
| Permutation N                | 9999                         |                       |                 |
| Mean rank within             | 285.5                        |                       |                 |
| Mean rank between            | 277.7                        |                       |                 |
| R                            | -0.0276                      |                       |                 |
| p (same)                     | 0.609                        |                       |                 |
| <b>p-values</b>              |                              |                       |                 |
|                              | <i>"P." madagascariensis</i> | <i>"P." piveteaui</i> | <i>"P." sp.</i> |
| <i>"P." madagascariensis</i> |                              | 0.8153                | 0.4755          |
| <i>"P." piveteaui</i>        | 0.8153                       |                       | 0.0615          |
| <i>"P." sp.</i>              | 0.4755                       | 0.0615                |                 |
| <b>R</b>                     |                              |                       |                 |
|                              | <i>"P." madagascariensis</i> | <i>"P." piveteaui</i> | <i>"P." sp.</i> |
| <i>"P." madagascariensis</i> |                              | -0.08397              | 0.0025          |
| <i>"P." piveteaui</i>        | -0.08397                     |                       | 0.2155          |
| <i>"P." sp.</i>              | 0.0025                       | 0.2155                |                 |

Table S5 - ANOSIM calculated along all RWs showing no significant differences between groups defined a priori (all  $p > 0.05$ ). Euclidean distances were chosen as distance measure.

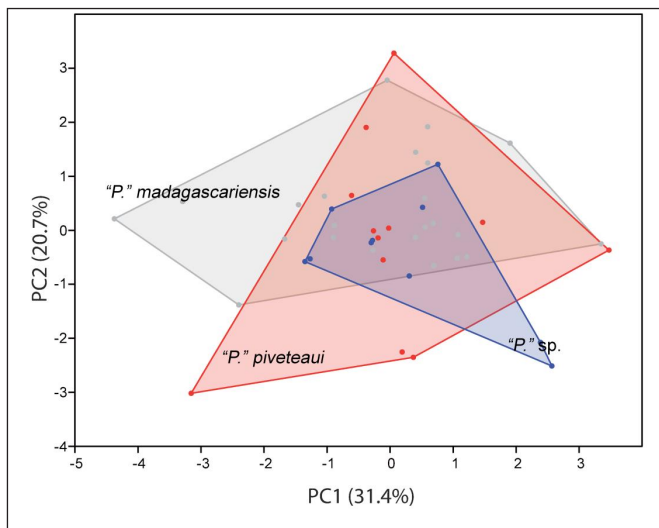


Figure S1 - Principal component analysis (PCA) performed on the entire dataset of standardized morphometric and meristic parameters.

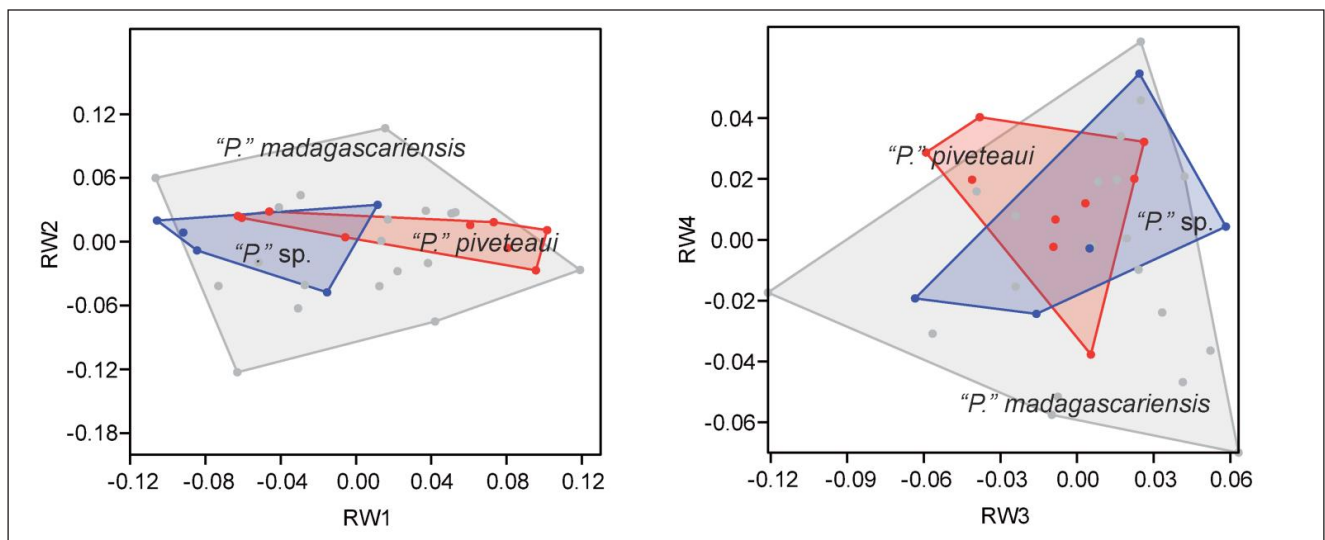


Figure S2 - Morphospace plotted on the first four RW axes showing the distribution of the three groups defined a priori.