

Supplementary Material

DNA but not always morphology help to recognise monophyletic genera within ‘*Cercyon*’ terrestrial water scavenger beetles: a case study of *Asiacyon* gen. nov. (Coleoptera: Hydrophilidae)

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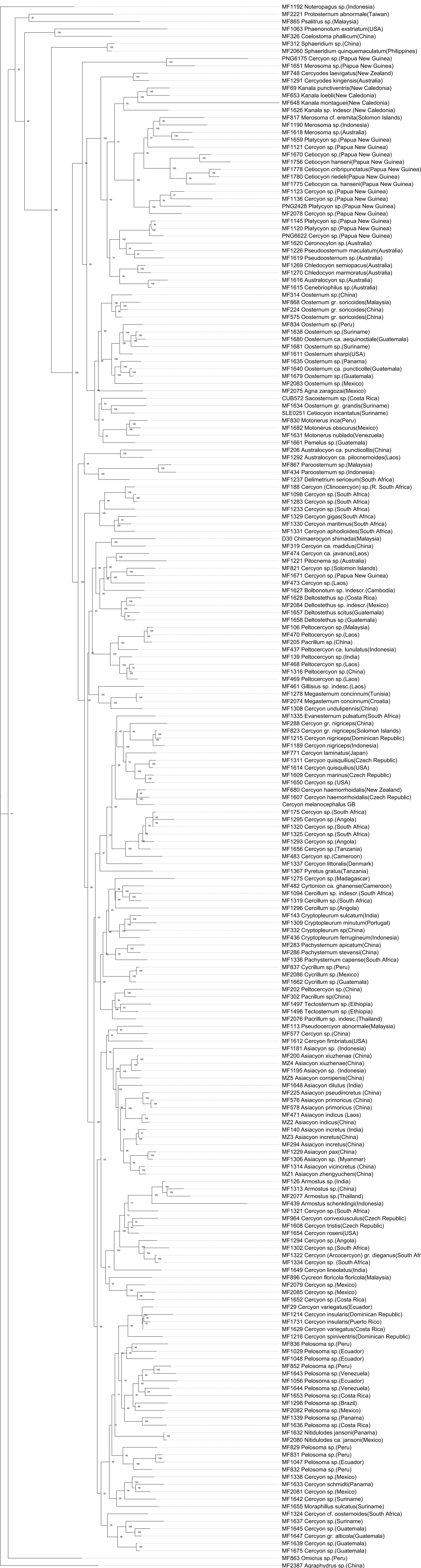
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File S1. The final alignment. See IS24012 File S1.phy.

Fig. 1. The whole ML tree. See next page.



- MF1192 Noteropagus sp. (Indonesia)
- MF2221 Protosternum abnormale(Taiwan)
- MF865 Psalitrus sp.(Malaysia)
- MF1063 Phaenonotum exstriatum(USA)
- MF326 Coelostoma phallicum(China)
- MF312 Sphaeridium sp.(China)
- MF2060 Sphaeridium quinqueaculatum(Philippines)
- PNG6175 Cercyon sp.(Papua New Guinea)
- MF1651 Merosoma sp.(Papua New Guinea)
- MF748 Cercyodes laevigatus(New Zealand)
- MF1291 Cercyodes kingensis(Australia)
- MF69 Kanala punctiventris(New Caledonia)
- MF653 Kanala loebli(New Caledonia)
- MF648 Kanala montaguei(New Caledonia)
- MF1626 Kanala sp. indescr.(New Caledonia)
- MF817 Merosoma cf. eremita(Solomon Islands)
- MF1190 Merosoma sp.(Indonesia)
- MF1618 Merosoma sp.(Australia)
- MF1659 Platycyon sp.(Papua New Guinea)
- MF1121 Cercyon sp.(Papua New Guinea)
- MF1670 Cetiocyon sp.(Papua New Guinea)
- MF1756 Cetiocyon hansenii(Papua New Guinea)
- MF1778 Cetiocyon cribripunctatus(Papua New Guinea)
- MF1780 Cetiocyon riedeli(Papua New Guinea)
- MF1775 Cetiocyon ca. hansenii(Papua New Guinea)
- MF1123 Cercyon sp.(Papua New Guinea)
- MF1136 Cercyon sp.(Papua New Guinea)
- PNG2428 Platycyon sp.(Papua New Guinea)
- MF2078 Cercyon sp.(Papua New Guinea)
- MF1145 Platycyon sp.(Papua New Guinea)
- MF1120 Platycyon sp.(Papua New Guinea)
- PNG6622 Cercyon sp.(Papua New Guinea)
- MF1620 Ceronocyton sp.(Australia)
- MF1226 Pseudoosternum maculatum(Australia)
- MF1619 Pseudoosternum sp.(Australia)
- MF1269 Chledocyon semiopacus(Australia)
- MF1270 Chledocyon marmoratus(Australia)
- MF1616 Australocyon sp.(Australia)
- MF1615 Cenebriophilus sp.(Australia)
- MF314 Oosternum sp.(China)
- MF868 Oosternum gr. soricoides(Malaysia)
- MF224 Oosternum gr. soricoides(China)
- MF575 Oosternum gr. soricoides(China)
- MF834 Oosternum sp.(Peru)
- MF1638 Oosternum sp.(Suriname)
- MF1680 Oosternum ca. aequinoctiale(Guatemala)
- MF1681 Oosternum sp.(Suriname)
- MF1611 Oosternum sharpi(USA)
- MF1635 Oosternum sp.(Panama)
- MF1640 Oosternum ca. puncticolle(Guatemala)
- MF1679 Oosternum sp.(Guatemala)
- MF2083 Oosternum sp.(Mexico)
- MF2075 Agna zaragozai(Mexico)
- CUB572 Sacosternum sp.(Costa Rica)
- MF1634 Oosternum gr. grandis(Suriname)
- SLE0251 Cetiocyon incantatus(Suriname)
- MF830 Motonerus inca(Peru)
- MF1682 Motonerus obscurus(Mexico)
- MF1631 Motonerus nublado(Venezuela)
- MF1661 Pemelus sp.(Guatemala)
- MF206 Australocyon ca. puncticollis(China)
- MF1292 Australocyon ca. pilocnemoides(Laos)
- MF867 Paroosternum sp.(Malaysia)
- MF434 Paroosternum sp.(Indonesia)
- MF1237 Delimetricum sericeum(South Africa)
- MF188 Cercyon (Clinocercyon) sp.(R. South Africa)
- MF1098 Cercyon sp.(South Africa)
- MF1283 Cercyon sp.(South Africa)
- MF1233 Cercyon sp.(South Africa)
- MF1329 Cercyon gigas(South Africa)
- MF1330 Cercyon maritimus(South Africa)
- MF1331 Cercyon aphodioides(South Africa)
- D30 Chimaerocyon shimadai(Malaysia)
- MF319 Cercyon ca. madidus(China)
- MF474 Cercyon ca. javanus(Laos)
- MF1221 Pilocnema sp.(Australia)
- MF821 Cercyon sp.(Solomon Islands)
- MF1671 Cercyon sp.(Papua New Guinea)
- MF473 Cercyon sp.(Laos)
- MF1627 Bolbonotum sp. indescr.(Cambodia)
- MF1628 Deltostethus sp.(Costa Rica)
- MF2084 Deltostethus sp. indescr.(Mexico)
- MF1657 Deltostethus scitus(Guatemala)
- MF1658 Deltostethus sp.(Guatemala)
- MF106 Peltocercyon sp.(Malaysia)
- MF470 Peltocercyon sp.(Laos)
- MF205 Pacrillum sp.(China)
- MF437 Peltocercyon ca. lunulatus(Indonesia)
- MF139 Peltocercyon sp.(India)
- MF468 Peltocercyon sp.(Laos)
- MF1316 Peltocercyon sp.(China)
- MF469 Peltocercyon sp.(Laos)
- MF461 Gillisius sp. indescr.(Laos)
- MF1278 Megasternum concinnum(Tunisia)
- MF2074 Megasternum concinnum(Croatia)
- MF1308 Cercyon undulipennis(China)
- MF1335 Evaneosternum pulsatum(South Africa)
- MF288 Cercyon gr. nigriceps(China)
- MF823 Cercyon gr. nigriceps(Solomon Islands)
- MF1215 Cercyon nigriceps(Dominican Republic)
- MF1189 Cercyon nigriceps(Indonesia)
- MF771 Cercyon laminatus(Japan)
- MF1311 Cercyon quisquilius(Czech Republic)
- MF1614 Cercyon quisquilius(USA)
- MF1609 Cercyon marinus(Czech Republic)
- MF1650 Cercyon sp.(USA)
- MF680 Cercyon haemorrhoidalis(New Zealand)
- MF1607 Cercyon haemorrhoidalis(Czech Republic)
- Cercyon melanocephalus GB
- MF175 Cercyon sp.(South Africa)
- MF1295 Cercyon sp.(Angola)
- MF1320 Cercyon sp.(South Africa)
- MF1325 Cercyon sp.(South Africa)
- MF1293 Cercyon sp.(Angola)
- MF1656 Cercyon sp.(Tanzania)
- MF483 Cercyon sp.(Cameroon)
- MF1337 Cercyon littoralis(Denmark)
- MF1367 Pyretus gratus(Tanzania)
- MF1275 Cercyon sp.(Madagascar)
- MF482 Cyrtonion ca. ghanense(Cameroon)
- MF1094 Cercillum sp. indescr.(South Africa)
- MF1319 Cercillum sp.(South Africa)
- MF1296 Cercillum sp.(Angola)
- MF143 Cryptopleurum sulcatum(India)
- MF1309 Cryptopleurum minutum(Portugal)
- MF332 Cryptopleurum sp.(China)
- MF436 Cryptopleurum ferrugineum(Indonesia)
- MF283 Pachysternum apicatum(China)
- MF286 Pachysternum stvensi(China)
- MF1336 Pachysternum capense(South Africa)
- MF837 Cyrillum sp.(Peru)
- MF2086 Cyrillum sp.(Mexico)
- MF1662 Cyrillum sp.(Guatemala)
- MF202 Peltocercyon sp.(China)
- MF302 Pacrillum sp.(China)
- MF1497 Tectosternum sp.(Ethiopia)
- MF1498 Tectosternum sp.(Ethiopia)
- MF2076 Pacrillum sp. indescr.(Thailand)
- MF113 Pseudocercyon abnormale(Malaysia)
- MF577 Cercyon sp.(China)
- MF1612 Cercyon fimbriatus(USA)
- MF1181 Asiacyon sp. (Indonesia)
- MF200 Asiacyon xiuzhenae (China)
- MZ4 Asiacyon xiuzhenae(China)
- MF1195 Asiacyon sp. (Indonesia)
- MZ5 Asiacyon cornipenis(China)
- MF1648 Asiacyon dilutus (India)
- MF225 Asiacyon pseudincretus (China)
- MF576 Asiacyon primoricus (China)
- MF578 Asiacyon primoricus (China)
- MF471 Asiacyon indicus (Laos)
- MZ2 Asiacyon indicus(China)
- MF140 Asiacyon incretus (India)
- MZ3 Asiacyon incretus(China)
- MF294 Asiacyon incretus(China)
- MF1229 Asiacyon pax(China)
- MF1306 Asiacyon sp. (Myanmar)
- MF1314 Asiacyon vicincretus (China)
- MZ1 Asiacyon zhengyuchenii(China)
- MF126 Armostus sp.(India)
- MF1313 Armostus sp.(China)
- MF2077 Armostus sp.(Thailand)
- MF439 Armostus schenklingsi(Indonesia)
- MF1321 Armostus sp.(South Africa)
- MF964 Cercyon convexiusculus(Czech Republic)
- MF1608 Cercyon tristis(Czech Republic)
- MF1654 Cercyon rosenii(USA)
- MF1294 Cercyon sp.(Angola)
- MF1302 Cercyon sp.(South Africa)
- MF1322 Cercyon (Arcocercyon) gr. dieganus(South Africa)
- MF1334 Cercyon sp. (South Africa)
- MF1649 Cercyon lineolatus(India)
- MF896 Cycreon floricola floricola(Malaysia)
- MF2079 Cercyon sp.(Mexico)
- MF2085 Cercyon sp.(Mexico)
- MF1652 Cercyon sp.(Costa Rica)
- MF29 Cercyon variegatus(Ecuador)
- MF1214 Cercyon insularis(Dominican Republic)
- MF1731 Cercyon insularis(Puerto Rico)
- MF1629 Cercyon variegatus(Costa Rica)
- MF1216 Cercyon spiniventris(Dominican Republic)
- MF836 Pelosoma sp.(Peru)
- MF1029 Pelosoma sp.(Ecuador)
- MF1048 Pelosoma sp.(Ecuador)
- MF852 Pelosoma sp.(Peru)
- MF1643 Pelosoma sp.(Venezuela)
- MF1056 Pelosoma sp.(Ecuador)
- MF1644 Pelosoma sp.(Venezuela)
- MF1653 Pelosoma sp.(Costa Rica)
- MF1298 Pelosoma sp.(Brazil)
- MF2082 Pelosoma sp.(Mexico)
- MF1339 Pelosoma sp.(Panama)
- MF1636 Pelosoma sp.(Costa Rica)
- MF1632 Nitidulodes jansonii(Panama)
- MF2080 Nitidulodes ca. jansonii(Mexico)
- MF829 Pelosoma sp.(Peru)
- MF831 Pelosoma sp.(Peru)
- MF1047 Pelosoma sp.(Ecuador)
- MF832 Pelosoma sp.(Peru)
- MF1338 Cercyon sp.(Mexico)
- MF1633 Cercyon schmidti(Panama)
- MF2081 Cercyon sp.(Mexico)
- MF1642 Cercyon sp.(Suriname)
- MF1655 Moraphillus sulcatus(Suriname)
- MF1324 Cercyon cf. oosternoides(South Africa)
- MF1637 Cercyon sp.(Suriname)
- MF1645 Cercyon sp.(Guatemala)
- MF1647 Cercyon gr. alticola(Guatemala)
- MF1639 Cercyon sp.(Guatemala)
- MF1675 Cercyon sp.(Guatemala)
- MF863 Omicrus sp.(Peru)
- MF2387 Agraphydrus sp.(China)