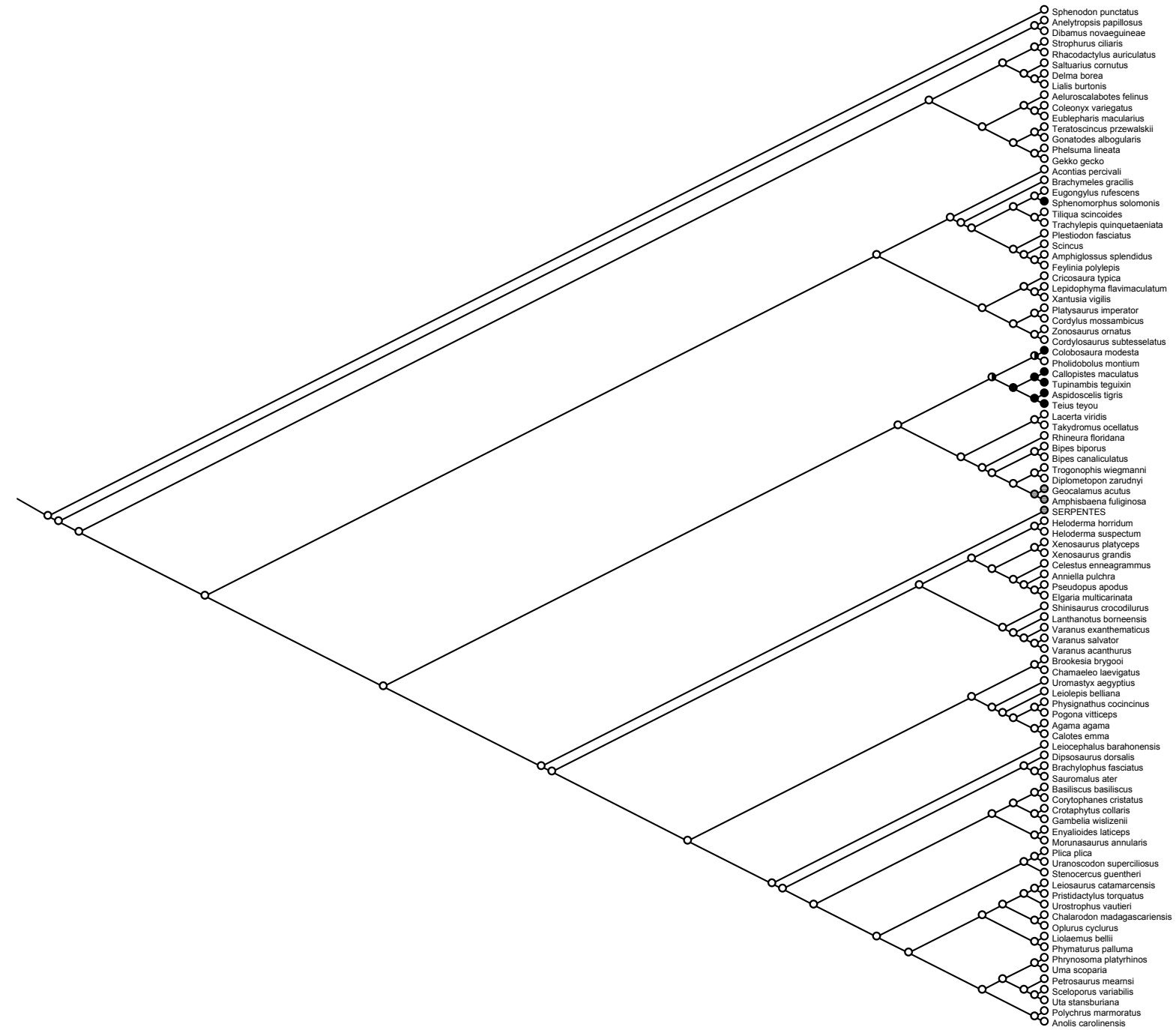


Parsimony ancestral state reconstructions of sesamoids and lunulae, using MESQUITE version 3.10

Reconstructions over the molecular-based tree of Zheng and Wiens (2016)

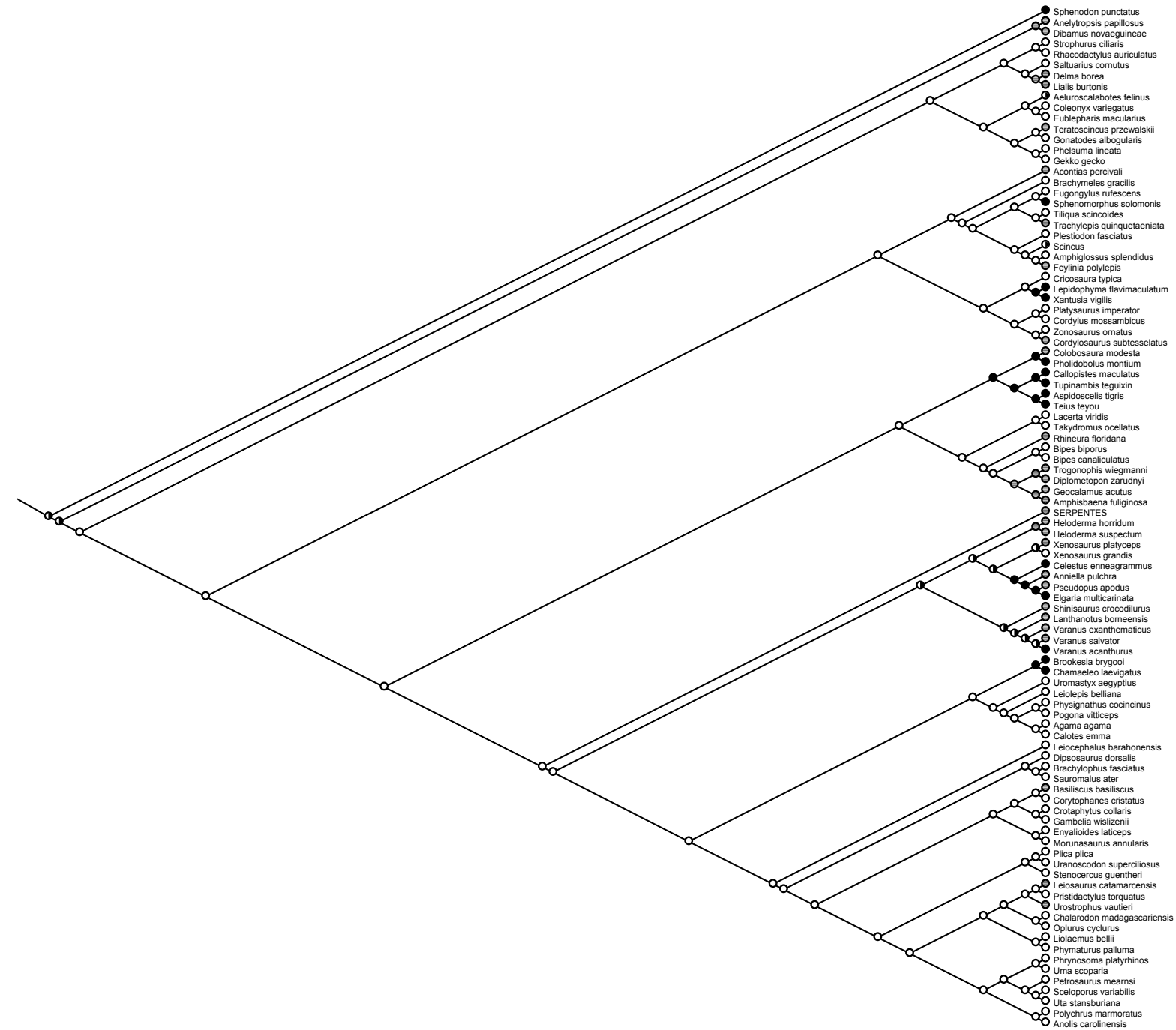
Character: Basipterygoid-pterygoid sesamoid
Parsimony reconstruction

◻ 0 absent
◼ 1 present



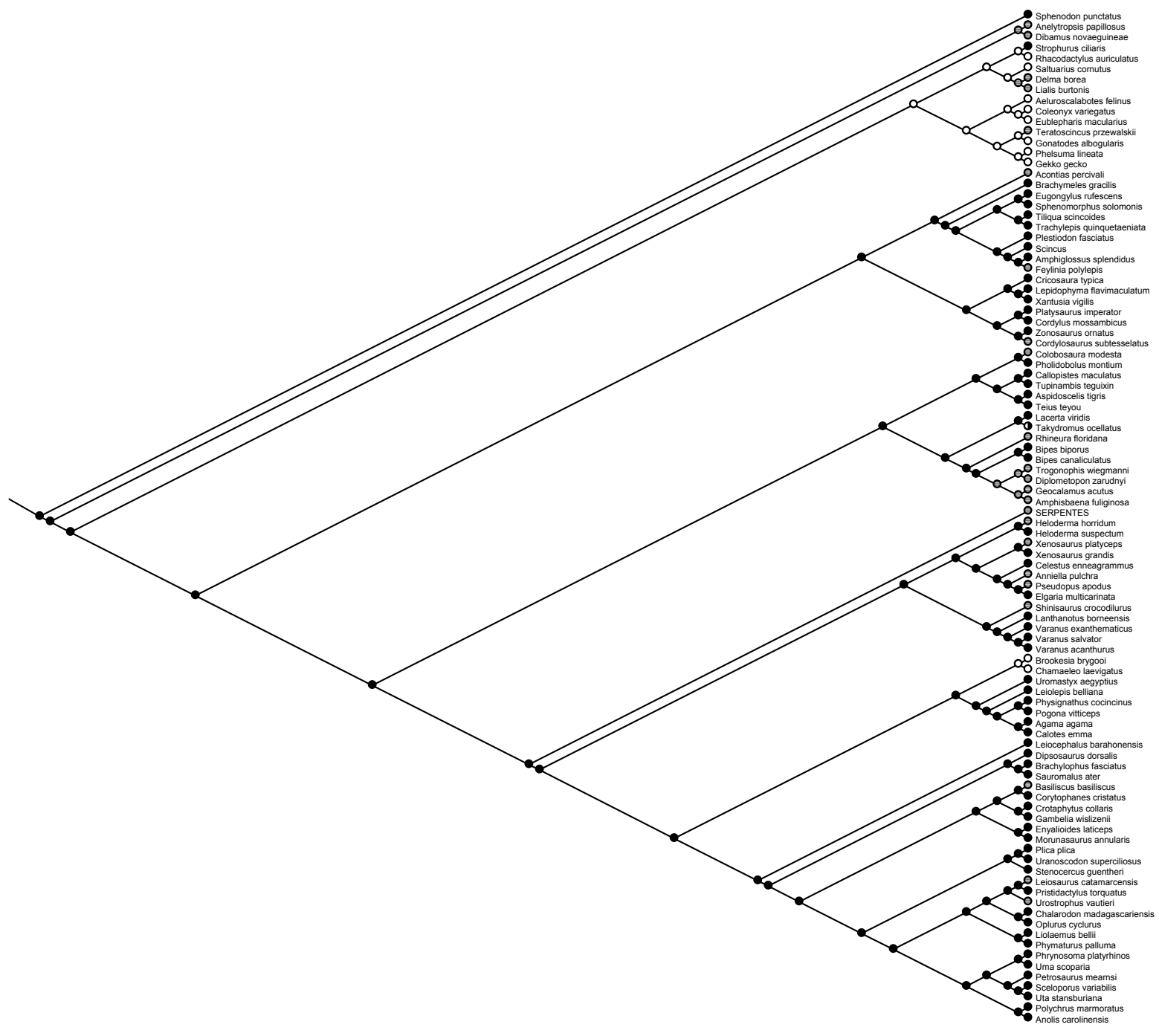
Character: Ulnar patella
Parsimony reconstruction

◻ 0 present
◼ 1 absent



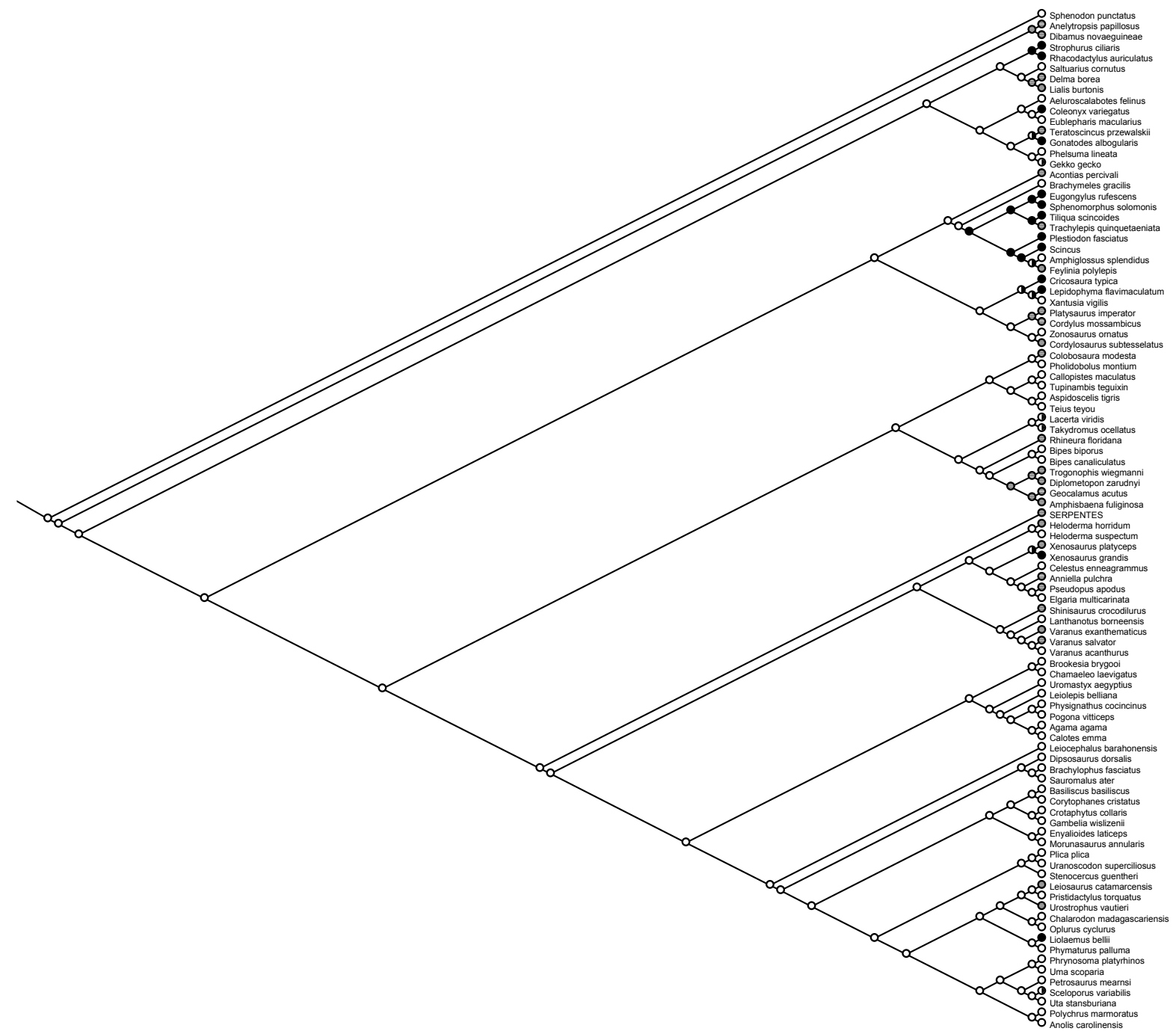
Character: Palmar sesamoid
Parsimony reconstruction

◻ 0 absent
◼ 1 present



Character: Metacarpal sesamoids
Parsimony reconstruction

◻ 0 absent
◼ 1 present



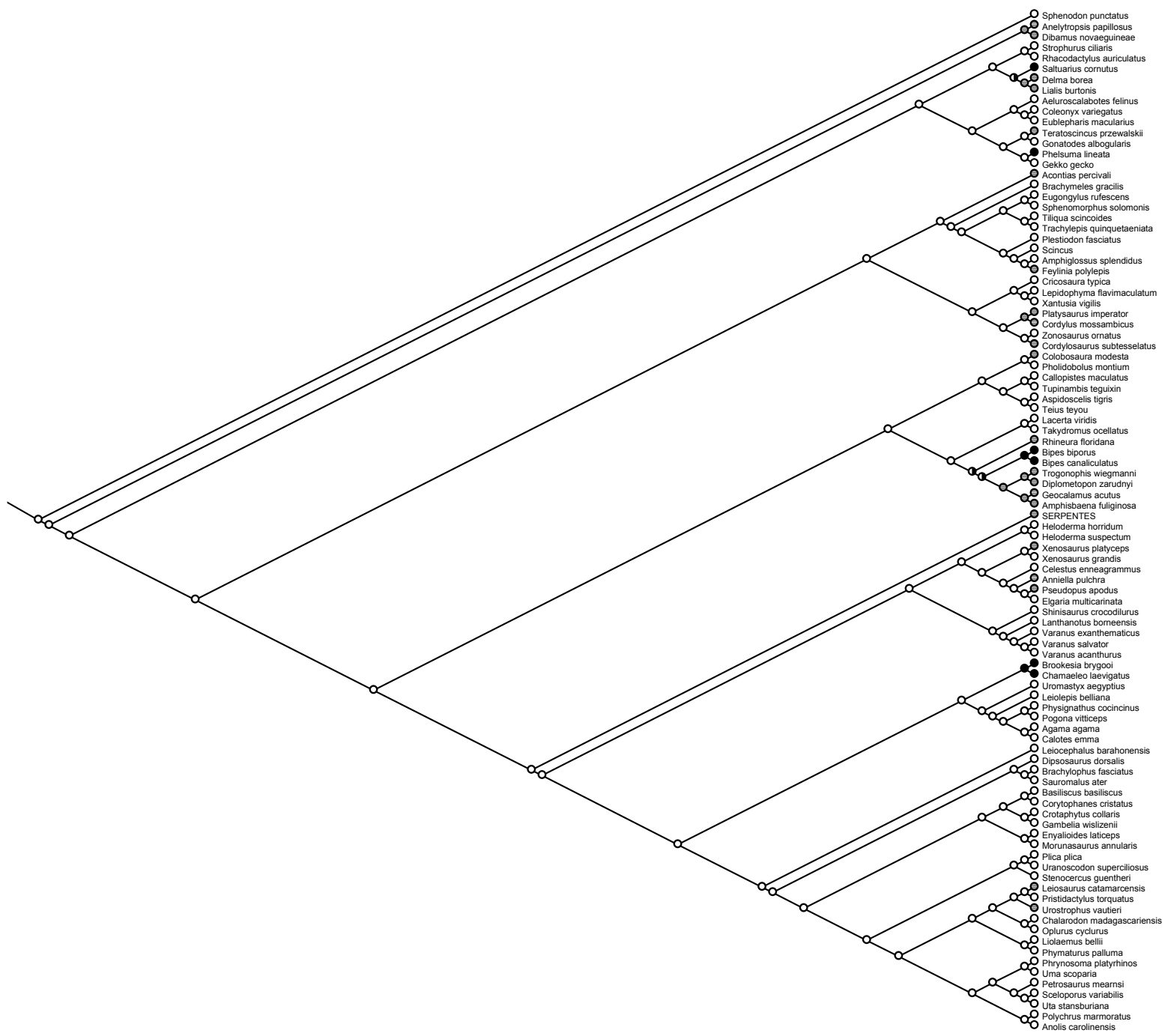
- Sphenodon punctatus
- Amelyropsis papillosus
- Dibamus novaeguineae
- Strophurus ciliaris
- Rhacodactylus auriculatus
- Saltuarius cornutus
- Delma borea
- Lialis burtonis
- Aeluroscalabotes felinus
- Colonyx variegatus
- Eublepharis macularius
- Teratoscincus przewalskii
- Gonotodes alboquilaris
- Phelsuma lineata
- Gekko gekko
- Acontias percivali
- Brachymeles gracilis
- Eugongylus rufescens
- Sphenomorphus solomonis
- Tiliqua scincoides
- Trachylepis quinqueteniata
- Plestiodon fasciatus
- Scincus
- Amphiglossus splendidus
- Feylinia polylepis
- Cricosaura typica
- Lepidophyma flavimaculatum
- Xantusia vigilis
- Platysaurus imperator
- Cordylus mossambicus
- Zonosaurus ornatus
- Cordylus subbesselsatus
- Colobosaura modesta
- Pholidobolus montium
- Callopietes maculatus
- Tupinambis teguixin
- Aspidoscelis tigris
- Telus leyou
- Lacerta viridis
- Takydromus ocellatus
- Rhineura floridana
- Bipes biporus
- Bipes canaliculatus
- Trogonophis wiegmanni
- Diplometopon zarudnyi
- Geocalamus acutus
- Amphisbaena fuliginosa
- SERPENTES
- Heloderma horridum
- Heloderma suspectum
- Xenosaurus platyceps
- Xenosaurus grandis
- Celestus enneagrammus
- Amniella pulchra
- Pseudopus apodus
- Eigaria multicaudata
- Shinisaurus crocodilurus
- Lanthanotus borneensis
- Varanus exanthematicus
- Varanus salvator
- Varanus acanthurus
- Brookesia brygooi
- Chamaeleo laevigatus
- Uromastyx aegyptius
- Leiolepis belliana
- Physignathus cocincinus
- Pogona vitticeps
- Agama agama
- Calotes emma
- Leiocephalus barahonensis
- Dipsosaurus dorsalis
- Brachylophus fasciatus
- Sauromalus ater
- Basiliscus basiliscus
- Corytophanes cristatus
- Crotaphytus collaris
- Gambelia wislizenii
- Enyalioides laticeps
- Morunasaurus annularis
- Plica plica
- Uranoscodon superciliosus
- Stenocercus guentheri
- Leiosaurus catamarcensis
- Pristidactylus torquatus
- Urostrophus vautieri
- Chalarodon madagascariensis
- Oplurus cyclurus
- Liolaemus bellii
- Phymaturus palluma
- Phrynosoma platyrhinos
- Uma scoparia
- Petrosaurus mearnsi
- Sceloporus variabilis
- Uta stansburiana
- Polychrus marmoratus
- Anolis carolinensis

Character: Distal phalangeal sesamoids (manus)

Parsimony reconstruction

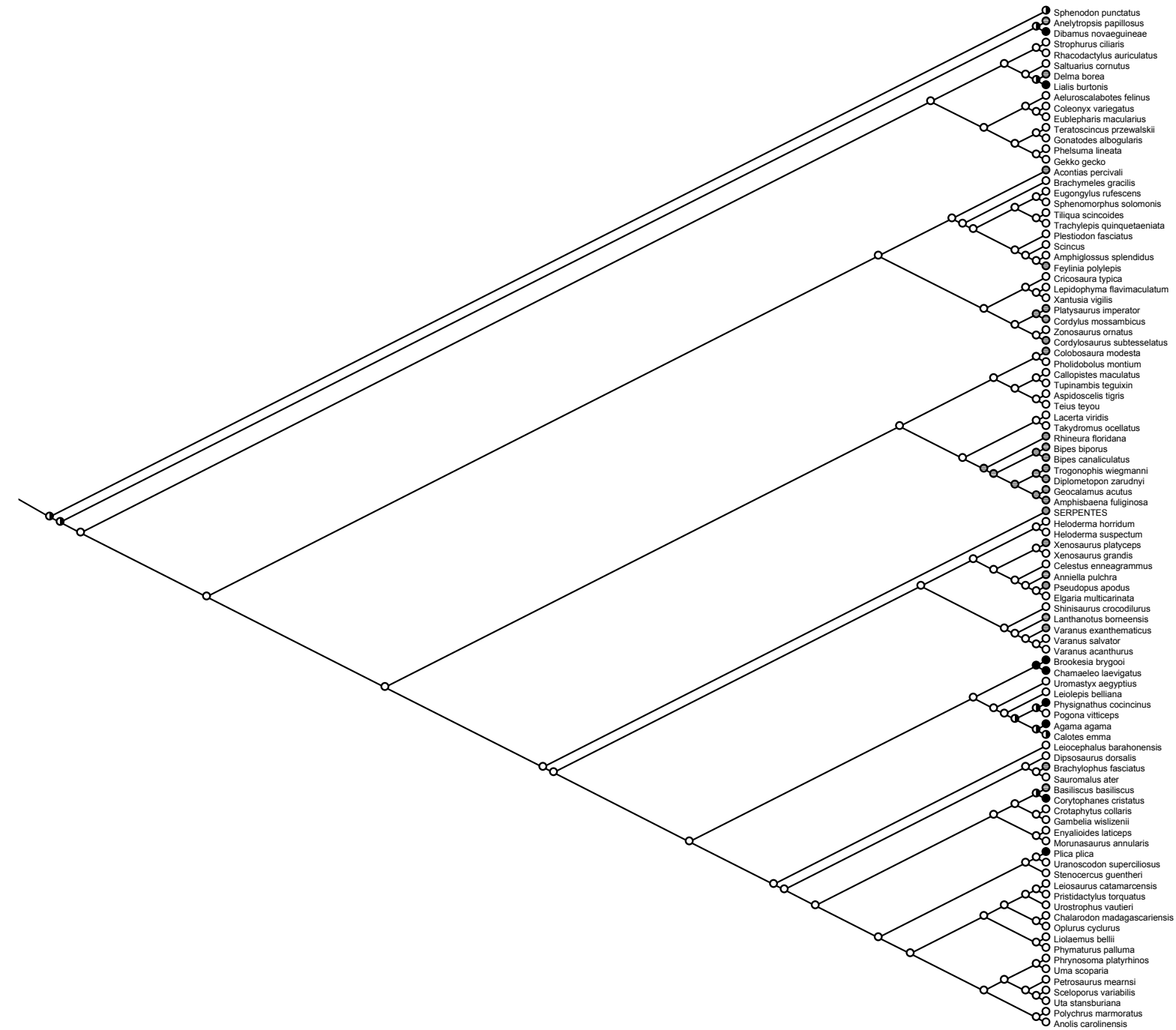
0 present

1 absent



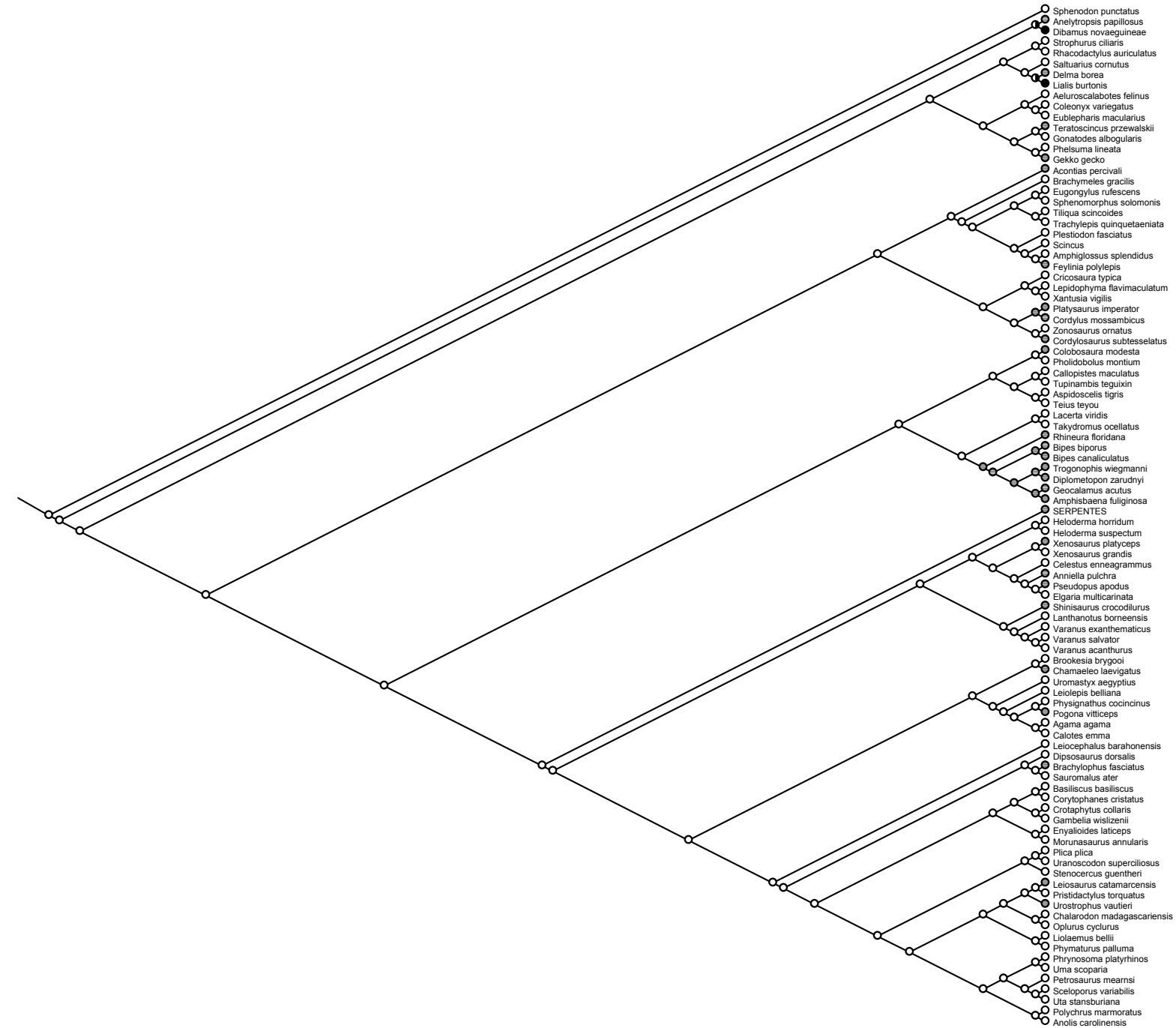
Character: Tibial patella
Parsimony reconstruction

○ 0 present
● 1 absent



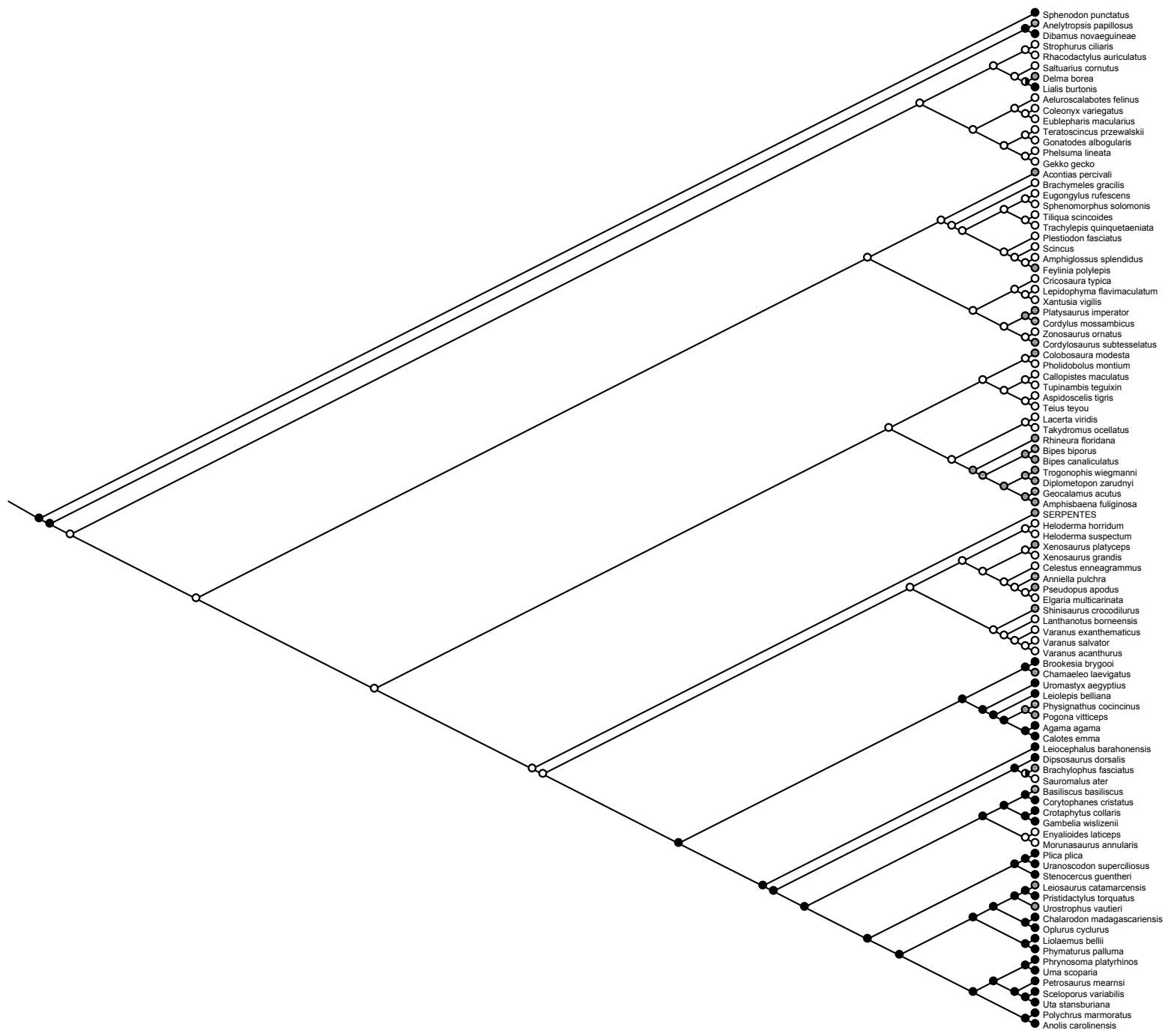
Character: Tibial lunula
Parsimony reconstruction

◻ 0 present
◼ 1 absent



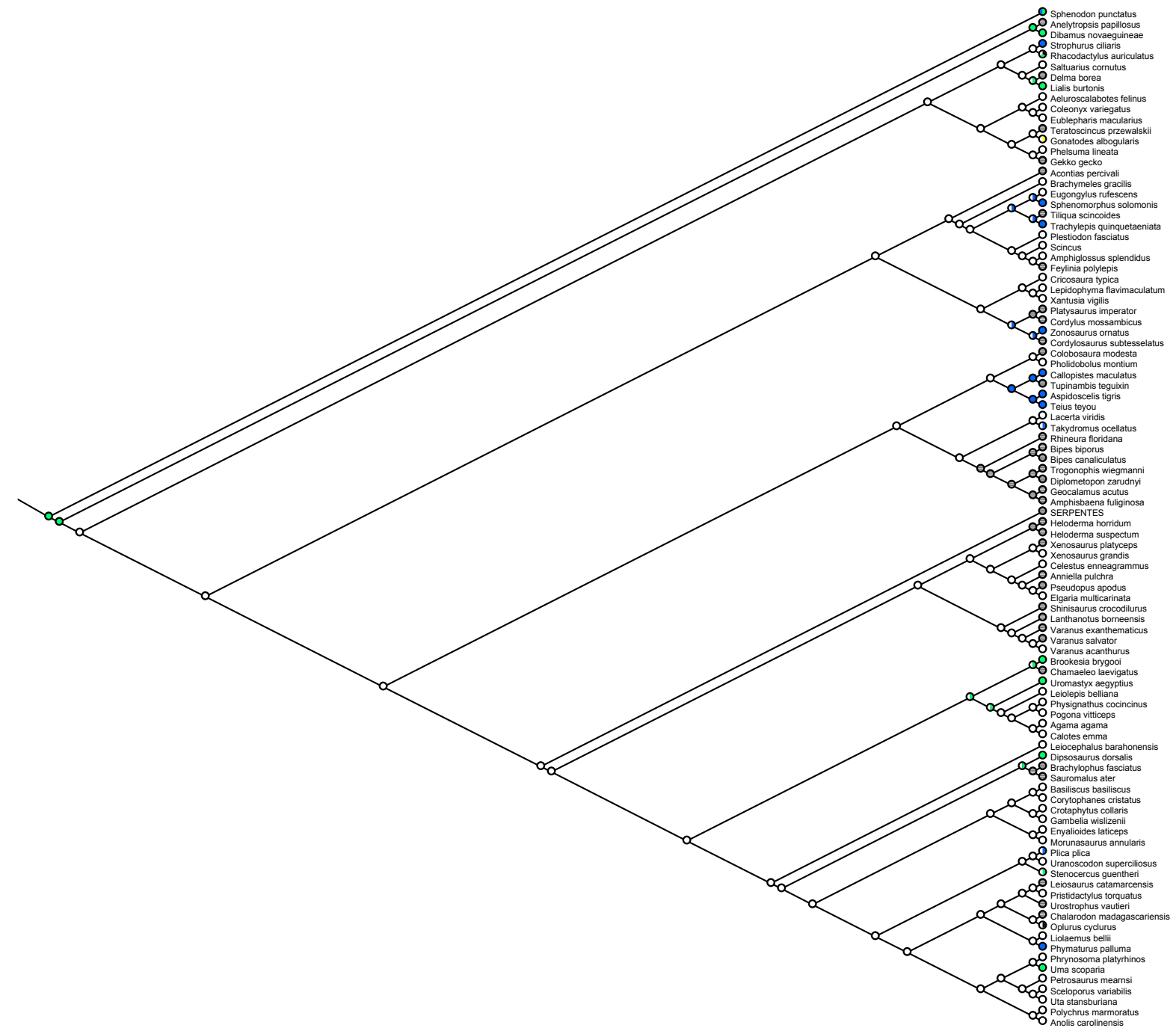
Character: Fibular lunula
Parsimony reconstruction

◻ 0 present
◼ 1 absent



Character: Tibiofemoral lunulae
 Parsimony reconstruction

- 0 present and separate
- 1 ventral only
- 2 both absent
- 3 present and fused
- 4 dorsal only

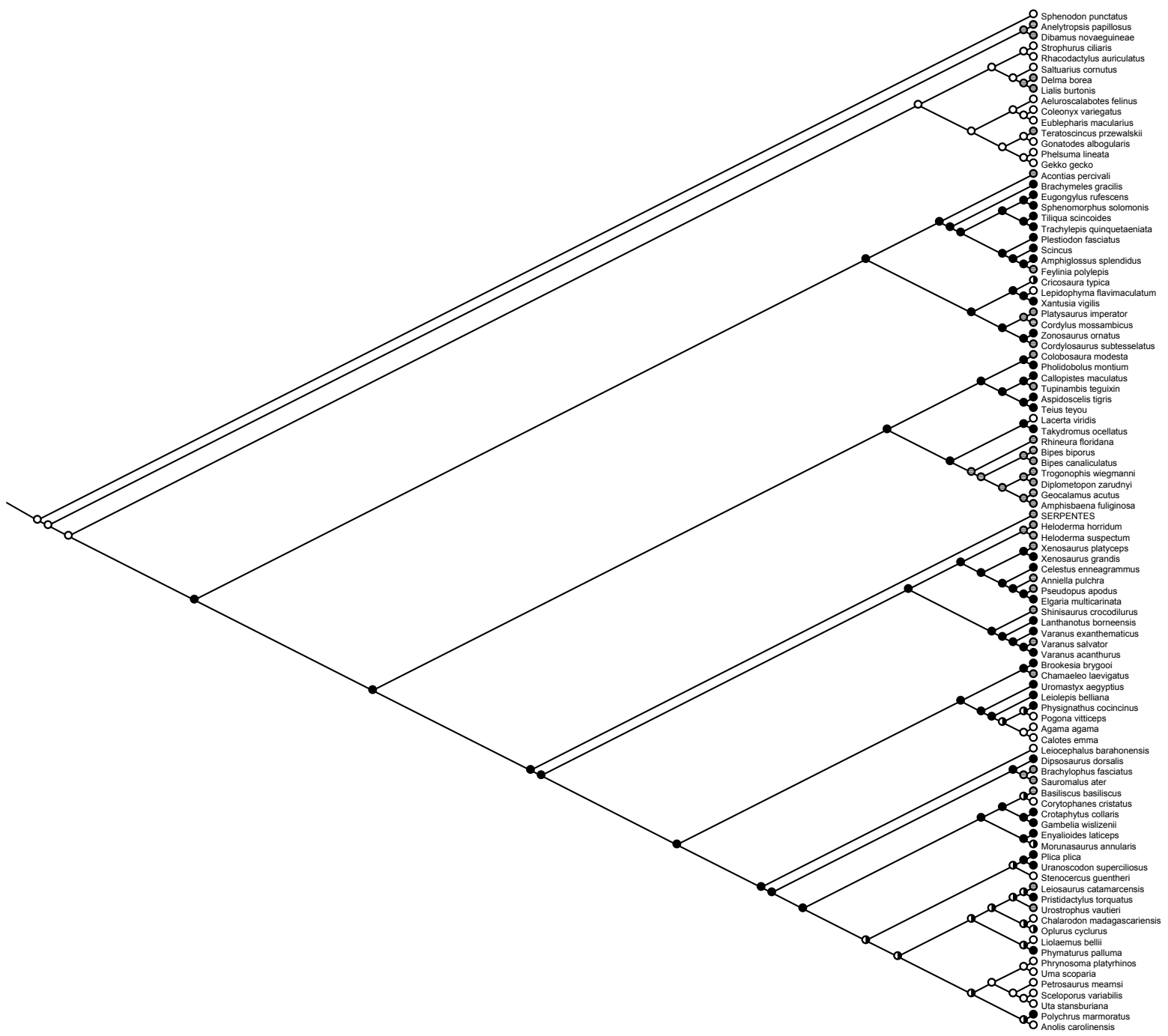


Character: AC-MTI sesamoid

Parsimony reconstruction

0 present

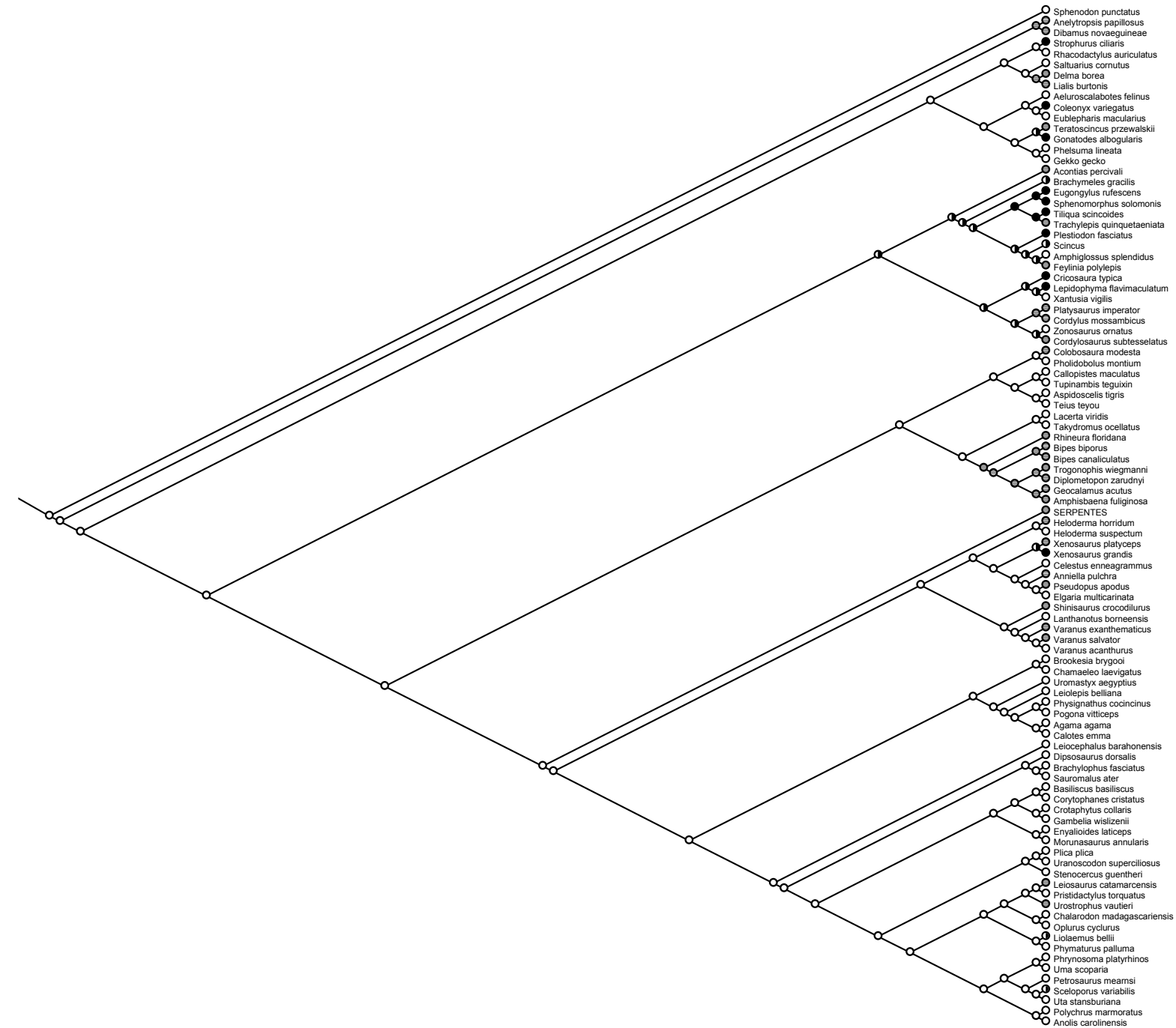
1 absent



Character: Metatarsal sesamoids

Parsimony reconstruction

◻ 0 absent
◼ 1 present



Character: Distal phalangeal sesamoids (pes)
Parsimony reconstruction

◻ 0 present
◼ 1 absent

