

## Appendix

The index values are listed with detail in Appendix 1 for each taxon.

(1) Distal transverse diameter/Lateral length\*100 (Figure 2, Table 1).

Mean <65: *Palaeotragus microdon*, *Injanatherium arabicum*, *Giraffokeryx punjabiensis*, *Giraffa jumae*, *Palaeotragus rouenii*, *Decennatherium pachecoi*, *Palaeotragus coelophrys*, *Giraffokeryx primaevus*, *Mitilanotherium inexpectatum*, *Honanotherium schlosseri*, *Alcicephalus neumayri*, *Bohlinia attica*, *Canthumeryx sirtensis*.

Mean 65-66: *Sivatherium hendeyi*, *Samotherium boissieri*, *Samotherium major*, *Okapia johnstoni*, *Helladotherium duvernoyi*, *Giraffa stillei*.

Mean >65 *Sivatherium maurusium/olduvaiense*, *Decennatherium rex*, *Sivatherium giganteum*, *Giraffa camelopardalis*, *Birgerbohlinia schaubi*, *Bramatherium megacephalum*.

(2) Medial anteroposterior diameter/Medial length\*100 (Figure 3, Table 2) Mean <100: *Birgerbohlinia schaubi*, *Giraffokeryx punjabiensis*.

Mean 100-110: *Bramatherium megacephalum*, *Decennatherium pachecoi*, *Samotherium major*, *Samotherium boissieri*, *Sivatherium giganteum*, *Alcicephalus neumayri*, *Decennatherium rex*, *Palaeotragus coelophrys*, *Okapia johnstoni*, *Bohlinia attica*, *Giraffokeryx primaevus*, *Helladotherium duvernoyi*  
Mean >110: *Sivatherium maurusium/olduvaiense*, *Giraffa camelopardalis*.

(3) Medial length / Lateral length\*100 (Figure 4, Table 3)

Mean <85: *Honanotherium schlosseri*.

Mean 85-90: *Sivatherium hendeyi*, *Sivatherium giganteum*, *Okapia johnstoni*, *Helladotherium duvernoyi*, *Giraffa camelopardalis*, *Bohlinia attica*, *Bramatherium megacephalum*, *Birgerbohlinia schaubi*, *Sivatherium maurusium/olduvaiense*, *Giraffa stillei*, *Palaeotragus coelophrys*, *Palaeotragus rouenii*, *Alcicephalus neumayri*, *Giraffa jumae*, *Samotherium boissieri*, *Samotherium major*.

Mean >90: *Injanatherium arabicum*, *Decennatherium pachecoi*, *Decennatherium rex*, *Giraffokeryx punjabiensis*, *Giraffokeryx primaevus*, *Mitilanotherium inexpectatum*.

