

APPENDIX 1—Comparative tooth measurements of Asian anchitheriines (from Japan, China, Mongolia, Kazakhstan, and northern Caucasus in Russia). Each measurement shows maximum anteroposterior length (L) and labiolingual width (W). The underlined specimens were measured directly from original specimens. Asterisks (\*) and brackets indicate respectively approximate measurements and measurements at indeterminate tooth position (i.e., M1/2, p3/4, and m1/2). Taxonomic assignments of *Sinohippus* follow Hou et al. (2007).

Species/Catalogued number and remarks	P2		P3		P4		M1		M2		M3		Locality	References
	L	W	L	W	L	W	L	W	L	W	L	W		
<i>Anchitherium</i> aff. <i>A. gobiense</i>														
Hasegawa specimen, FPDm-V 8348 (cast)	25.3*	25.0	23.9	29.2	24.5	29.4	23.6	27.5	22.0	27.2	20.0	23.9	Gifu, Japan	
<i>A. aurelianense</i>														
AMNH 26502, holotype	25.2	25.3	23.1	26.6	23.8	28.7	23.8	28.3	21.5	28.2	18.8	24.3	Inner Mongolia, China	Colbert (1939)
IVPP V 8615							[19.8]	[23.7*]	[19.8]	[23.7*]	17.3	22.2	Junggar Basin, China	Ye (1989), Ye et al. (2005)
IVPP V 14290													Junggar Basin, China	Ye et al. (2005)
<i>A. aurelianense</i>														
IVPP V 5150			23.6	26.9			26.0	29.5					Fangxian, Hubei, China	Yan (1979)
Fig.2 in Borissiak (1945)					26.0	30.0							Northern Caucasus, Russia	Borissiak (1945)
Fig.3 in Borissiak (1945)							26.0	29.5					Northern Caucasus, Russia	Borissiak (1945)
<i>Paranchitherium karpinskii</i>														
Holotype	29.0	27.0	24.0	30.0	24.0	32.0	23.5	31.5	24.0	31.0	23.5	28.0	Northern Caucasus, Russia	Borissiak (1945)
<i>Sinohippus zitteli</i>														
IVPP V 2639					26.3	28.9	26.0	29.6	24.2	29.3	21.0	24.2	Shanxi, China	Zhai (1962)
IVPP V 2641											21.9	28.0	Shanxi, China	Zhai (1962)
<i>S. robustus</i>														
IVPP V 15163	25.1	27.0	25.3	30.2	27.0	32.3	25.5	31.8	23.7	31.2			Gansu, China	Hou et al. (2007)
SZ 0601	27.9		30.2	32.4	27.9	32.3							Inner Mongolia, China	Hou et al. (2007)
IVPP V 2640			27.9	27.9	27.7	30.2	29.6	30.4					Shanxi, China	Hou et al. (2007)
IVPP V 2763	27.0*	23.5*	27.2*	31.5	28.7	32.7*							Inner Mongolia, China	Hou et al. (2007)
AMNH 60775 (Frick Collection)	29.2	27.7	28.7	31.2	28.8	32.6	31.5	33.3	26.7	32.1	20.0	25.5	China	Hou et al. (2007)
<i>Species/Catalogued number and remarks</i>														
	p2		p3		p4		m1		m2		m3			
	L	W	L	W	L	W	L	W	L	W	L	W	Locality	References
<i>Anchitherium</i> aff. <i>A. gobiense</i>														
Holotype of <i>A. "hypohippoides"</i>			[20.0]	[15.0]	[20.0]	[15.0]	20.9	14.9	20.2	14.1	24.5	12.6	Gifu, Japan	Matsumoto (1921)
FPDM-V 7845, NSM-PV 6762	21.4	13.2	21.6	15.8	21.5	16.7	20.9	14.9	20.2	14.1	24.5	12.6	Gifu, Japan	Shikama and Yoshida (1961)
<i>A. gobiense</i>														
AMNH 26503, paratype	21.7*	14.9	22.1	17.6	21.9	17.4	22.2	16.2	20.4	14.6	25.0	12.5	Inner Mongolia, China	Colbert (1939)
AMNH 26554, paratype			24.6	18.0	24.7	19.0	25.2	16.4	23.5	15.2			Inner Mongolia, China	Colbert (1939)
AMNH 26604, paratype	19.3	11.7	18.5*										Inner Mongolia, China	Colbert (1939)
IVPP V 14291			20.0	16.0	20.0	16.5	20.5	15.5	19.6	15.0	24.0	12.2	Junggar Basin, China	Ye et al. (2005)
IVPP V 14292			[20.2]	[14.8]	[20.2]	[14.8]							Junggar Basin, China	Ye et al. (2005)
IVPP V 14327	19.5	12.2									23.6	12.3	Junggar Basin, China	Ye et al. (2005)
IVPP V 14328													Junggar Basin, China	Ye et al. (2005)
<i>A. aurelianense</i>														
IVPP V 5150			23.4*	16.8*	23.4	17.9	23.1	16.8	22.1	15.3	25.8	13.1	Fangxian, Hubei, China	Yan (1979)
IVPP V 822			20.2	14.0	20.6	15.1	19.6	13.7					Fangshang, Jiangsu, China	Chow and Hu (1956)
PIN 532-13, 14	18.5	11.0*	17.0*	14.5*	16.5	14.5	18.5	13.5*	18.0	12.5*			Ulan Tolgoi, Hsanda Gol, Mongolia	Gromova (1952)
PIN 3218-80			18.0*	14.4	17.1	14.5	16.6	12.5	15.9	12.3			Ulan Tolgoi, Hsanda Gol, Mongolia	Tleuberdimina and Forsten (2001)
PIN 3218-82							[16.5]	[11.2]	[16.5]	[11.2]			Ulan Tolgoi, Hsanda Gol, Mongolia	Tleuberdimina and Forsten (2001)
792/68-CHKGU											20.5	11.3	Kulan-utpes, Kazakhstan	Tleuberdimina and Forsten (2001)
I/318-k			[20.6]	[15.8]	[20.6]	[15.8]							Kalkaman, Kazakhstan	Tleuberdimina and Forsten (2001)
I/376-k			[22.4]	[16.8]	[22.4]	[16.8]							Kalkaman, Kazakhstan	Tleuberdimina and Forsten (2001)
MK 1979/I			[22.2]	[16.8]	[22.2]	[16.8]							Kalkaman, Kazakhstan	Tleuberdimina and Forsten (2001)

APPENDIX 1—Continued.

Species/Catalogued number and remarks	P2		P3		P4		M1		M2		M3		Locality	References
	L	W	L	W	L	W	L	W	L	W	L	W		
AK 1957 3K/1318 473/53-M 997-18/48-T 998-12/48-T PIN 645-12	22.1	16.8	22.2	19.5			[17.4]	[12.2]	[17.4]	[12.2]	22.1	13.3	Akzhal, Kazakhstan Akzhal, Kazakhstan Maraldy, Kazakhstan Zhylandy, Kazakhstan Akzhar, Kazakhstan Uly-Zhianchik, Kazakhstan	Tleuberdina and Forsten (2001) Tleuberdina and Forsten (2001) Tleuberdina and Forsten (2001) Tleuberdina and Forsten (2001) Tleuberdina and Forsten (2001) Tleuberdina and Forsten (2001) Belyaeva (1954), Tleuberdina and Forsten (2001)
3948/51-Kb Fig. 4 in Borissiak (1945)							[19.0]	[12.0]	[19.0]	[12.0]	16.9	11.9	Kumbulak, Kazakhstan Northern Caucasus, Russia	Tleuberdina and Forsten (2001) Borissiak (1945)
<i>Paranchitherium karpinskii</i> holotype	26.0	16.5	24	20.5	24.5	21.5	24.0	18.0	23.5	16.5	26.5	14.5	Northern Caucasus, Russia	Borissiak (1945)
<i>Sinohippus zitteli</i> IVPP V 2639 IVPP V 2641 <u>AMNH 60776 (Frick Collection)</u>	22.3	15.5	25.0	17.3	26.2	20.7							Shanxi, China Shanxi, China China	Zhai (1962) Zhai (1962) Hou et al. (2007)
<i>S. robustus</i> IVPP V 15164, holotype IVPP V 2760	26.5	18.1	29.6	21.9	29.6	22.5	29.4	21.0	27.0	19.3	30.5	17.0	Gansu, China Inner Mongolia, China	Hou et al. (2007) Zhai (1963)
	25.8	16.9	24.5	17.3	29.0	19.2	28.8	18.6	25.2	17.1	13.8			