

Reassessment of the largest Pleistocene rhinocerotine *Rhinoceros platyrhinus* (Mammalia,  
Rhinocerotidae) from the Upper Siwaliks (Siwalik Hills, India)

LUCA PANDOLFI\* and LEONARDO MAIORINO

Department of Sciences, Roma Tre University, Largo S. Leonardo Murialdo 1, 00146, Rome, Italy,

luca.pandolfi@uniroma3.it; leonardo.maiorino@uniroma3.it

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\*Corresponding author

**Institutional Abbreviations**—**BSPG**, Bayerische Staatssammlung für Paläontologie und Geologie, Munich, Germany; **FSL**, Faculté des Sciences et Technologies, Université Claude Bernard, Lyon 1, Lyon, France; **HAZU**, Quaternary Institute of the Croatian Academy of Science and Art; **HLMD**, Hessisches Landesmuseum Darmstadt; **HMV**, Hezheng Paleozoological Museum in Gansu; **HNHM**, Hungarian Natural History Museum, Budapest, Hungary; **GIKMK**, Historical-Ethnographical State Museum, Kishinev, Republic of Moldova; **IGF**, Istituto Geo-Paleontologico di Firenze, Florence, Italy; **IQW**, Institute für Quartärpaläontologie, Weimar, Germany; **IVPP**, Institute of Vertebrate Paleontology and Paleoanthropology, Beijing, China; **LCMN**, Laboratoire de Conservation du Musée Cantonal d'Archeologie de Neuchâtel, Switzerland; **LVH**, Landesmuseum für Vorgeschichte in Halle, Germany; **MAFI**, Magyar Földtani és Geofizikai Intézet (Geological and Geophysical Institute of Hungary), Budapest, Hungary; **MfN**, Museum für Naturkunde, Berlin, Germany; **MGGC**, Museo di Geologia Giovanni Capellini, Bologna, Italy; **MGPPD**, Museo di Geologia e Paleontologia, Padua, Italy; **MIL**, Milia Natural History Museum, Milia, Greece; **MNCN**, Museo Nacional de Ciencias Naturales, Madrid, Spain; **MNHN**, Muséum National d'Histoire Naturelle, Paris, France; **MNHM**, Museum Natur Historisches, Mainz, Germany; **MPAVC**, Museo Paleontologico e Archeologico "Virginio Caccia", San Colombano al Lambro, Italy; **MPC**, Mongolian Paleontological Collection, Ulan Bator, Mongolia; **MPG**, Museum of Paleontology and Geology, Athens, Greece; **MPLBP**, Museo Paleontologico "Luigi Boldrini" di Pietrafitta, Perugia, Italy; **MPM**, Museo Paleontologico di Montevarchi, Montevarchi, Italy; **MPP**, Museo Paleontologico Parmense, Parma, Italy; **MPUR**, Museo Paleontologico dell'Università di Roma, Rome, Italy; **MSNAF**, Museo di Storia Naturale, Accademia dei Fisiocritici, Siena, Italy; **MZ**, Museum of the Earth, Warsaw, Poland; **MZF**, Museo di Storia Naturale, sezione di Zoologia, Florence, Italy; **NCB**, Naturalis Biodiversitas Center, Leiden, Netherlands; **NHMB**, Natural History Museum of Belgrade, Belgrade, Serbia; **NHMUK**, Natural History Museum, London, United Kingdom; **NHMW**, Naturhistorisches Museum, Wien, Austria; **NMB**, Naturhistorisches Museum, Basel, Switzerland; **RHI**, Musée de Montbéliard, France; **SMF**, Senckenberg Naturmuseum, Frankfurt, Germany; **SMNK**, Staatliches Museum für Naturkunde, Karlsruhe, Germany; **SMNS**, Staatliches Museum für Naturkunde, Stuttgart, Germany; **UL**, Zoological Museum, University of Łódź, Poland; **USNM**, National Museum of Natural History (Smithsonian Institution), Washington D.C., U.S.A.; **ZG**, Department of Geology, Jagiellonian University, Krakow, Poland; **ZIN**, Zoological Institute of the Russian Academy of Science, Saint Petersburg, Russia; **ZSM**, Zoologische Staatssammlung, Munich, Germany.

## COMPARISON

### **Comparison with *Dicerorhinus***

In the Plio-Pleistocene the genus *Dicerorhinus* is represented by two Southeastern Asian species: *Dicerorhinus sumatrensis* and *Dicerorhinus gwebinensis* (Guérin, 1980, Zin-Maung-Maung-Thein, 2008, Antoine, 2012). *Dicerorhinus sumatrensis* differs from the studied specimen NHMUK 36661 in having a smaller size (Table S2), a lesser concave dorsal profile of the skull, an open external auditory pseudomeatus, a posterior border of the nasal notch lying above P2 and an infraorbital foramen lying above the P2-P3 boundary (Table S1; Figs. S1–S2). Moreover, the cheek teeth are low-crowned, the crista and the crochet are usually absent on the premolars, the premolars display a separated protocone and a hypocone, whereas the mediofossette is absent on the molars. The skull of *D. gwebinensis* differs from the studied specimen in having a smaller size, a lesser concave dorsal cranial profile, a posterior border of the nasal notch lying above P2, an infraorbital foramen lying above P2-P3 boundary and in the lack of the mediofossette on M1 (Table S1).

### **Comparison with *Coelodonta***

*Coelodonta* is a well-represented taxon in Eurasia and the genus probably originated in the Tibet Plateau during the Pliocene (Guérin, 1980; Deng et al. 2011). The skulls of the species belonging to this genus (Table S1) display an ossified nasal septum (partially in *C. thibetana*) and the presence of an insertion for the frontal horn. Moreover, the posterior border of the nasal notch lies in a more rear position (above P4 or M1) than that seen in the studied specimen as well as the anterior border of the orbit (lying above M2–M3 boundary or above M3) (Figs. S1–S2). In *Coelodonta* the occipital face lying backwards and the occipital crest overhangs the occipital condyles (Fig. S1). The premolars display a closed mediofossette and the metacone fold is absent on the molars (Fig. S2).

### **Comparison with *Stephanorhinus***

The genus *Stephanorhinus* is closely related to *Coelodonta* and it was widespread in Eurasia during the Pleistocene (Guérin, 1980; Tong, 2012). *Stephanorhinus* has been never reported from the Indian Subcontinent but it has been recorded in southern China (Antoine, 2012; Tong, 2012). The species belonging to this genus (Table S1) are characterized by the presence of a partially ossified nasal septum and of an insertion for the frontal horn (Fig. S1). The upper cheek teeth are less hypsodont than those of the studied specimen, lacking the metacone fold (at least on the molars) (Fig. S2). The mediofossette is rarely observed on M1 and M2. Moreover, the lingual cingulum is usually present on the premolars in *Stephanorhinus* and the metaloph is never ‘S’-shaped in occlusal view (Fig. S2).

TABLE S1. Sources for the cranial and dental material used in the morphological comparisons.

Species	Direct Observation	References
<i>Dicerorhinus sumatrensis</i>	MNHN, MZF, NHMUK, NMB	Guérin, 1980
<i>Dicerorhinus gwebinensis</i>		Zin-Maung-Maung-Thein et al., 2008
<i>Stephanorhinus jeanvireti</i>	IGF, HNHM, MGGC, NMB	Guérin, 1972, 1980
<i>Stephanorhinus etruscus</i>	IGF, MGGC, MNCN, MNHN, MPGPD, MPUR, MSNAF, NHMUK, NMB	Guérin, 1980
<i>Stephanorhinus hundsheimensis</i>	MNHN, NHMW, NHMUK	Toula, 1902; Guérin, 1980
<i>Stephanorhinus hemitoechus</i>	IGF, MNCN, MPUR, NHMUK	Guérin, 1980
<i>Stephanorhinus kirchbergensis</i>	MfN, MNHN, MPUR, NHMUK, NMB	Guérin, 1980
<i>Stephanorhinus lantianensis</i>	IVPP	Tong, 2012
<i>Stephanorhinus yunchuchenensis</i>	IVPP	Chow, 1963; Tong, 2012
<i>Coelodonta thibetana</i>		Deng et al., 2011
<i>Coelodonta nihowanensis</i>		Deng, 2002
<i>Coelodonta tolojiensis</i>		Belyaeva, 1966; Kahlke and Lacombat, 2008
<i>Coelodonta antiquitatis</i>	HNHM, IGF, MAFI, MfN, MGGC, MPGPD, MPUR, NHMUK, NHMW, NMB	Guérin, 1980
<i>Rhinoceros unicornis</i>	NHMUK, NMB	Guérin, 1980
<i>Rhinoceros sondaicus</i>	NHMUK, NMB	Guérin, 1980
<i>Rhinoceros sivalensis</i>	NHMUK	Falconer and Cautley, 1846; Colbert, 1935
<i>Rhinoceros sinensis</i>		Matthew and Granger, 1929; Colbert and Hoojier, 1953

TABLE S2. Measurements (in mm) of the dimensional ranges of the skull and upper tooth rows of NHMUK 36661 compared with those of NHMUK 29628, *Rhinoceros platyrhinus* published by Khan (1971), *R. unicornis* (data from Guérin, 1980), *R. sondaicus* (data from Guérin, 1980), *R. sinensis* (data from Matthew and Granger, 1923), *R. sivalensis* (NHMUK M2729, 36740, 39625, 39647), *Dicerorhinus sumatrensis* (data from Guérin, 1980), Early Pleistocene *Stephanorhinus* (data from Guérin, 1980), middle–late Pleistocene *Stephanorhinus* (data from Guérin, 1980), *Coelodonta antiquitatis* (data from Guérin, 1980) and *C. nihowanensis* (data from Deng, 2002). 1 = Distance between the occipital condyle and the premaxillary tip; 2 = Distance between the occipital condyle and the nasal tip; 3 = Distance between the nasal tip and the occipital crest; 4 = Distance between the nasal tip and the nasal notch; 5 = Minimal width of the postorbital constriction; 7 = Distance between the occipital crest and the processus supraorbitalis; 8 = Distance between the occipital crest and the processus lacrymalis; 9 = Distance between the nasal notch and the anterior border of the orbit; 15 = Width of occipital crest; 16 = Width between the mastoid processes; 17 = Minimal width between the parietal crests; 21 = Maximal width between the zygomatic arches; 23 = Height of occipital face; 25 = Height of skull in front of P2; 26 = Height of skull between P4 and M1; 27 = Height of skull between M2 and M3; 31 = Width of foramen magnum; 32 = Width of the occipital condyles; P2–M3 = length of the tooth row; P2–P4 = length of the premolar row; P3–P4 = length of the two last premolars; M1–M3 = length of the molar row.

Species	1	2	3	4	5
NHMUK 36661	>788	780.4	759.4	160.9	
NHMUK 39628					113.22
<i>R. platyrhinus</i> Khan 1971	762				
<i>R. unicornis</i>	613–694	622–701	563–647	162.5–186	105–127
<i>R. sondaicus</i>	561–647	567–669	482–578	133–177	107–132
<i>R. sinensis</i>					
<i>R. sivalensis</i>					40.24–61.24
<i>D. sumatrensis</i>	486–556	490–581	440–588	128–182.5	89.5–128.5
<i>Stephanorhinus</i> early Pleistocene		530–684	530–755	138–264	79–126
<i>Stephanorhinus</i> middle–late Pleistocene		634–780	605–786	217.5–289	107–149
<i>C. antiquitatis</i>		666–800	706–883	183–237	111–144.5
<i>C. nihowanensis</i>	540	625	651	208	82.5

TABLE S2. (Continued).

7	8	9	15	16	17	21	23
395	488	123.8	221.27	330			245.59
			220.62	339	66.95		248.02
				279.4		396.2	
311–351	320–385	107–129	147–225	266.5–328	26–71	355–435	179.5–220
260–304	284–348	96–126	131–217	264–316	26–95	324–365	155–200
				176.23	87.35–121.13	252.21	
222–292	239–320	98.5–134	105–149	160.5–231	36.5–87	244–305	111–139
314–340	334.5–346.5	90–123	101–148	158–253	34–60.5	253.5–372	117–153
285–407	320–410	81–143	101–175	220–288	18–88	270–380	139–191.5
351–440	375.5–458	128–178	150–257.5	245–313	53–136.5	296–383	141.5–208
390	435	139	145	212.5	32	294	152

TABLE S2. (Continued).

25	26	27	31	32	P2–M3	P2–P4	P3–P4
285.7	260.06	257.3	58.36	139.74	ca 360	156.13–158.34	113.13–113.27
			60.17	138.36			
			30.8	147.3	297.2		
177–258	179–246	186–241	44–67	126–155	248–288	110.5–159	80–101
142–195	140–186	146–204	42–64	100–154	219–264	104–145.5	72–87.5
						130	
			ca 50.8	139		ca 124.37	ca 77–90.13
131–173	127–175	137–188	33–51	90.5–119.5	180.5–232	80.5–114	55.5–85
124–178	127–222	138–218	40–58	103–134	220–248	100–135	67–83.5
156–238	150–257	152–236	37–63	133–155	226–289.5	96–133	69–97
173.5–228	168–232	166–242.5	43–76	142.5–177.5	207–254	77–100	54–72.5
171	178	190	45	135			

TABLE S2. (Continued).

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M1-M3  
188.79-190.38

140-155.5

125-146

160

ca 150

112-131

126-145

128-176

127-167

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TABLE S3. List of material directly photographed for this study and references for those species for which we used published photos and drawings. Full references list is appended below. LV = lateral view, UT = upper teeth.

Species	Collection Number	Material	Reference
<i>Dicerorhinus sumatrensis</i>	MNHN PA7965 BVI-192	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	SMF ZIH184	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1952-4-1-2	Skull (LV-UT)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1901-1-22-1	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1901-8-15-1	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1921-2-8-1	UT	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1959-8-16-1	UT	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1921-2-8-2	Skull (LV-UT)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1921-2-8-3	Skull (LV-UT)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1921-2-8-4	Skull (LV-UT)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1931-5-28-1	Skull (LV-UT)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1948-1-14-2	Skull (LV-UT)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1948-12-20-1	Skull (LV-UT)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1949-1-11-1	Skull (LV-UT)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1949-2-1-1	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1950-3-16-1	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1968-4-15-1	Skull (LV-UT)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1972-720	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1986-12-28-8	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1975-8-9-18	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1879-6-14-2	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1972-12-31-1	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	NHMUK 1894-9-24-1	Skull (LV-UT)	
<i>Dicerorhinus sumatrensis</i>	MZF 735	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	IVPP CO34	Skull (LV)	
<i>Dicerorhinus sumatrensis</i>	NMB 10529	Skull (LV)	
<i>Rhinoceros sondaicus</i>	NHMUK 1861-3-11-1	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	NHMUK 1945-12-29-5	Skull (LV)	
<i>Rhinoceros sondaicus</i>	NHMUK 1951-11-10-11	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	NHMUK 1976-3-30-1	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	NHMUK 1921-5-15-1	Skull (LV)	
<i>Rhinoceros sondaicus</i>	NHMUK 1932-10-21-1	Skull (LV)	
<i>Rhinoceros sondaicus</i>	NHMUK 1902-12-18-1	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	NHMUK 1920-10-13-1	Skull (LV)	
<i>Rhinoceros sondaicus</i>	NHMUK 1955-4-4-4	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	NHMUK 1972-721	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	NHMUK 1979-11-21-178	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	NHMUK 1981-6-30-9	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	NHMUK 1871-12-29-7	Skull (LV)	
<i>Rhinoceros sondaicus</i>	NHMUK 1948-1-28-10	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	MNHN 1985-159	Skull (LV)	
<i>Rhinoceros sondaicus</i>	MNHN A7971 BVI-190	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	ZSM 1930-352	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	MNHN 1896-2003	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	MNHN 1932-42	Skull (LV-UT)	



TABLE S3. (Continued).

<i>Rhinoceros sondaicus</i>	MNHN PeE588	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	MNHN A2277	Skull (LV)	
<i>Rhinoceros sondaicus</i>	MNHN 1930-483	Skull (LV)	
<i>Rhinoceros sondaicus</i>	SMF 664	Skull (LV-UT)	
<i>Rhinoceros sondaicus</i>	MNHN 1912-299	Skull (LV)	
<i>Rhinoceros sondaicus</i>	MNHN A7970 BVI-191	Skull (LV)	
<i>Rhinoceros sondaicus</i>	MNHN 985-160	Skull (LV)	
<i>Rhinoceros sondaicus</i>	MNHN 1940-483	Skull (LV)	
<i>Rhinoceros sondaicus</i>	NMB 10885	Skull (LV)	
<i>Rhinoceros unicornis</i>	NHMUK 1972-12-30-1	Skull (LV-UT)	
<i>Rhinoceros unicornis</i>	ZSM 2001-33	Skull (LV-UT)	
<i>Rhinoceros unicornis</i>	MNHN 1932-49	Skull (LV)	
<i>Rhinoceros unicornis</i>	MNHN 1960-59	Skull (LV-UT)	
<i>Rhinoceros unicornis</i>	MNHN 1967-101	UT	
<i>Rhinoceros unicornis</i>	ZSM AM416	Skull (LV-UT)	
<i>Rhinoceros unicornis</i>	NHMUK 1884-1-22-1+2	Skull (LV-UT)	
<i>Rhinoceros unicornis</i>	NHMUK 1948-9-24-1	Skull (LV)	
<i>Rhinoceros unicornis</i>	NHMUK 1951-11-30-2	Skull (LV)	
<i>Rhinoceros unicornis</i>	NHMUK 1972-739	Skull (LV-UT)	
<i>Rhinoceros unicornis</i>	NHMUK 1948-1-28-9	Skull (LV)	
<i>Rhinoceros unicornis</i>	NHMUK 1950-10-18-5	Skull (LV-UT)	
<i>Rhinoceros unicornis</i>	NHMUK 1947-12-20-2	Skull (LV)	
<i>Rhinoceros unicornis</i>	NHMUK 1972-722	Skull (LV)	
<i>Rhinoceros unicornis</i>	NHMUK 1983-10-23-3	Skull (LV-UT)	
<i>Rhinoceros unicornis</i>	NHMUK 1901-3-10-1	Skull (LV-UT)	
<i>Rhinoceros unicornis</i>	NHMUK 1926-6-7-8	Skull (LV)	
<i>Rhinoceros unicornis</i>	NMB 7351	Skull (LV)	
<i>Rhinoceros unicornis</i>	NMB 1798	Skull (LV)	
<i>Rhinoceros unicornis</i>	NMB 009-2	Skull (LV)	
<i>Rhinoceros unicornis</i>	NMB 009	Skull (LV)	
<i>Dihoplus megarhinus</i>	MNHN AC2683	Skull (LV-UT)	Guérin, 1980
<i>Dihoplus megarhinus</i>	NHMUK M40834	Skull (LV-UT)	
<i>Dihoplus megarhinus</i>	HMV 1115	Skull (LV)	Deng, 2006
<i>Dihoplus megarhinus</i>	BSPG 2000 I 56	Skull (LV)	
<i>Stephanorhinus jeanvireti</i>	MIL 162	Skull (LV-UT)	Guérin and Tsoukala, 2013
<i>Stephanorhinus jeanvireti</i>	NMB Vt 627	Skull (LV-UT)	
<i>Stephanorhinus jeanvireti</i>	NMB Vt 622	Skull (LV-UT)	
<i>Stephanorhinus etruscus</i>	MNHN 1923-4	Skull (LV-UT)	
<i>Stephanorhinus etruscus</i>	SMNK M389 (GIH)	Skull (LV)	
<i>Stephanorhinus etruscus</i>	MNHN 1922-15	Skull (LV)	
<i>Stephanorhinus etruscus</i>	IGF 12728	Skull (LV)	
<i>Stephanorhinus etruscus</i>	IGF 3098	Skull (LV)	
<i>Stephanorhinus etruscus</i>	IGF 8660	Skull (LV-UT)	
<i>Stephanorhinus etruscus</i>	IGF 889	Skull (LV-UT)	
<i>Stephanorhinus etruscus</i>	IGF 12488	Skull (LV)	
<i>Stephanorhinus etruscus</i>	IGF 756	Skull (LV)	
<i>Stephanorhinus etruscus</i>	IGF 746	UT	
<i>Stephanorhinus etruscus</i>	MPM 182	Skull (LV)	

TABLE S3. (Continued).

<i>Stephanorhinus etruscus</i>	FSL 601v	Skull (LV)	Guérin, 1980
<i>Stephanorhinus etruscus</i>	GIKMK 9179	Skull (LV)	Beljaeva and David, 1975
<i>Stephanorhinus etruscus</i>	NMB SE1703	Skull (LV)	
<i>Stephanorhinus etruscus</i>	NMB SE548	Skull (LV)	
<i>Stephanorhinus etruscus</i>	NMB SE1785	Skull (LV)	
<i>Stephanorhinus etruscus</i>	NMB SE1711	Skull (LV)	
<i>Stephanorhinus etruscus</i>	NMB VA453	UT	
<i>Stephanorhinus etruscus</i>	NMB SE187	UT	
<i>Stephanorhinus etruscus</i>	MPLBP no code	UT	
<i>Stephanorhinus etruscus</i>	MPLBP 582	UT	
<i>Stephanorhinus etruscus</i>	MPLBP no code	UT	
<i>Stephanorhinus etruscus</i>	MPUR ve 1500	UT	
<i>Stephanorhinus hundsheimensis</i>	MNHM PW 1945-172	Skull (LV-UT)	
<i>Stephanorhinus hundsheimensis</i>	MNHM PW 1977-13	Skull (LV-UT)	
<i>Stephanorhinus hundsheimensis</i>	MNHM 1956-62	Skull (LV-UT)	
<i>Stephanorhinus hundsheimensis</i>	MNHM 1958-764	Skull (LV-UT)	
<i>Stephanorhinus hundsheimensis</i>	MNHM 1970-75	UT	
<i>Stephanorhinus hundsheimensis</i>	MNHM 1992-433+512	UT	
<i>Stephanorhinus hundsheimensis</i>	IQW 1965-2 513	Skull (LV)	
<i>Stephanorhinus hundsheimensis</i>	IQW 1966-7 415	UT	
<i>Stephanorhinus hundsheimensis</i>	IQW 1964-6 80	UT	
<i>Stephanorhinus hundsheimensis</i>	IGF 1931V	Skull (LV)	
<i>Stephanorhinus hundsheimensis</i>	MPP no code	Skull (LV)	
<i>Stephanorhinus hundsheimensis</i>	HLMD Mau 85	Skull (LV)	Schreiber, 2005
<i>Stephanorhinus hundsheimensis</i>	NHMUK 18 705	UT	
<i>Stephanorhinus hundsheimensis</i>	NHMW 1909.11.578	UT	
<i>Stephanorhinus kirchbergensis</i>	NHMUK 20 020	UT	
<i>Stephanorhinus kirchbergensis</i>	MNHM PW 1956-963	Skull (LV)	
<i>Stephanorhinus kirchbergensis</i>	SMNS no code	Skull (LV)	
<i>Stephanorhinus kirchbergensis</i>	SMNS 6516.4.2.66.4	Skull (LV)	
<i>Stephanorhinus kirchbergensis</i>	SMNS 6616.2.11.89.133	Skull (LV)	
<i>Stephanorhinus kirchbergensis</i>	SMNS 6516.4.2.66.44	Skull (LV-UT)	
<i>Stephanorhinus kirchbergensis</i>	SMNS 6616.17.10.83.86	Skull (LV)	
<i>Stephanorhinus kirchbergensis</i>	SMNK PAL 4254	Skull (LV-UT)	
<i>Stephanorhinus kirchbergensis</i>	MNHM PW 1949-238	Skull (LV)	
<i>Stephanorhinus kirchbergensis</i>	MNHM PW 1996-1138	Skull (LV-UT)	
<i>Stephanorhinus kirchbergensis</i>	MNHM PW 1964-689	UT	
<i>Stephanorhinus kirchbergensis</i>	LVH 198	Skull (LV-UT)	Made, 2010
<i>Stephanorhinus kirchbergensis</i>	HAZU no code	Skull (LV)	Gorjanovich-Kramberger, 1913
<i>Stephanorhinus kirchbergensis</i>	IVPP V2682	Skull (LV)	Chow, 1963
<i>Stephanorhinus kirchbergensis</i>	ZIN 10718	Skull (LV)	
<i>Stephanorhinus kirchbergensis</i>	MZ VIII VM-450	Skull (LV)	Borsuk-Bialynicka and Jakubowski, 1972
<i>Stephanorhinus kirchbergensis</i>	MfN Mb Ma 36270	UT	
<i>Stephanorhinus hemitoechus</i>	MPUR ve 2832	Skull (LV)	
<i>Stephanorhinus hemitoechus</i>	SMNS 16295-1929	Skull (LV)	

TABLE S3. (Continued).

<i>Stephanorhinus hemitoechus</i>	NHMUK 45 205	Skull (LV-UT)	
<i>Stephanorhinus hemitoechus</i>	NHMUK 40 939	UT	
<i>Stephanorhinus hemitoechus</i>	NHMUK 40 946	UT	
<i>Stephanorhinus hemitoechus</i>	IGF 1105	Skull (LV)	
<i>Stephanorhinus hemitoechus</i>	IGF 1109	Skull (LV)	
<i>Stephanorhinus hemitoechus</i>	IGF 10792	Skull (LV)	
<i>Stephanorhinus hemitoechus</i>	MPAVC no code	Skull (LV-UT)	
<i>Stephanorhinus hemitoechus</i>	LVH 189-HK88	Skull (LV)	Made, 2010
<i>Stephanorhinus hemitoechus</i>	NCB 93302	Skull (LV-UT)	Loose, 1961; Loose, 1975
<i>Stephanorhinus hemitoechus</i>	MPUR ve 1497	UT	
<i>Stephanorhinus hemitoechus</i>	MPUR ve 1498	UT	
<i>Coelodonta antiquitatis</i>	MNHN 51 ABB 008	UT	
<i>Coelodonta antiquitatis</i>	IGF 1040	Skull (LV)	
<i>Coelodonta antiquitatis</i>	IGF 16945	Skull (LV)	
<i>Coelodonta antiquitatis</i>	MNHM PW 1978-62	Skull (LV)	
<i>Coelodonta antiquitatis</i>	SMNK PAL QP-645	Skull (LV)	
<i>Coelodonta antiquitatis</i>	SMNK QP435-PAL4177	Skull (LV)	
<i>Coelodonta antiquitatis</i>	SMNS 3770	Skull (LV)	
<i>Coelodonta antiquitatis</i>	SMNS 6316.2.7.74.7	Skull (LV)	
<i>Coelodonta antiquitatis</i>	SMNS 6316.2.9.77.3	Skull (LV)	
<i>Coelodonta antiquitatis</i>	MPUR ve2832	Skull (LV-UT)	
<i>Coelodonta antiquitatis</i>	MNHM no code	Skull (LV)	
<i>Coelodonta antiquitatis</i>	NHMUK 12 504	Skull (LV)	
<i>Coelodonta antiquitatis</i>	NHMUK no code	Skull (LV-UT)	
<i>Coelodonta antiquitatis</i>	LHV 201-1996,47	Skull (LV)	Made, 2010
<i>Coelodonta antiquitatis</i>	FSL 30001	Skull (LV)	Guérin, 1980
<i>Coelodonta antiquitatis</i>	IVPP V59	Skull (LV)	
<i>Coelodonta antiquitatis</i>	IVPP V2130	Skull (LV)	
<i>Coelodonta antiquitatis</i>	NHMUK M9130	Skull (LV-UT)	
<i>Coelodonta antiquitatis</i>	MPC-MA no code	Skull (LV)	
<i>Coelodonta antiquitatis</i>	MfN Mb Ma 420	Skull (LV)	
<i>Coelodonta antiquitatis</i>	MfN Mb Ma 666	Skull (LV)	
<i>Coelodonta antiquitatis</i>	MfN Mb Ma 673	Skull (LV)	
<i>Coelodonta antiquitatis</i>	MfN Mb Ma 641	Skull (LV)	
<i>Coelodonta antiquitatis</i>	LCMN no code	Skull (LV)	Morel and Hug, 1996
<i>Coelodonta antiquitatis</i>	MPC-MA 4066	Skull (LV)	
<i>Coelodonta antiquitatis</i>	NHMW A5023	Skull (LV)	
<i>Coelodonta antiquitatis</i>	NHMW no code	Skull (LV)	
<i>Coelodonta antiquitatis</i>	NHMW 1980	Skull (LV)	
<i>Coelodonta antiquitatis</i>	NHMB 1284	Skull (LV)	Marković, 1998
<i>Coelodonta antiquitatis</i>	NHMB 874	Skull (LV)	Marković, 1998
<i>Coelodonta antiquitatis</i>	MPG no code	Skull (LV)	Lyras, 2007
<i>Coelodonta antiquitatis</i>	USNM 6053	Skull (LV)	
<i>Coelodonta antiquitatis</i>	NHMUK no code	Skull (LV)	
<i>Coelodonta antiquitatis</i>	HNHM A252	Skull (LV)	
<i>Coelodonta antiquitatis</i>	HNHM A254	Skull (LV)	
<i>Coelodonta antiquitatis</i>	MZ VIII Mm 452	Skull (LV)	

TABLE S3. (Continued).

<i>Coelodonta antiquitatis</i>	MZ VIII Vm 234	Skull (LV)	
<i>Coelodonta antiquitatis</i>	NHMUK 9114	Skull (LV)	
<i>Coelodonta antiquitatis</i>	MfN Mb Ma 672	Skull (LV)	
<i>Coelodonta antiquitatis</i>	NHMW 321g2-6	Skull (LV)	
<i>Coelodonta antiquitatis</i>	UL IV-3	Skull (LV)	Borsuk-Bialynicka, 1973
<i>Coelodonta antiquitatis</i>	ZG II-b-13-1	Skull (LV)	Borsuk-Bialynicka, 1973
<i>Coelodonta antiquitatis</i>	NMB UP801	Skull (LV)	
<i>Coelodonta antiquitatis</i>	RHI 1(R 20-53 RO 86)	UT	Guérin, 2010
<i>Coelodonta antiquitatis</i>	MfN Mb Ma 51839	UT	
<i>Rhinoceros platyrhinus</i>	NHMUK 36661	Skull (LV-UT)	

FIGURE S1. Skulls of Pleistocene Eurasian Rhinocerotini. **A**, NHMUK 36661; **B**, *Rhinoceros unicornis* (NHMUK 72.739); **C**, *R. sondaicus* (MNHN 1932.42); **D**, *Dicerorhinus sumatrensis* (NMB 10529); **E**, *Stephanorhinus etruscus* (IGF 756); **F**, *Coelodonta antiquitatis* (HNHM A.252). Scale bar equals 10 cm.

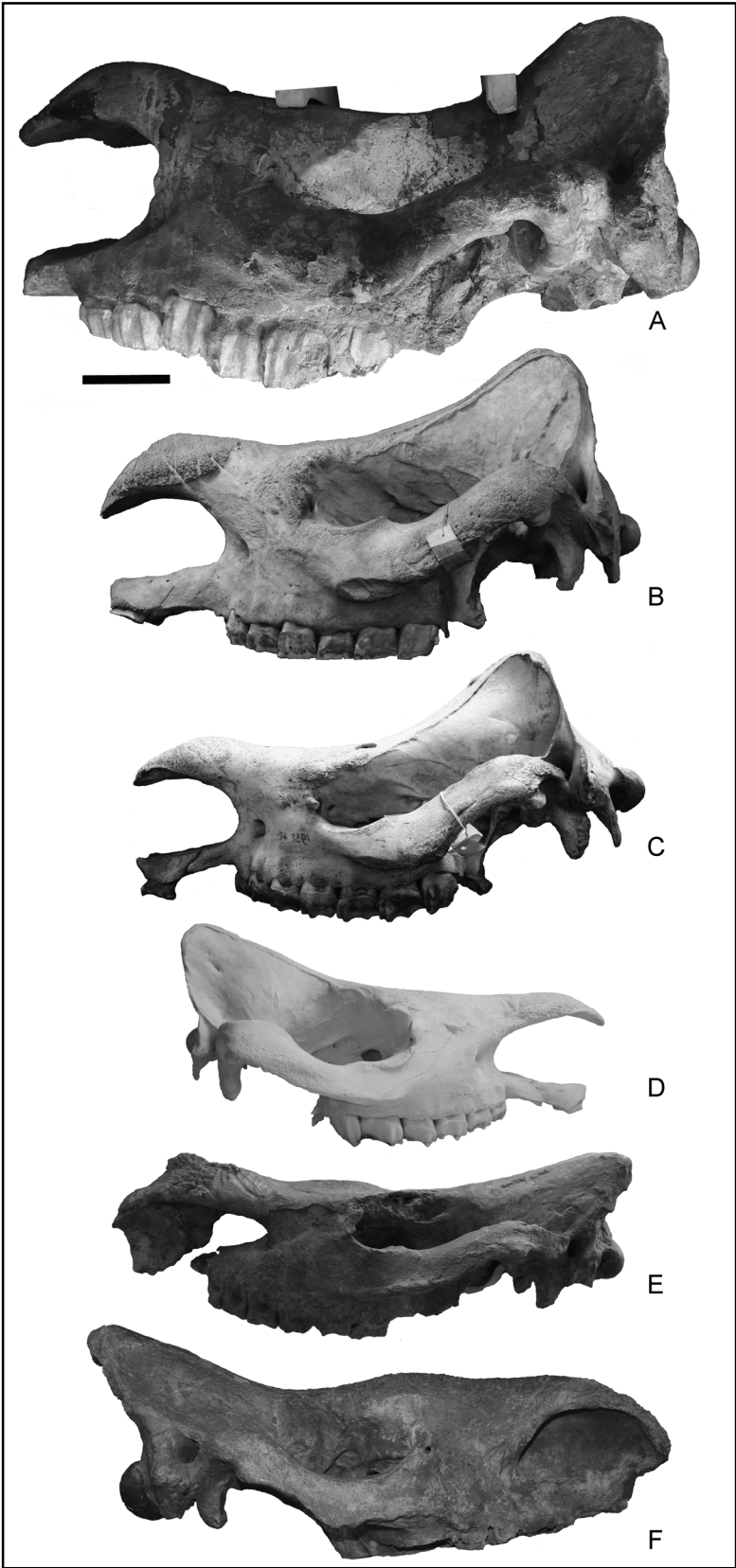
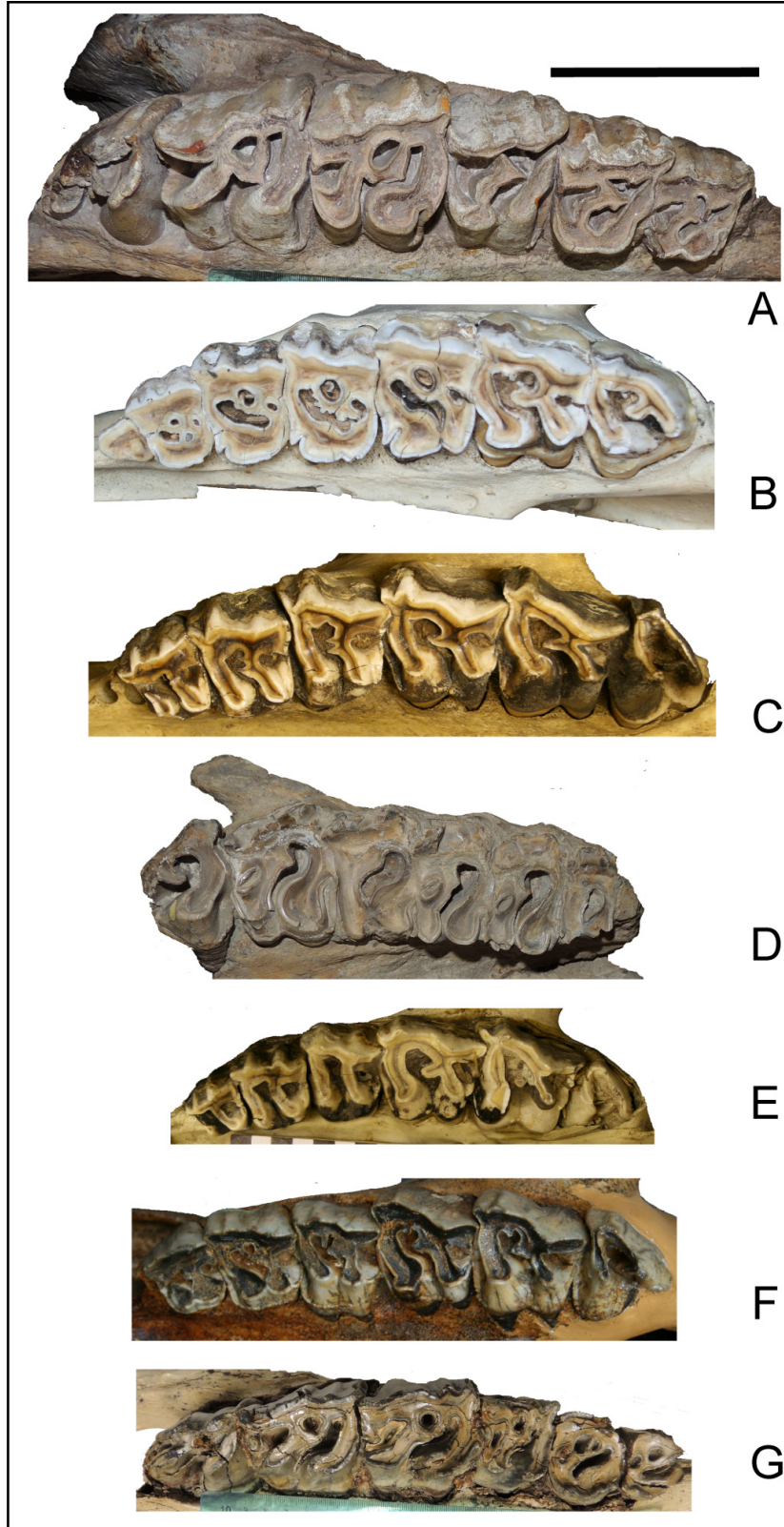




FIGURE S2. Upper tooth row of Pleistocene Eurasian Rhinocerotini. **A**, NHMUK 36661; **B**, *Rhinoceros unicornis* (MNHN 1967.101); **C**, *R. sondaicus* (NHMUK 76.3.30.1); **D**, *R. sivalensis* (NHMUK 39647); **E**, *Dicerorhinus sumatrensis* (NHMUK 1921.2.8.1); **F**, *Stephanorhinus hundsheimensis* (MNHNPW 1977-13); **G**, *Coelodonta antiquitatis* (NHMUK M9130). Scale bar equals 10 cm.



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