

Collection Record of Small Mammals in Xinjiang-Uygur, 1998 and 1999 with Brief Review of Its Mammalian Fauna

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Abstract. Epidemiological surveys of zoonosis in small mammals in Xinjiang in the western part of China were carried out from 1998 to 1999, for the development of new animal models for human disease. The study areas of the survey were located in and around both Mt Tian-Shan and Mt Altai, the Xinjiang-Uygur autonomous region. The total number of specimens was 569 belonging to 2 families, 2 genera and 2 species of Insectivora, and 3 families, 18 genera, 25 species of Rodentia. We captured about 50% of rodent species recorded in Xinjiang through these collection surveys. A brief review of mammalian fauna of the orders Insectivora and Rodentia in Xinjiang-Uygur was presented.

Key words: Collection record, Insectivora, Rodentia, Xinjiang-Uygur.

Epidemiological surveys of zoonosis in small mammals in Xinjiang in the western part of China were carried out from 1998 to 1999, for the development of new animal models for human disease. The studies were supported by International Scientific Research Program No. 10041210 of the Ministry of Education, Science of Culture of Japan. The study areas of the survey were located in and around both Mt Tian-Shan and Mt Altai, the

Xinjiang-Uygur autonomous region. In this paper, preliminary information including habitats of the collecting sites and species on the small mammals captured in this survey is presented.

Materials and Methods

Outline of the locality and dates of each survey are shown below (Fig 1).

Mt Tian-Shan: The study areas of Hami, Barkol, Mori, Fukang, Banfanggou, Fubei, Houxia, Jinghe

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Fig. 1. Map showing localities of the collection survey. 1: Hami, 2: Bartol, 3: Mori, 4: Fukang, 5: Banfanggou, 6: Fubei, 7: Houxia, 8: Wuchai wan, 9: Ulun-gur river, 10: Fuhai, 11: Burqin, 12: Hanashi Lake, 13: Jadenggu, 14: Fuyun, 15: Kamushite, ★:Urumqi

and Qitai in or around Mt Tian-Shan, are located from 42°37' N to 44°24' N latitude, and from 87°52' E to 93°26' E longitude (Fig 1, Tabs 1 and 2). Traps were set from September 20, 1998, to September 28, 1998. Major vegetation of the trap sites except for Houxia were desert with grass land and/or vegetable fields. The vegetation of Houxia was consisted of mountainous grassland around the base of areas about 2100 m altitude.

Mt Altai: The study areas, namely Wuchai wan of Ulun-gur river, Fuhai, Burqin, Hanashi Lake, Jadenggu, Fuyun and Kamushite on or around Mt Altai, are located from 44°48' N to 48°42' N latitude, and from 86°48' E to 88°52' E longitude (Fig 1, Tabs 1 and 2). Traps were set from July 15, 1999 to July 22, 1999. Major vegetation of the trap sites of Wuchai wan, Fuhai, Burqin, Fuyun and Kamushite was desert with grasslands. Vegetation of the Ulun-gur river, Hanashi Lake and Jadenggu were consisted of primary forest of pine trees or broad-leaved deciduous trees with some low ground plants. Hanashi Lake and Jadenggu in paticular are close to the Hanashi National Nature Reserve which exhibits rich and diversified mammalian fauna (Abdukadir *et al.*, 1999).

Methods of capture and identification: The snap trap mainly used in the present investigation were about 6×9 cm in size, and each one contained meal or seed as a bait (Fig 2A). However, for trapping slightly larger mammals, the sciurids and the genera *Rhombomys* and *Ellobius* occurring in underground tunnels, steel traps about 12 cm in diameter were used (Fig 2B). Before setting these traps, the frequency of habitat utilization was evaluated by the following main field signs; feces (Fig 5), ways which the small mammals frequently used, tunnels, foot prints, eaten marks on the plants and fruits. After this evaluation, the traps were set near the signs. The animals were collected at the mid-night of the day or in the next morning.

In addition to the animals captured with traps, two dead bodies of *Hemiechinus auritus* and *Alactagulus pumilio* killed by traffic accidents were obtained during the survey. After the speciemen labels of the

AS series registered by M. Asakawa, one of authors, were attached to the mammals captured, each mammal was dissected in order to obtain its blood and brain for protozoological and virological samples, and intestine for helminthological examination. Each whole dissected body was preserved in about 100% ethanol or 20% formalin solution in the study area, and measurements of body weight (BW), head and body length (HB), tail length (T), hind foot (excluding nail) length (HF), and ear length (E) were measured in the laboratory. Stuffed specimens and/or skull specimens were prepared for some mammals for identification purposes (Fig 6).

Results and Discussion

The total number of specimens was 569 belonging to 2 families, 2 genera and 2 species of Insectivora, and 3 families, 18 genera, 25 species of Rodentia (Tabs 1-3, Figs 3-5). Detailed information including measurements [in mm except for BW (g)] on each animal is shown in the Appendix.

According to the most recent review of reports on the rodent fauna of the western part of China including Xinjiang (Zhang, 1997), the following 58 species have been recorded: *Sciurus vulgaris*, *Eutamias sibiricus*, *Citellus relictus*, *C. major*, *C. undulatus*, *C. erythrogegens*, *Marmota baibacina*, *M. himalayana*, *M. caudata*, *Castor fiber*, *Sicista subtilis*, *S. concolor*, *Cardiocranius paradoxus*, *Salpingotus kozlovi*, *S. crassicauda*, *Euchoreutes naso*, *Allactaga sibirica*, *A. elator*, *A. bullata*, *Alactagulus pumilio*, *Dipus sagitta*, *Stylodipus telum*, *Dryomys nitedula*, *Micromys minutus*, *Apodemus sylvaticus*, *A. agrarius*, *Rattus flavipectus*, *R. norvegicus*, *Mus musculus*, *Nesokia indica*, *Cricetulus migratorius*, *C. longicaudatus*, *C. eversmanni*, *Phodopus sungorus*, *P. roborovskii*, *Cricetus cricetus*, *Meriones tamariscinus*, *M. meridianus*, *M. chengi*, *M. erythrorus*, *Brachiones przewalskii*, *Rhombomys opimus*, *Ellobius talpinus*, *Clethrionomys rutilus*, *C. frater*, *C. rufocanus*, *Alticola argentata*, *A. strelzowi*, *Lagurus lagurus*, *L. luteus*, *Arvicola terrestris*, *Ondatra zibethica*, *Pitymys leucurus*, *Microtus*

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Table 1 Number of individual small mammals captured in Xinjiang, 1998.

Locality	Hami	Barkol	Mori	Fukang	Banfanggou	Fubei	Houxia	Jinghe	Qitai	
Latitude	42° 37' N	43° 35' N	unknown	43° 56' N	43° 24' N	44° 24' N	43° 12' N	unknown	unknown	
Longitude	93° 26' E	93° 06' E	unknown	88° 08' E	87° 23' E	87° 52' E	87° 07' E	unknown	unknown	
Date	Sep.20	Sep.21	Sep.21	Sep.23	Sep.24	Sep.26	Sep.28	Sep.?	Sep.?	TOTAL
<i>Crociodura leucodon</i>	0	0	0	0	15	0	0	0	0	15
<i>Spermophilus undulatus</i>	0	0	0	0	0	0	0	3	0	3
<i>Cricetulus migratorius</i>	27	36	0	14	26	0	13	0	0	116
<i>Cricetulus eversmanni</i>	0	2	0	0	0	0	0	0	0	2
<i>Microtus oeconomus</i>	0	2	0	0	0	0	1	0	0	3
<i>Microtus socialis</i>	0	0	1	0	17	0	0	0	0	18
<i>Lagurus lagurus</i>	0	1	0	0	0	0	0	0	8	9
<i>Ellobius talpinus</i>	0	0	0	0	0	0	3	0	0	3
<i>Alticola argentatus</i>	0	0	0	0	0	0	51	0	0	51
<i>Meriones meridianus</i>	12	0	0	0	0	0	0	0	0	12
<i>Meriones tamariscinus</i>	5	0	0	0	0	0	0	0	0	5
<i>Rhombomys opimus</i>	0	0	0	0	0	6	0	0	0	6
<i>Apodemus uralensis</i>	0	0	0	42	4	0	2	0	0	48
<i>Mus musculus</i>	2	37	0	6	42	0	0	0	0	87
<i>Rattus norvegicus</i>	0	0	0	2	1	0	0	0	0	3
<i>Alactagulus pumilio</i>	0	0	0	0	0	1	0	0	0	1
<i>Dipus sagitta</i>	6	0	0	0	0	0	0	0	0	6
TOTAL	52	78	1	64	105	7	70	3	8	388

Table 2 Number of individual small mammals captured in Xinjiang, 1999.

Locality	Wuchaiwan	Ulun-gur	Fuhai	Burqin	Hanashi	Jadenggn	Fuyun	Kamushite	
Latitude	44° 48' N	47° 56' N	47° 08' N	47° 44' N	48° 42' N	48° 42' N	unknown	unknown	
Longitude	88° 52' E	88° 08' E	87° 33' E	86° 48' E	87° 01' E	87° 08' E	unknown	unknown	
Date	Jul.15	Jul.16	Jul.17	Jul.19	Jul.20	Jul.21	Jul.22	Jul.22	TOTAL
<i>Hemiechinus auritus</i>	0	0	1	0	0	0	0	0	1
<i>Spermophilus undulatus</i>	0	0	0	0	0	7	0	0	7
<i>Citellus erythrogenys</i>	0	0	0	0	0	0	0	2	2
<i>Cricetulus migratorius</i>	3	1	1	0	0	0	1	0	6
<i>Cricetulus longicauda</i>	0	8	1	0	0	0	0	0	9
<i>Cricetulus eversmanni</i>	0	0	11	0	0	0	0	0	11
<i>Cricetus cricetus</i>	0	0	0	0	0	1	0	0	1
<i>Microtus arvalis</i>	0	0	0	0	0	8	0	0	8
<i>Lagurus luteus</i>	0	0	0	0	0	0	1	3	4
<i>Clethrionomys rufocanus</i>	0	1	0	0	0	0	0	0	1
<i>Clethrionomys rutilus</i>	0	0	0	0	7	7	0	0	14
<i>Meriones meridianus</i>	17	0	6	6	0	0	2	0	31
<i>Meriones tamariscinus</i>	5	0	1	3	0	0	0	0	9
<i>Apodemus uralensis</i>	0	7	2	0	1	7	0	0	17
<i>Mus musculus</i>	0	1	0	0	0	0	0	0	1
<i>Alactagulus pumilio</i>	1	0	0	0	0	0	0	0	1
<i>Allactaga sibirica</i>	3	0	10	2	0	0	5	0	20
<i>Euchoreutes naso</i>	5	0	0	0	0	0	0	0	5
<i>Dipus sagitta</i>	4	0	15	14	0	0	0	0	33
TOTAL	38	18	48	25	8	30	9	5	181

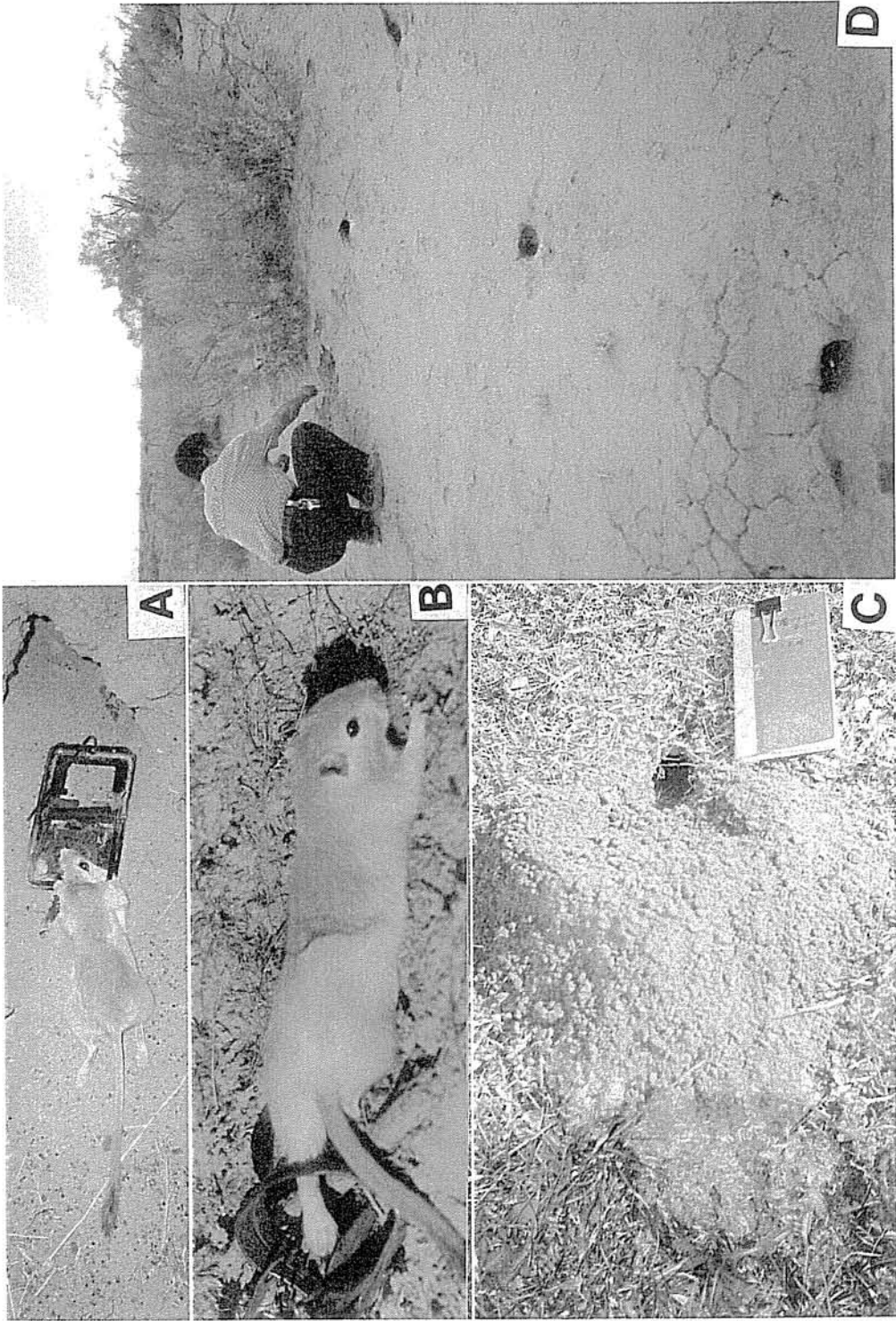


Fig. 2. Traps and tunnels. A- *Meriones meridianus* captured with a snap trap in Wuchai wan. B- *Rhombomys opimus* captured with a steel trap in Fubei. C- Tunnel of *Ellobius talpinus* in Houxia. D- Tunnels of *Meriones* sp. in Wuchai wan.

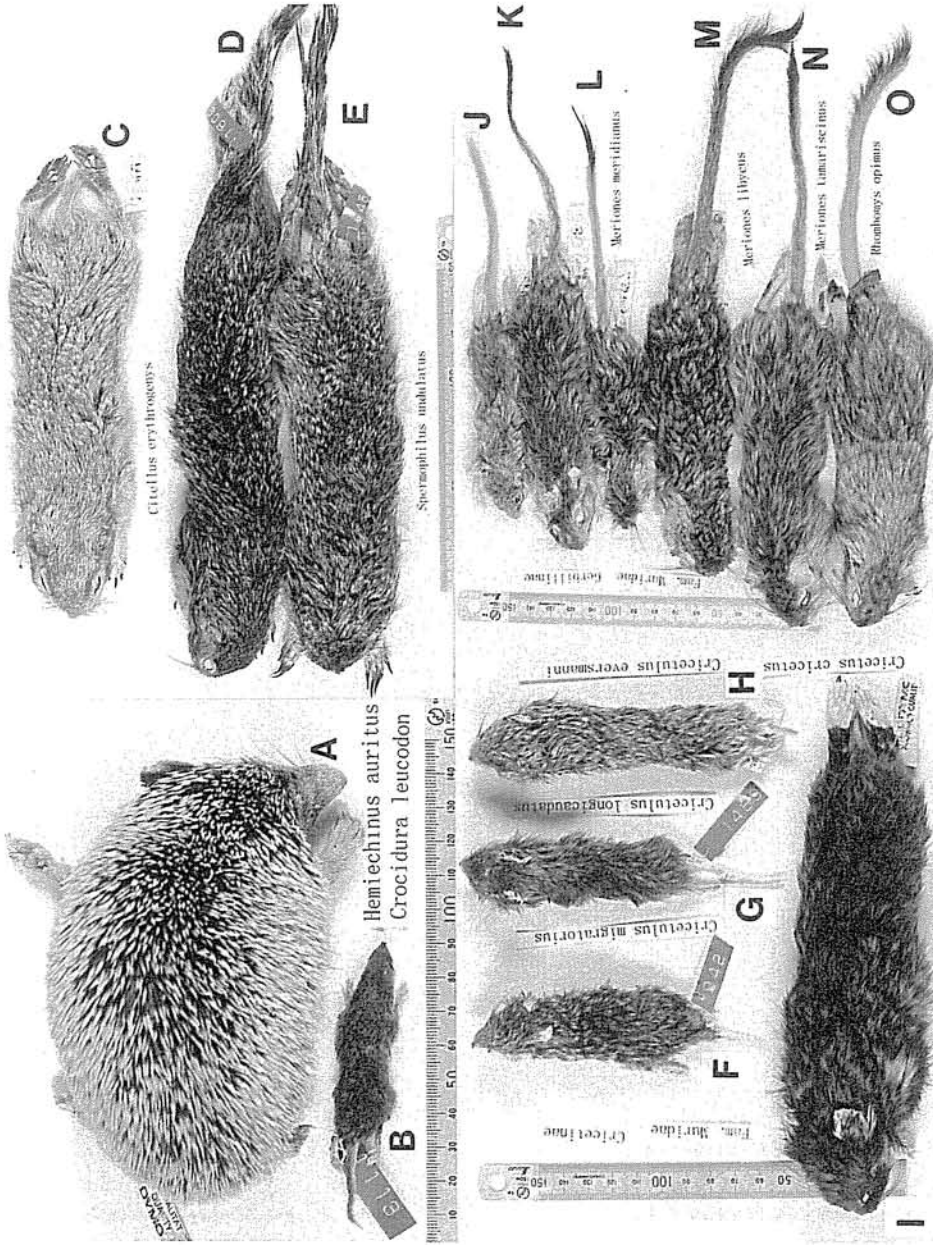


Fig. 3. Small mammals captured in Xinjiang (1) A- *Hemieichinus auritus* (AS 1655; Dr. Liao's specimen), a hedgehog with the spine which is dark brown at a base and white at a tip. B- *Crocidura leucodon* (AS 1113), a dark-gray shrew with whitish feet. C and D- Squirrels modified for a terrestrial life through the shortening of tails, reduction of external ears and development of stout claws for burrowing. C- *Citellus erythrogaps* (AS 1648), buff in color with shorter tail; D- *Spermophilus undulatus* (AS 1669) and E- ditto (AS 1145), dark-gray in color with medium length tail. F to H- small hamsters with tail longer than hind foot; F- *Citellus migratorius* (AS 942), with shortest tail; G- *C. longicaudatus* (AS 1469) with longest tail; H- *C. evermanni* (AS 1530) with medium length tail. I- *Cricetus crinitus* (AS 1620), a large hamster with tail shorter than hind foot. J to N- J- rat-like gerbils with ears well developed; J- *Meriones meridianus* (AS 1643), K- ditto (AS 1533), L- ditto (AS 1497), smallest sized body; M- *M. libycus* (AS 1654); Dr. Liao's specimen, median sized body; N- *M. tamarsicus* (AS 884), largest sized body. O- *Rhombomys opimus* (AS 1147), a gerbil with ears shorter than in *Meriones* and their side clothed with very short buffy hair, body buff and slightly paler over the shoulders.

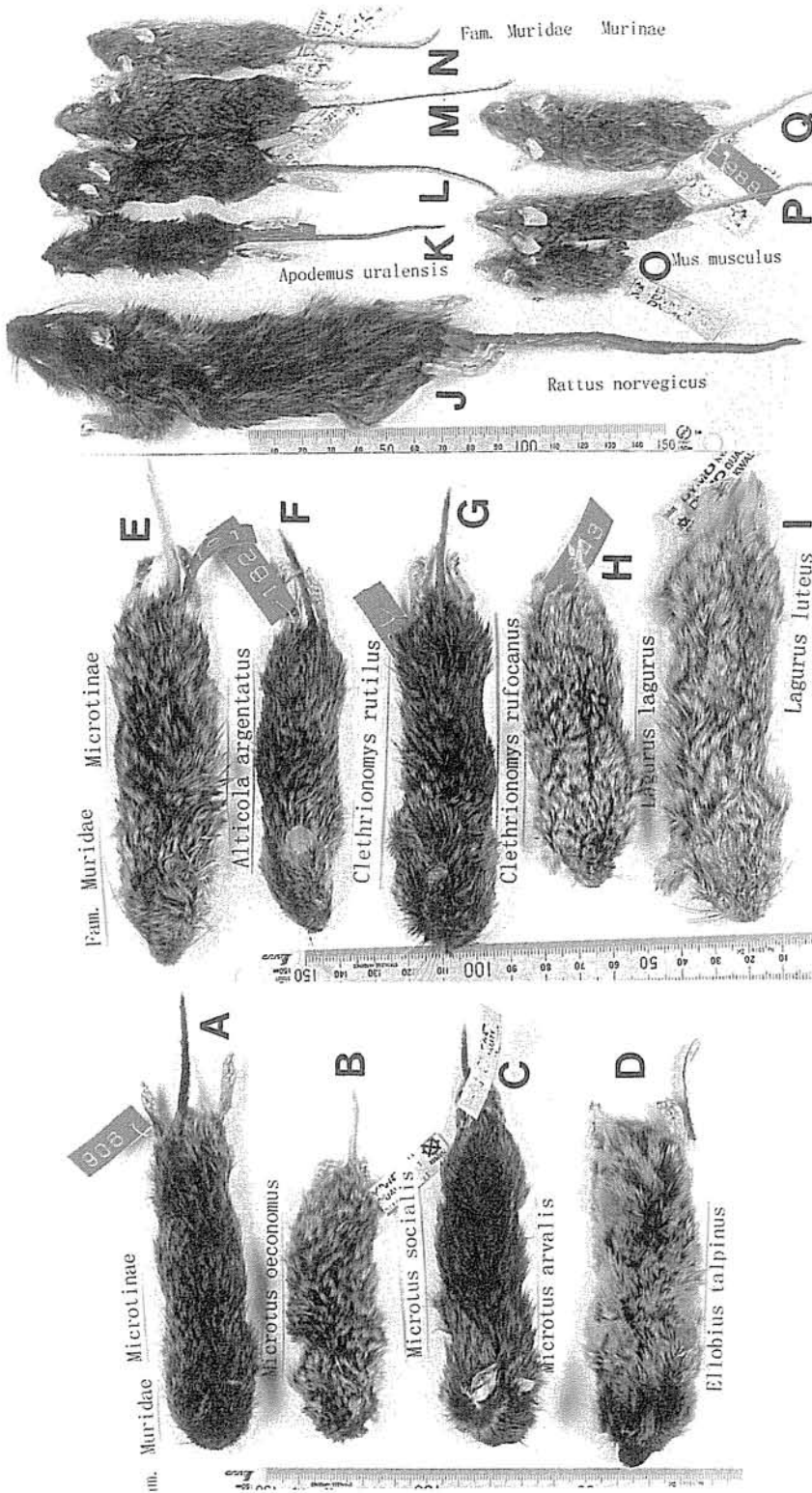


Fig. 4. Small mammals captured in Xinjiang (2). A to C, voles not specially modified for burrowing with ears projecting above fur, tail longer than hind foot, A- *Microtus oeconomus* (AS 906), body dark-gray with whitish feet; B- *M. socialis* (AS 971), body buff, C- *M. arvalis* (AS 1636), body dark-gray with blackish feet. D- *Ellobius talpinus* (AS 1233), a vole highly modified for burrowing with remarkably small ears and tail. E- *Altiicola argentatus* (AS 1191), a buffy gray vole with buffy white tail. F- and G-, voles of dorsal coloration decidedly red, F- *Clethrionomys rutilus* (AS 1624), back brighter and tail reddish like the back, G- *C. rufocanus* (AS 1513), back dull-red and tail blackish. H- and I-, voles modified for burrowing with reduced ears and tail, much less than the length of the hind foot. H- *Lagurus lagurus* (AS 943), body smaller sized, back with a median black line. I- *L. luteus* (AS 1637), body larger sized. J- to Q-, a rat and mice; J- *Rattus norvegicus* (AS 1128), common formed rat; K- *Apodemus uralensis* (AS 1613), L- ditto (AS 1634), M- ditto (AS 1050), N- ditto (AS 1002), field mice with bicolored tail, O- *Mus musculus* (AS 1514), P- ditto (AS 1032), Q- ditto (AS 988), tail not bicolor.

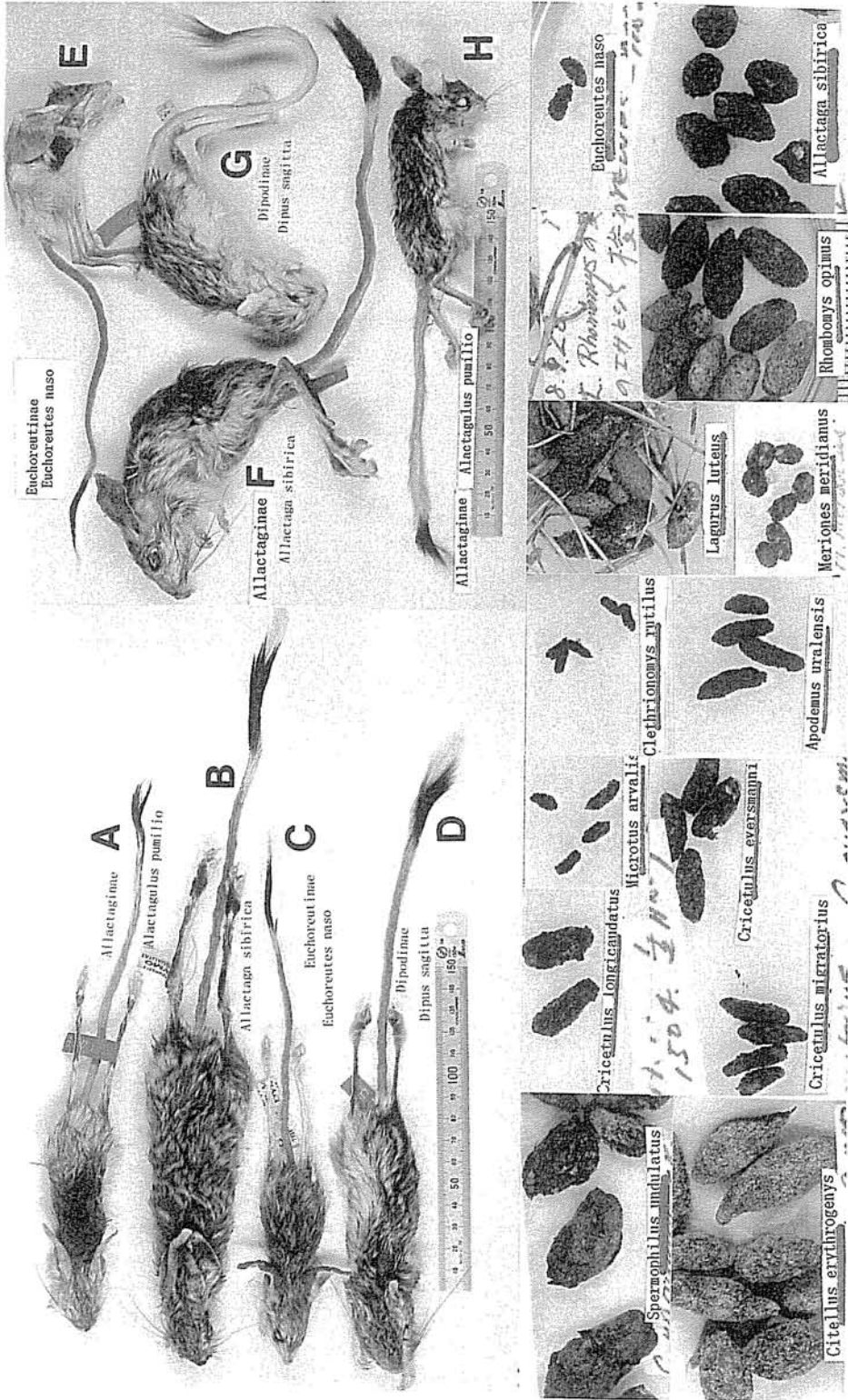


Fig. 5. Small mammals captured in Xinjiang (3) and their feces (Bar=10mm). A- to H-, jerboas modified for saltatorial progress with elongated tail and with hind feet with reduction (A- to C-, E-, F- and H-, so-called "five-toed jerboa") or entire loss (D- and G-, so-called "three-toed jerboa") of the lateral toes, and modified for burrowing with strong claws of the fore feet. A- and H-, *Allactagulus pumilio* (AS 1479 and 1146'), body smaller with narrow ears, hind foot less than 60 mm in length. B- and F-, *Allactaga sibirica* (AS 1642 and 1593), body larger with narrow ears, hind foot more than 60 mm in length. C- and E-, *Euchoreutes naso* (AS 1481 and 1477), broad and long ears. D- and G-, *Dipus sagitta* (AS 845 and 841), short ears modified for burrowing habits.

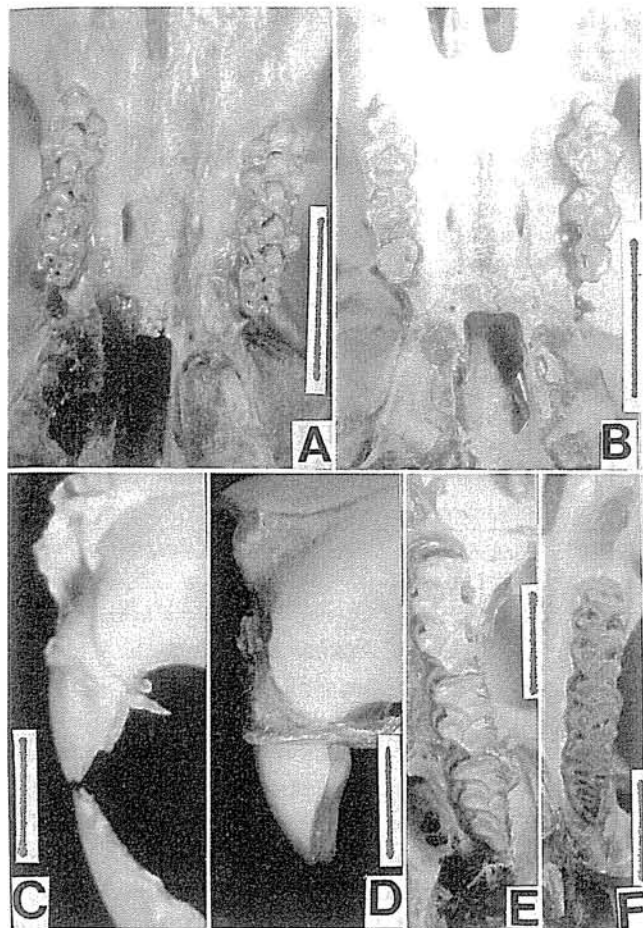


Fig. 6. Upper molars (A, B, E and F) and incisors (C and D) of the genera *Apodemus* (A, B and D), *Mus* (C) and *Clethrionomys* (E and F). A- *A. uralensis* (AS 1634; Bar= 3 mm), B- *A. peninsulae* (for comparison) (Saroma, Hokkaido, Japan; Bar= 3 mm), C- *M. musculus* (AS 1032; Bar= 2 mm), D-*A. uralensis* (AS 977; Bar= 2 mm), E- *C. rufocanus* (AS 1513; Bar= 2 mm), F- *C. rutilus* (AS 1627; Bar= 2 mm).

socialis, *M. arvalis*, *M. ilaeus*, *M. agrestis*, *M. oeconomus*, and *M. gregalis*. However, Wang and Yang (1983) recorded 60 species and Ma *et al.* (1987) recorded 55 species of rodents, the present authors captured about 50% of rodent species recorded in Xinjiang through these collection surveys. Only 2 insectivora species were obtained in this survey although 7 species have been recorded (Jiang *et al.*, 1992).

The Chinese arid area is subdivided into 3 parts, *i.e.*, the northwest desert of Xinjiang, the Inner Mongolian steppe and the Tibetan highland, which occupy almost half of the total land area of China. Among the mammals, *Hemiechinus auritus*, *Citellus erythrogenys*, *Cricetulus migratorius*, *C. longicaudatus*, *C. evermanni*, *Microtus oeconomus*, *M. arvalis*, *Lagurus luteus*, *Ellobius talpinus*, *Alticola argentatus*, *Clethrionomys rutilus*, *Meriones meridianus*, *Alactagulus pumilio*, *Allactaga sibirica* and *Dipus sagitta* are common species throughout the 3 subdivided areas (Zhang, 1991). These species are adapted to a desert habitat except for the mountainous microtines, *i.e.*, *Microtus* spp., *A. argentatus* and *C. rutilus*. *C. migratorius* and *C. longicaudatus* on particular occur in the desert and extend to the steppe and parts of the Tibetan highland. Geologically, the northwest desert consists of a sandy desert and a rocky desert (=gobi, the original Chinese term), and jumping mice seem to be associated with the rocky desert (Zhang, 1991). However, the authors found many jumping mice throughout the sandy desert in the present surveys.

Rhombomys opimus and *Meriones tamariscinus* are mainly restricted to the Northwest Desert because of the presence of the special food plants; *R. opimus* is associated with *Haloxylon ammodendron* (Fam. Chenopodiaceae) and *M. tamariscinus* with *Tamarix* spp. (Fam. Tamaricaceae) (Zhang, 1991). The distribution of *R. opimus* should be investigated with regard to the distribution of this plant species in future studies because this gerbil species has been reported as a reservoir animal of *Leishmania* spp., *i.e.*, the pathogen of zoonotic cutaneous leishmaniasis in Central Asia (Ito, 1999).

In terms of parasitology and virology, more precise ecological and zoological investigations on 6

Table 3 Scientific names of mammals captured in Xinjiang, 1998 and 1999.

Insectivora	Fam. Muridae (continued)	Fam. Muridae (continued)
Fam. Soricidae	Microtinae	Murinae
<i>Crociodura leucodon</i>	<i>Microtus oeconomus</i>	<i>Apodemus uralensis</i> (*)
Fam. Erinaceidae	<i>Microtus socialis</i>	<i>Mus musculus</i>
<i>Hemiechinus auritus</i>	<i>Microtus arvalis</i>	<i>Rattus norvegicus</i>
Rodentia	<i>Lagurus lagurus</i>	Fam. Dipodidae
Fam. Sciuridae	<i>Lagurus luteus</i>	Allactaginae
<i>Spermophilus undulatus</i>	<i>Ellobius talpinus</i>	<i>Alactagulus pumilio</i>
<i>Citellus erythrogenys</i>	<i>Alticola argentatus</i>	<i>Allactaga sibirica</i>
Fam. Muridae	<i>Clethrionomys rufocanus</i>	Euchoreutinae
Cricetinae	<i>Clethrionomys rutilus</i>	<i>Euchoreutes naso</i>
<i>Cricetulus migratorius</i>	Gerbillinae	Dipodinae
<i>Cricetulus longicaudatus</i>	<i>Meriones meridianus</i>	<i>Dipus sagitta</i>
<i>Cricetulus evermanni</i>	<i>Meriones tamariscinus</i>	
<i>Cricetus cricetus</i>	<i>Rhombomys opimus</i>	

*: So called "*A. sylvaticus*" (or "*A. microps*") recorded in Chinese references (cf. Musser *et al.*, 1996)

rodents, *i.e.*, *C. migratorius*, *M. meridianus*, *M. erythrorus*, *A. sylvaticus*, *M. musculus*, and *R. norvegicus*, should be undertaken in the future although *M. erythrorus* was not obtained in the present survey and only a few *R. norvegicus* were obtained in this survey because this species spread to Xinjiang via the railways from 1963 (Wang and Yang, 1983). These 6 species are common in vegetable fields and residential areas of cities throughout Xinjiang (Liao *et al.*, 1993, 1999). *C. migratorius* and *M. meridianus* have been investigated in the department of experimental zoology and parasitology of the Xinjiang Institute for Endemic Diseases Control and Research (cf. Liao and Wei, 1998, 1999; Osman *et al.*, 1998).

It was remarkable that all individuals belonging to the genus *Apodemus* captured in Ulun-gur river, Hanashi Lake and Jadenggu in Mt Altai were *A. uralensis* because *A. peninsulae* is a very common species and *A. uralensis* was not captured in Artybash on the Russian side of Mt Altai (Narita *et al.*, 1995). Because this is an interesting phenomenon from the mammalogical and zoogeographical viewpoints, the factors involved in the distribution of these *Apodemus* species occurring on Mt Altai should be investigated in the future.

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Appendix Measurements of small mammals captured in Xinjiang-Uygur, 1998 and 1999.

AS no.	Loc.	Gen. sp.	Sex (m/f)	BW (g)	HB (mm)	T (mm)	HF (mm)	E (mm)
841	Hami	<i>Dipus sagitta</i>	m	NE	127	170	61	20
842		<i>Dipus sagitta</i>	m	NE	120	170	65	21
843		<i>Dipus sagitta</i>	m	NE	118	194	63	20
844		<i>Dipus sagitta</i>	m	88	122	NE	62	20
845		<i>Dipus sagitta</i>	f	NE	123	169	61	20
846		<i>Dipus sagitta</i>	m	NE	122	180	66	22
847		<i>Cricetulus migratorius</i>	m	29.3	110	25	16	16
848		<i>Cricetulus migratorius</i>	m	NE	94	28	18	18
849		<i>Cricetulus migratorius</i>	m	27.6	108	33	16	18
850		<i>Cricetulus migratorius</i>	f	34	93	35	16	15
851		<i>Cricetulus migratorius</i>	m	22	59	30	19	13
852		<i>Cricetulus migratorius</i>	m	38	98	30	17	15
853		<i>Cricetulus migratorius</i>	m	32	97	30	18	18
854		<i>Cricetulus migratorius</i>	f	28	93	26	17	18
855		<i>Cricetulus migratorius</i>	f?	NE	91	28.5	16.5	15.5
857		<i>Cricetulus migratorius</i>	m	86.4	93	29.5	16	15
858		<i>Meriones tamariscinus</i>	f	116	145	138	38	17
859		<i>Meriones tamariscinus</i>	f	88	140	134	36	18
860		<i>Meriones tamariscinus</i>	f	106	136	113	38	15
861		<i>Meriones meridianus</i>	f	68	120	119	35	17
862		<i>Meriones meridianus</i>	f	72	125	110	31	14
863		<i>Meriones meridianus</i>	f	72	130	115	31	15
864		<i>Meriones meridianus</i>	f	70	123	140	29	14
865		<i>Meriones meridianus</i>	f	56	120	115	30	11
866		<i>Meriones meridianus</i>	m	36	102	100	31	14
867		<i>Meriones meridianus</i>	f	44	110	95	29	11
868		<i>Cricetulus migratorius</i>	m	30.3	107	30	16.7	17
869		<i>Cricetulus migratorius</i>	m	47	112.5	31.5	16.5	18
870		<i>Cricetulus migratorius</i>	m	21.8	91	27.5	16.2	15
871		<i>Cricetulus migratorius</i>	m	21.6	NE	NE	NE	NE
872		<i>Cricetulus migratorius</i>	m	21.6	85.5	26.5	16.8	16.5
873		<i>Cricetulus migratorius</i>	f	21.9	96.5	30	16.5	15
874		<i>Cricetulus migratorius</i>	f	19.6	83.5	21	15.2	14
875		<i>Cricetulus migratorius</i>	f	20.9	91	26.5	15.5	14
876		<i>Cricetulus migratorius</i>	f	20.7	93	28.5	15	16
877		<i>Cricetulus migratorius</i>	m	45.9	100.5	32.5	14.5	16
878		<i>Cricetulus migratorius</i>	m	20.4	91	25	15.5	14.5
879		<i>Cricetulus migratorius</i>	f	27.5	99	31.5	18	17.5
880		<i>Cricetulus migratorius</i>	m	26.4	95	28	16	15
881		<i>Cricetulus migratorius</i>	f	26.2	94	26.6	15	15.5
882		<i>Cricetulus migratorius</i>	m	23.2	96.5	29.5	15	15
883		<i>Cricetulus migratorius</i>	m	21.1	100	31	16	16
884		<i>Meriones tamariscinus</i>	f	142	165	140	35	20
885		<i>Meriones meridianus</i>	m	74	138	110	32	14
886		<i>Meriones meridianus</i>	f	40	105	91	30	14
887		<i>Cricetulus migratorius</i>	f	34	100	27	17	16
888		<i>Mus musculus</i>	m	11	65	52	16	12
889	<i>Mus musculus</i>	m	16	78	62	15	12	
890	<i>Meriones meridianus</i>	m	44	110	110	31	12	
892	<i>Meriones tamariscinus</i>	f	79.2	129	111.2	35.2	17	
893	Barkol	<i>Mus musculus</i>	f	15	82	49.5	15	12
894		<i>Mus musculus</i>	m	17.1	87	53.5?	16.8	13
895		<i>Mus musculus</i>	f	15.6	80	55	16	13
896		<i>Mus musculus</i>	f	13	75	51	15	12.5
897		<i>Mus musculus</i>	m	9.8	64	52	16	11.2
898		<i>Mus musculus</i>	f	14.1	76.5	57.5	15	13
899		<i>Mus musculus</i>	m	16.8	87	57	15.5	12.5
900		<i>Mus musculus</i>	f	17.7	87	55.9	15.5	11.5
901		<i>Mus musculus</i>	m	15.9	88.5	58.5	16	12
902		<i>Mus musculus</i>	m	15.4	84	56	16.1	12
903		<i>Mus musculus</i>	m	15.9	85.5	61.5	15.2	11.6
904		<i>Mus musculus</i>	m	15.5	74	56.5	16	13.2
905		<i>Mus musculus</i>	m	16.3	76	60	15.5	13
906		<i>Microtus oeconomus</i>	m	32.4	111.3	43	16.2	12
907		<i>Microtus oeconomus</i>	m	34	99	37	16.2	12.7
908		<i>Mus musculus</i>	m	8.8	68	49.5	15.5	11.6
909		<i>Mus musculus</i>	NE	6.9	55.5	44	14.5	11
910		<i>Mus musculus</i>	m	8.5	60	48	15.5	11
911	<i>Mus musculus</i>	m	7.1	64.1	42	15.4	11	

AS no.	Loc.	Gen. sp.	Sex (m/f)	BW (g)	HB (mm)	T (mm)	HF (mm)	E (mm)
912		<i>Mus musculus</i>	m	7.3	58.5	45.5	15.5	13
913		<i>Mus musculus</i>	m	7.2	43.5	42.8	15.2	11
914		<i>Mus musculus</i>	m	8.6	61	47.5	15	11
915		<i>Mus musculus</i>	f	7.4	59.5	37.5	15	12
916		<i>Mus musculus</i>	f	5.6	58.5	43	15.5	12.5
917		<i>Mus musculus</i>	f	7.3	75	48	15.2	13
918		<i>Mus musculus</i>	m	7.1	61	47	15.5	11
919		<i>Mus musculus</i>	f	6.9	58	38	15.4	10.5
920		<i>Mus musculus</i>	f	7.8	64	47.5	16	12.2
921		<i>Mus musculus</i>	f	6.6	63	41.4	15	11
922		<i>Mus musculus</i>	f	4.6	55.5	36	14	11
923		<i>Mus musculus</i>	f	7.9	63	50	15.5	13
924		<i>Mus musculus</i>	m	8.6	68.5	47	16	11.5
925		<i>Mus musculus</i>	NE	NE	NE	NE	14.5	NE
926		<i>Mus musculus</i>	m	8.6	62	47.5	15.3	11
927		<i>Mus musculus</i>	m	8.6	54.5	50	16	12
928		<i>Mus musculus</i>	m	13.1	70	55	16	12.6
929		<i>Mus musculus</i>	m	8	52	51	16.1	10.5
930		<i>Mus musculus</i>	f	15	69	54.5	15.6	14
931		<i>Mus musculus</i>	f	6.7	58	44.5	15.2	10.2
932		<i>Cricetulus migratorius</i>	m	27.6	98.5	19	15.5	17.5
933		<i>Cricetulus migratorius</i>	f	23.1	95	17.5	15.5	12.5
934		<i>Cricetulus migratorius</i>	m	24.1	88.5	26.5	16.5	16
935		<i>Cricetulus migratorius</i>	f	35.1	104	18.6	15	14
936		<i>Cricetulus migratorius</i>	f	19.5	85	27.5	14.5	15.2
937		<i>Cricetulus migratorius</i>	f	29.6	94.5	31.5	15	14
938		<i>Cricetulus migratorius</i>	f	36.1	100	31.5	16.2	14.5
939		<i>Cricetulus migratorius</i>	m	NE	102	23.6	13.7	14
940		<i>Cricetulus migratorius</i>	f	16.8	76.2	23	14.5	14
941		<i>Cricetulus migratorius</i>	f	18.9	87	21.5	16.6	12.5
942		<i>Cricetulus migratorius</i>	m	NE	94	28	16	15
943		<i>Lagurus lagurus</i>	m	NE	86.5	12	14	6
944		<i>Cricetulus migratorius</i>	f	20.8	92	30	15.4	17.5
945		<i>Cricetulus migratorius</i>	m	18	76	23	15.5	16
946		<i>Cricetulus evermanni</i>	m	43	114	24.5	16.6	15.3
947		<i>Cricetulus migratorius</i>	m	NE	81	24.5	15.5	14
948		<i>Cricetulus migratorius</i>	f	NE	101.5	29	16.5	17.2
949		<i>Cricetulus migratorius</i>	f	25.6	96.5	26	16.2	14
950		<i>Cricetulus migratorius</i>	f	15.7	68.5	23	15	14.5
951		<i>Cricetulus migratorius</i>	m	17.3	93	26.2	15.5	14.5
952		<i>Cricetulus migratorius</i>	f	23.8	92	20.5	16	13
953		<i>Cricetulus migratorius</i>	m	33.5	114	26.3	16	16
954		<i>Cricetulus migratorius</i>	f	41	101	32	15	18
955		<i>Cricetulus migratorius</i>	f	NE	87.5	24	14.5	16
956		<i>Cricetulus migratorius</i>	f	14.2	64	21	13.5	11
957		<i>Cricetulus migratorius</i>	m	30.8	95	23	16	14
958		<i>Cricetulus migratorius</i>	f	29.9	85.5	26	17	17.5
959		<i>Cricetulus migratorius</i>	f	17.5	81	24.5	15	13.5
960		<i>Cricetulus migratorius</i>	m	23.8	87	20.3	15.5	15
961		<i>Cricetulus migratorius</i>	m	NE	91	20.5	16.5	16
962		<i>Cricetulus migratorius</i>	m	33	97	23.5	16	14
963		<i>Cricetulus migratorius</i>	f	17	75.5	26.8	14.8	14
964		<i>Cricetulus migratorius</i>	m	17.1	81	23	14.5	11
965		<i>Cricetulus migratorius</i>	f	15.7	81	23.5	15.5	15
966		<i>Cricetulus migratorius</i>	m	36.5	106	25.5	15	16
967		<i>Cricetulus migratorius</i>	m	25.8	91	20.5	15.5	15
968		<i>Cricetulus migratorius</i>	f	NE	82	17	15.7	16
969		<i>Cricetulus evermanni</i>	f	NE	108.5	19	18	15.3
970		<i>Cricetulus migratorius</i>	m	12.9	81	23.5	14.5	14
971	Mori	<i>Microtus socialis</i>	m	25.1	100	28.5	14.5	9.5
972	Fukang	<i>Cricetulus migratorius</i>	m	20.8	89	25	15.5	16
973		<i>Cricetulus migratorius</i>	m	21.5	85	25	15	15
974		<i>Apodemus uralensis</i>	m	7.9	66.5	49	17.5	11.5
975		<i>Apodemus uralensis</i>	f	17.4	90.5	79	20	13.5
976		<i>Apodemus uralensis</i>	m	17.3	91	76	20	15.2
977		<i>Apodemus uralensis</i>	m	16.9	95.5	76	19.3	14.5
978		<i>Apodemus uralensis</i>	m	18.8	90	74	19.5	15.5
979		<i>Apodemus uralensis</i>	m	17.7	90	77	20	20.35
980		<i>Rattus norvegicus</i>	m	87.6	152	136	30	16
981		<i>Rattus norvegicus</i>	m	43.9	111	96	27.5	16
982		<i>Apodemus uralensis</i>	f	17.6	92	77	20	14

Collection Record of Small Mammals in Xinjiang-Uygur

AS no.	Loc.	Gen. sp.	Sex (m/f)	BW (g)	HB (mm)	T (mm)	HF (mm)	E (mm)
983		<i>Apodemus uralensis</i>	f	16.7	92.5	73	18	14
984		<i>Apodemus uralensis</i>	f	16.9	95.5	80.5	20	16
985		<i>Apodemus uralensis</i>	f	20.8	101	84.5	19.5	14
986		<i>Apodemus uralensis</i>	f	11.3	73.5	64	18	12
987		<i>Apodemus uralensis</i>	m	11.3	79	67.6	19	14
988		<i>Mus musculus</i>	f	21.1	90	59	15.5	12.5
989		<i>Apodemus uralensis</i>	f	17.6	95.5	74.5	19	14
990		<i>Apodemus uralensis</i>	m?	11.5	68.5	64.5	18.6	14
991		<i>Apodemus uralensis</i>	f	10.8	69.5	65.5	19.3	11.5
992		<i>Apodemus uralensis</i>	m	10.8	71	66.5	19.5	11.5
993		<i>Apodemus uralensis</i>	m	11.1	71	63	18.7	13
994		<i>Apodemus uralensis</i>	m	9.7	64	61.2	17	13
995		<i>Mus musculus</i>	f	15.1	84	56	15	14
996		<i>Apodemus uralensis</i>	f	NE	NE	74.5	19.5	NE
997		<i>Apodemus uralensis</i>	m	12.2	82	64.5	19	13.5
998		<i>Apodemus uralensis</i>	m	11.1	69.5	61.5	19	14
999		<i>Apodemus uralensis</i>	f	15	72.5	66	19.2	13.5
1000		<i>Apodemus uralensis</i>	f?	11.2	78.5	54.5?	16.5	13
1001		<i>Apodemus uralensis</i>	f	10.3	79	67.5	19	13
1002		<i>Mus musculus</i>	m	15	90	55	15.5	14
1003		<i>Apodemus uralensis</i>	f	21.8	69.5	63	18.2	13
1004		<i>Apodemus uralensis</i>	f	10.8	72	63.5	18.5	14
1005		<i>Apodemus uralensis</i>	m	NE	NE	59.5	19	NE
1006		<i>Apodemus uralensis</i>	f	9.5	74.5	66	18.5	13
1007		<i>Apodemus uralensis</i>	m	11.1	79	74	20.2	13
1008		<i>Apodemus uralensis</i>	m	11.4	78	70.5	16.6	13.5
1009		<i>Cricetulus migratorius</i>	m	23.3	91	26.2	15	15
1010		<i>Cricetulus migratorius</i>	m	43.7	129	29	16	17
1011		<i>Cricetulus migratorius</i>	f	31.8	98	30.5	15.5	16
1012		<i>Cricetulus migratorius</i>	f	42.4	106	28	15.5	16
1013		<i>Cricetulus migratorius</i>	f	33.3	109	30	16	17
1014		<i>Cricetulus migratorius</i>	m	25.3	95	25	16	16
1015		<i>Cricetulus migratorius</i>	m	23.2	25	26	15.5	15
1016		<i>Apodemus uralensis</i>	m	11.6	73	65	19	17.5
1017		<i>Mus musculus</i>	m	14.1	81	55	15.3	12
1018		<i>Mus musculus</i>	f	13.6	72	50.8	15	8.5
1019		<i>Cricetulus migratorius</i>	m	41.1	117	28.5	15.5	17
1020		<i>Cricetulus migratorius</i>	m	27.4	95.5	25.5	15.2	15
1021		<i>Cricetulus migratorius</i>	m	41.9	116	29	16.1	18.7
1022		<i>Cricetulus migratorius</i>	f	23	101	28	16.5	14
1023		<i>Cricetulus migratorius</i>	f	22.4	86.5	26	15.5	13
1024		<i>Apodemus uralensis</i>	m	11.1	77.5	68.5	19.6	13.5
1025		<i>Apodemus uralensis</i>	f	10.6	73.5	62	17.5	12
1026		<i>Apodemus uralensis</i>	f	15.1	82	69	18	14
1027		<i>Apodemus uralensis</i>	f	NE	NE	74	18.5	NE
1028		<i>Apodemus uralensis</i>	m	12.6	84	72.5	19.3	14
1029		<i>Apodemus uralensis</i>	f	10.9	73.5	66.5	19	13.8
1030		<i>Apodemus uralensis</i>	f	11.3	68.5	68.5	18.5	14
1031		<i>Apodemus uralensis</i>	f	25	98.5	73	20	15
1032		<i>Mus musculus</i>	f	15.8	84.5	60.5	15.2	13
1036	Banfanggou	<i>Cricetulus migratorius</i>	f	24.7	101.5	28.6	15	17
1037		<i>Cricetulus migratorius</i>	m	23.2	92	26	16	16
1038		<i>Cricetulus migratorius</i>	m	37.9	110	31	16.8	18
1039		<i>Cricetulus migratorius</i>	f	16.1	81	26.5	16	14.5
1040		<i>Cricetulus migratorius</i>	f?	21.3	93	26.5	16.4	15.5
1041		<i>Cricetulus migratorius</i>	f	18.9	86	26.2	14.5	14
1042		<i>Cricetulus migratorius</i>	f	21.5	89	28	16	16
1043		<i>Cricetulus migratorius</i>	f	16.3	77	24	15.5	15
1044		<i>Cricetulus migratorius</i>	f	17.2	84	27.5	15.3	14.3
1045		<i>Cricetulus migratorius</i>	f	17.5	82	24	15.3	16
1046		<i>Cricetulus migratorius</i>	m	17.6	78.5	25	13.8	13.5
1047		<i>Cricetulus migratorius</i>	f	19.8	99.8	25.5	15.4	11
1048		<i>Apodemus uralensis</i>	m	12	69	71.2	19.5	14
1049		<i>Mus musculus</i>	m	9.7	76	45.5	14.8	10
1050		<i>Apodemus uralensis</i>	m	19.6	97	77	19	14
1051		<i>Apodemus uralensis</i>	f	16.9	87	74.5	18.5	14
1052		<i>Micronus socialis</i>	m	24.6	104.5	24.5	15.6	9
1053		<i>Microtus socialis</i>	f	14	81.5	30.5	17.5	13
1054		<i>Microtus socialis</i>	m	14.7	89	18.5	14.5	9
1055		<i>Micronus socialis</i>	f	18	96.5	24.5	16.7	9
1056		<i>Microtus socialis</i>	f	14.2	84.5	20.5	15	8.5

AS no.	Loc.	Gen. sp.	Sex (m/f)	BW (g)	HB (mm)	T (mm)	HF (mm)	E (mm)
1057		<i>Microtus socialis</i>	m	19.7	92	22	15.5	9.5
1058		<i>Microtus socialis</i>	m	22.1	101.5	26	16.2	10.2
1059		<i>Microtus socialis</i>	m	25.4	92	27	16.8	10.8
1060		<i>Microtus socialis</i>	m	17.2	92.5	23	16.4	9.5
1061		<i>Microtus socialis</i>	m	17.8	89	24	15	9.5
1062		<i>Microtus socialis</i>	f	35.8	98.5	23.2	14.9	9
1063		<i>Microtus socialis</i>	f	21.9	91	22	16	9.5
1064		<i>Microtus socialis</i>	m	18.1	90	23.5	15	9
1065		<i>Microtus socialis</i>	m	27.3	98	25	15	9.5
1066		<i>Microtus socialis</i>	f	24.9	103	21	15	9
1067		<i>Microtus socialis</i>	m	25.1	99	24	16	9.7
1068		<i>Microtus socialis</i>	f?	13.1	82.5	21	13.5	9.5
1069		<i>Mus musculus</i>	m	8.3	68.5	44.5	14.2	12.2
1070		<i>Mus musculus</i>	f	12.8	94	57	14.5	13
1071		<i>Mus musculus</i>	m	7.8	62	42	14.5	13
1072		<i>Mus musculus</i>	m	10.1	73	46.2	14	11
1073		<i>Mus musculus</i>	f?	NE	53	43.5	14	11
1074		<i>Mus musculus</i>	m	12	69	53	15	10
1075		<i>Mus musculus</i>	m	12.4	81	49	14.5	11.5
1076		<i>Mus musculus</i>	f	NE	65	44	14	10
1077		<i>Mus musculus</i>	f	10	69	49.5	15	11.5
1078		<i>Mus musculus</i>	m	13.9	75.5	53.2	15.5	12
1079		<i>Mus musculus</i>	f	13	75	NE	15.5	12
1080		<i>Mus musculus</i>	f?	12.1	86	49	15	12
1081		<i>Mus musculus</i>	m	11.9	76	50	15	12
1082		<i>Mus musculus</i>	f	6.9	61.5	43	15	10.5
1083		<i>Mus musculus</i>	m	9.8	64.5	49.5	15.5	12.5
1084		<i>Mus musculus</i>	m	6.2	62	41.5	14	10
1085		<i>Mus musculus</i>	m	11.6	72	50.5	15	11
1086		<i>Mus musculus</i>	m	13.1	72	53.6	14.2	12
1087		<i>Apodemus uralensis</i>	m	10.9	74.5	63.5	19.5	18.2
1088		<i>Mus musculus</i>	f	9.8	76	44.5	15.5	NE
1089		<i>Mus musculus</i>	f	5.7	61	36	13.5	10
1090		<i>Mus musculus</i>	m	9.4	76	47.1	15	11
1091		<i>Mus musculus</i>	m	8.9	66.6	50	15.5	12
1092		<i>Mus musculus</i>	m	11	76	49	16.2	13
1093		<i>Mus musculus</i>	m	12.1	73	42	13.5	13
1094		<i>Mus musculus</i>	f	15.7	81	55	15	12
1095		<i>Mus musculus</i>	m	9.7	71	49.3	15	11.5
1096		<i>Mus musculus</i>	f	16.4	80	49.5	14.5	12
1097		<i>Mus musculus</i>	m	10.8	70	48	15.2	10.2
1098		<i>Mus musculus</i>	f	12.4	81	54.5	14.5	11.5
1099		<i>Mus musculus</i>	f	6.1	59	45	13	NE
1100		<i>Mus musculus</i>	m	13.9	79.5	52.6	14.5	11.2
1101		<i>Mus musculus</i>	f	12.3	79	48.2	15	12
1102		<i>Mus musculus</i>	f	10.4	72	49.5	14.5	12.5
1103		<i>Mus musculus</i>	m	9.3	69	48	15	12
1104		<i>Mus musculus</i>	f	17	76	51	15	11.5
1105		<i>Mus musculus</i>	m?	6.8	65	41.5	14	10
1106		<i>Mus musculus</i>	m	11.2	72.5	51.3	15.6	13
1107		<i>Mus musculus</i>	m	10.2	71.5	51	14.5	13
1108		<i>Mus musculus</i>	f	4.6	63.5	41.2	14.2	11
1109		<i>Mus musculus</i>	m?	8	69	48.5	15	12
1110		<i>Mus musculus</i>	m	9.3	8.5	48	14.5	12.3
1111		<i>Crociodura leucodon</i>	f	5.5	67.5	28	10.5	7
1112		<i>Crociodura leucodon</i>	m	5.6	55.5	32.5	11	NE
1113		<i>Crociodura leucodon</i>	m	5.7	56	27	11	6
1114		<i>Crociodura leucodon</i>	f	5.4	66.5	28.5	11	7
1115		<i>Crociodura leucodon</i>	f	4.4	53	27	10.5	7
1116		<i>Crociodura leucodon</i>	m	5.5	69	24.5	10.5	7
1117		<i>Crociodura leucodon</i>	NE	4.1	64.5	25.5	10.4	6
1118		<i>Crociodura leucodon</i>	f?	NE	NE	31	10.5	NE
1119		<i>Crociodura leucodon</i>	m	4.9	58.5	29.5	11	6.5
1120		<i>Crociodura leucodon</i>	f	4.8	60	27.5	10.5	7.2
1121		<i>Crociodura leucodon</i>	f	5.1	57	27	11	7.5
1122		<i>Crociodura leucodon</i>	m	3.3	48	25	11	7
1123'		<i>Crociodura leucodon</i>	m	3.9	54	28	11	7.2
1124'		<i>Crociodura leucodon</i>	m?	5.2	63	27	10	6.5
1125'		<i>Crociodura leucodon</i>	m	5.1	59	27	10.5	5.5
1126'		<i>Crociodura leucodon</i>	f	5.1	64.5	25	10.3	7
1127'		<i>Crociodura leucodon</i>	f?	5.9	56	30	10	6

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AS no.	Loc.	Gen. sp.	Sex (m/f)	BW (g)	HB (mm)	T (mm)	HF (mm)	E (mm)
1128'		<i>Rattus norvegicus</i>	m	83.4	141	134	34.5	18
1129'		<i>Cricetulus migratorius</i>	m	24.5	93	27	15.5	14.5
1130'		<i>Cricetulus migratorius</i>	m	28.4	100.5	31	16	14.2
1131'		<i>Cricetulus migratorius</i>	m	33.3	96	30	16	13.5
1132'		<i>Cricetulus migratorius</i>	f	24.4	84	28	16	15.5
1133'		<i>Cricetulus migratorius</i>	f	21.5	90	25.4	15.5	16
1134'		<i>Cricetulus migratorius</i>	m	22.3	83.5	28.2	16	16
1135'		<i>Cricetulus migratorius</i>	f	26.2	95	25.5	16	15.5
1136'		<i>Cricetulus migratorius</i>	f	23.2	88	26.5	16	15.8
1137'		<i>Cricetulus migratorius</i>	f	19.2	83	24.5	14	16.5
1138'		<i>Cricetulus migratorius</i>	m	23.9	86	24.5	16	15
1139'		<i>Cricetulus migratorius</i>	f	18.8	90	26.2	16.5	14.5
1140'		<i>Cricetulus migratorius</i>	f	17.5	75	25.5	14.6	15.5
1141'		<i>Cricetulus migratorius</i>	f?	23.6	95	24.5	14.5	12.5
1142'		<i>Cricetulus migratorius</i>	f	20	86.5	22.4	15	15
1143	Jinghe	<i>Spermophilus undulatus</i>	f	NE	203	84	42	11
1144'		<i>Spermophilus undulatus</i>	f	NE	190	90	39.5	14
1145'		<i>Spermophilus undulatus</i>	m	NE	201	108	45.5	11
1146'	Fubei	<i>Alactagulus pumilio</i>	m	43.3	107	131	46.5	27.5
1147'		<i>Rhombomys opimus</i>	f	121.2	148	137	38	15.5
1148'		<i>Rhombomys opimus</i>	NE	NE	NE	NE	NE	NE
1149'		<i>Rhombomys opimus</i>	NE	NE	NE	NE	NE	NE
1150'		<i>Rhombomys opimus</i>	NE	NE	NE	NE	NE	NE
1151'		<i>Rhombomys opimus</i>	NE	NE	NE	NE	NE	NE
1152'		<i>Rhombomys opimus</i>	m	130.6	148	130.3	39	14
1153'	Qitai	<i>Lagurus lagurus</i>	f	NE	NE	NE	NE	NE
1154'		<i>Lagurus lagurus</i>	m	NE	NE	NE	NE	NE
1155'		<i>Lagurus lagurus</i>	f	24.1	86.5	10.6	14.2	6
1156'		<i>Lagurus lagurus</i>	f	24.7	86.5	10	12.5	6.2
1157'		<i>Lagurus lagurus</i>	f	21.9	87	13.3	14	6
1158'		<i>Lagurus lagurus</i>	f	23.3	91	10	13	6
1159'		<i>Lagurus lagurus</i>	m	20.5	83	9.5	13.5	NE
1160'		<i>Lagurus lagurus</i>	NE	NE	NE	NE	NE	NE
1165'	Houxia	<i>Cricetulus migratorius</i>	f	46.5	99	30	16	14
1166'		<i>Cricetulus migratorius</i>	m	37.1	95.5	25.5	16.3	16
1167'		<i>Cricetulus migratorius</i>	m	21.6	83.5	27	16	14.5
1168'		<i>Cricetulus migratorius</i>	f	15.9	81	23.5	15.2	14.5
1169'		<i>Cricetulus migratorius</i>	f	17.2	81	22.5	15.2	14.5
1170'		<i>Cricetulus migratorius</i>	m	30.7	95	26.5	15.5	14
1171'		<i>Cricetulus migratorius</i>	m	23.3	80	22.5	15.5	14.5
1172'		<i>Cricetulus migratorius</i>	m	25.1	74.5	26.5	15.7	14
1173'		<i>Cricetulus migratorius</i>	f	36.6	101.5	32	16	19.5
1174'		<i>Cricetulus migratorius</i>	m	27.1	95.5	23.2	17.5	16
1175'		<i>Cricetulus migratorius</i>	m	17.2	69	19.5	14	13
1176'		<i>Apodemus uralensis</i>	m	7.8	61	58	18	12
1177'		<i>Apodemus uralensis</i>	f	15.4	80.2	74	20	13
1178'		<i>Cricetulus migratorius</i>	f	46.6	106	30.5	16	16
1179'		<i>Cricetulus migratorius</i>	f	27.3	93	27	16.3	18
1180'		<i>Alticola argentatus</i>	NE	NE	NE	NE	NE	NE
1181'		<i>Alticola argentatus</i>	m	29.1	99.5	44	18.5	14
1182'		<i>Alticola argentatus</i>	m	27.4	100.7	34	19	14.5
1183'		<i>Alticola argentatus</i>	NE	NE	NE	NE	NE	NE
1184'		<i>Alticola argentatus</i>	f	33.3	119	45	18	15
1185'		<i>Alticola argentatus</i>	f	21.9	101.5	33	18.5	NE
1186'		<i>Alticola argentatus</i>	m	25.9	95	38.5	18.5	14
1187'		<i>Alticola argentatus</i>	f	25.2	100.5	33.5	13.5	15
1188'		<i>Alticola argentatus</i>	f	20.6	81.5	35	17.5	14
1189'		<i>Alticola argentatus</i>	f	22.1	96	38	18	14
1190'		<i>Alticola argentatus</i>	m	29.1	101	35	18	14
1191'		<i>Alticola argentatus</i>	f	34.5	111.5	44.5	14.5	18.5
1192		<i>Alticola argentatus</i>	f	20	82	31	12	17.5
1193		<i>Alticola argentatus</i>	m	24.8	96.5	37	19	16
1194		<i>Alticola argentatus</i>	f	23.4	82	31	16	15
1195		<i>Alticola argentatus</i>	f	28.3	97	36	18.5	14
1196		<i>Alticola argentatus</i>	m	26.7	93	34	18.5	15
1197		<i>Alticola argentatus</i>	m	26.7	90	35	19	16
1198		<i>Alticola argentatus</i>	f	21.8	91	27	17	16
1199		<i>Alticola argentatus</i>	f	22.5	85.5	39.5	18	?
1200		<i>Alticola argentatus</i>	f	29	84.5	32	16.5	13.5
1201		<i>Alticola argentatus</i>	m	21.3	79	37	17.5	14
1202		<i>Alticola argentatus</i>	f	27.7	101	36	17	13

AS no.	Loc.	Gen. sp.	Sex (m/f)	BW (g)	HB (mm)	T (mm)	HF (mm)	E (mm)
1203		<i>Alticola argentatus</i>	f	21.1	86.5	35	17	14.5
1204		<i>Alticola argentatus</i>	f	23.4	86	35	18	14
1205		<i>Alticola argentatus</i>	f	27.5	95	35	19	15
1206		<i>Alticola argentatus</i>	f	24.9	90	36.5	17.5	15.5
1207		<i>Alticola argentatus</i>	m	24.5	100.5	36	16.5	14
1208		<i>Alticola argentatus</i>	f	26.8	92	40	19.5	16
1209		<i>Alticola argentatus</i>	f	34.7	105	41.5	19.5	15
1210		<i>Alticola argentatus</i>	m	29	97	35.5	19	14
1211		<i>Alticola argentatus</i>	m	26.1	95.5	34	17.5	15
1212		<i>Alticola argentatus</i>	f	25.4	84	34.5	18	14
1213		<i>Alticola argentatus</i>	f	23.8	90	36	19	15
1214		<i>Alticola argentatus</i>	f	22.2	98	37.5	17.5	14
1215		<i>Alticola argentatus</i>	m	26.4	101	36	18	12.5
1216		<i>Alticola argentatus</i>	m	27.7	97	35	18	15
1217		<i>Alticola argentatus</i>	f	24.2	104	35	17.5	14
1218		<i>Alticola argentatus</i>	m	22.3	91	31	16.5	16.5
1219		<i>Alticola argentatus</i>	f	27.2	91	34	18.5	16
1220		<i>Alticola argentatus</i>	m	25.1	84	34	19.5	15
1221		<i>Alticola argentatus</i>	f	27.3	88.5	38	19.5	13
1222		<i>Alticola argentatus</i>	f	25.6	92.5	35	18	15.5
1223		<i>Alticola argentatus</i>	NE	NE	NE	NE	NE	NE
1224		<i>Alticola argentatus</i>	m	26.5	100	38.4	17	17
1225		<i>Alticola argentatus</i>	f	23.2	91	37.5	17.5	13.5
1226		<i>Alticola argentatus</i>	m	24.4	89.5	35	19	15
1227		<i>Alticola argentatus</i>	f	27.6	102	34	17.5	13
1228		<i>Alticola argentatus</i>	f	21.3	84	36	18	15.2
1229		<i>Alticola argentatus</i>	m	32	92	40	20	16
1230		<i>Alticola argentatus</i>	m	25.5	98	36	19	14
1231		<i>Microtus oeconomus</i>	f	15.8	82.5	41	17	15
1232		<i>Ellobius talpinus</i>	m	46.2	104	7.5	19.5	NE
1233		<i>Ellobius talpinus</i>	f	42.1	106	9	22.5	NE
1234		<i>Ellobius talpinus</i>	f	40.8	110.5	8.5	19.5	NE
1471	Wuchaiwan	<i>Meriones meridianus</i>	f	44.7	113.5	120	31.2	NE
1472		<i>Meriones meridianus</i>	m	NE	136	136	33.2	19
1473		<i>Meriones meridianus</i>	m	NE	99	102	28	13
1474		<i>Meriones meridianus</i>	m	NE	78	97	28.5	14
1475		<i>Meriones meridianus</i>	m	NE	87	96	28	12.5
1476		<i>Meriones meridianus</i>	m	NE	88	95	28	12
1477		<i>Euchoreutes naso</i>	m	NE	101.5	165	46	38
1478		<i>Euchoreutes naso</i>	m	NE	88	143	43	38
1479		<i>Alactagulus pumilio</i>	f	NE	100	164	52.5	34.5
1480		<i>Euchoreutes naso</i>	f	NE	86	170	46.5	33
1481		<i>Euchoreutes naso</i>	m	NE	79	148	44.5	38
1482		<i>Euchoreutes naso</i>	f	NE	99	157	45	39
1483		<i>Dipus sagitta</i>	m	NE	112	145	58.5	16.5
1484		<i>Dipus sagitta</i>	f	NE	112.5	153<	58	18
1485		<i>Dipus sagitta</i>	m	NE	114	146	57	17.5
1486		<i>Dipus sagitta</i>	f	NE	122	NE	58	NE
1487		<i>Meriones meridianus</i>	m	NE	89	99	28	12.5
1488		<i>Meriones meridianus</i>	f	26.4	95	80.5<	29	14
1489		<i>Meriones meridianus</i>	m	NE	86	100	29	13
1490		<i>Meriones meridianus</i>	f	21.9	82	103	29	14.6
1491		<i>Meriones meridianus</i>	m	NE	117	115	29.5	14.5
1492		<i>Meriones meridianus</i>	f	24.7	91	99	27.3	13
1493		<i>Meriones meridianus</i>	f	NE	102	108	28.2	12.5
1494		<i>Meriones meridianus</i>	m	NE	91	75	29	12.5
1495		<i>Meriones meridianus</i>	m	28.7	97	104	29.2	12.6
1496		<i>Meriones meridianus</i>	m	NE	97	97	28	13
1497		<i>Meriones meridianus</i>	m	23.2	91	98	26.2	12.8
1498		<i>Allactaga sibirica</i>	m	NE	132.5	184	NE	44
1499		<i>Allactaga sibirica</i>	m	NE	124.5	188	65.8	39
1500		<i>Allactaga sibirica</i>	f	NE	121	187	68	44
1501		<i>Cricetulus migratorius</i>	f	NE	85	25.5	14.9	NE
1502		<i>Cricetulus migratorius</i>	m	NE	84.5	24	14.9	15.1
1503		<i>Cricetulus migratorius</i>	f	22.7	94	100	29.5	13
1504	Ulun-gur	<i>Cricetulus longicaudatus</i>	f	NE	106	47	18	16.2
1505		<i>Cricetulus longicaudatus</i>	m	NE	86.5	45	18.2	16
1506		<i>Cricetulus longicaudatus</i>	f	NE	88	44.1	17.5	16
1507		<i>Cricetulus longicaudatus</i>	m	NE	87.5	38	18.3	16.5
1508		<i>Cricetulus longicaudatus</i>	m	NE	80	41	18	14.8
1509		<i>Cricetulus longicaudatus</i>	m	NE	84	49	17	14

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AS no.	Loc.	Gen. sp.	Sex (m/f)	BW (g)	HB (mm)	T (mm)	HF (mm)	E (mm)
1510		<i>Cricetulus longicaudatus</i>	m	NE	120.5	46	17	18.1
1511		<i>Cricetulus longicaudatus</i>	m	33.9	117	40.1	18.5	18
1512		<i>Cricetulus migratorius</i>	m	NE	109	27	15.5	13
1513		<i>Clethrionomys rufocanus</i>	m	NE	104	34.5	17	14.5
1514		<i>Mus musculus</i>	m	NE	62	NE	14.5	9.8
1515		<i>Apodemus uralensis</i>	m	NE	75.5	NE	19.3	12.8
1516		<i>Apodemus uralensis</i>	m	NE	71.5	74.5	19.2	12
1517		<i>Apodemus uralensis</i>	f	NE	80	73	18.3	12.5
1518		<i>Apodemus uralensis</i>	f	NE	68	69.5	18.8	12
1519		<i>Apodemus uralensis</i>	m	NE	98.5	78	20	14.5
1520		<i>Apodemus uralensis</i>	m	NE	84	75	19	13
1521		<i>Apodemus uralensis</i>	m	NE	80.5	78	19.5	12.3
1522	Fuhai	<i>Allactaga sibirica</i>	f	NE	123	200	72.6	44
1523		<i>Allactaga sibirica</i>	f	NE	123	200	66.8	44
1524		<i>Allactaga sibirica</i>	m	NE	133.5	199	69.8	45
1525		<i>Cricetulus eversmanni</i>	f	NE	78.5	18.8	15	13.6
1526		<i>Cricetulus migratorius</i>	f	NE	82	30	15	16
1527		<i>Cricetulus longicaudatus</i>	m	NE	113	28.1	15.2	14
1528		<i>Cricetulus eversmanni</i>	m	NE	92.5	20.6	16	14.3
1529		<i>Cricetulus eversmanni</i>	m	NE	70.5	18.5	15	13
1530		<i>Cricetulus eversmanni</i>	f	NE	113	21.5	15.5	14
1531		<i>Meriones tamariscinus</i>	m	NE	172	138	36	18.5
1532		<i>Meriones meridianus</i>	m	NE	129	113	36.2	17
1533		<i>Meriones meridianus</i>	m	NE	127	115	36	16
1534		<i>Apodemus uralensis</i>	m	NE	83	70	19	13.4
1535		<i>Apodemus uralensis</i>	m	NE	96	75	18.7	15
1536		<i>Dipus sagitta</i>	m	NE	106	148	54.5	16.5
1537		<i>Dipus sagitta</i>	m	65.3	125	151	58	NE
1538		<i>Dipus sagitta</i>	f	NE	114.5	147	59	18.3
1539		<i>Dipus sagitta</i>	f	42.9	116.5	153	57	18.9
1540		<i>Dipus sagitta</i>	m	NE	115	159	58.1	18.1
1541		<i>Dipus sagitta</i>	f	NE	109	154	59	14.5
1542		<i>Allactaga sibirica</i> f	NE	123	195	65	44	
1543		<i>Allactaga sibirica</i> f	NE	131.5	198	67	44.5	
1544		<i>Cricetulus eversmanni</i>	m	NE	111	20.5	16.3	16
1545		<i>Cricetulus eversmanni</i>	m	NE	95	22	15.5	14.5
1546		<i>Cricetulus eversmanni</i>	f?	NE	77.5	16.4	15	12.2
1547		<i>Cricetulus eversmanni</i>	m	NE	101.5	19	16	14.1
1548		<i>Cricetulus eversmanni</i>	m	NE	113	23	17.3	NE
1549		<i>Cricetulus eversmanni</i>	m	NE	114	21	16.5	13
1550		<i>Meriones meridianus</i>	f	NE	90	88	26.2	13.5
1551		<i>Meriones meridianus</i>	f	NE	112	95	27	14
1552		<i>Meriones meridianus</i>	f	NE	103	92	26	13.5
1553		<i>Allactaga sibirica</i>	f	67.7	139	203	69	43.5
1554		<i>Allactaga sibirica</i>	f	82.4	127	200	65.8	49.5
1555		<i>Allactaga sibirica</i>	m	82.8	131	188	70.5	41.5
1556		<i>Allactaga sibirica</i>	m	NE	116	194	66	41
1557		<i>Dipus sagitta</i>	f	NE	115	141	57	18
1558		<i>Dipus sagitta</i>	m	NE	134	158	60	18.3
1559		<i>Dipus sagitta</i>	m	37.7	103	142	56	17.2
1560		<i>Dipus sagitta</i>	m	NE	104	145	55.5	14.5
1561		<i>Dipus sagitta</i>	f	NE	108	146	58	18
1562		<i>Dipus sagitta</i>	f	NE	107	162	59.5	17
1563		<i>Dipus sagitta</i>	f	NE	107	155	56.3	16.5
1564		<i>Dipus sagitta</i>	f	47.5	115	150	59	16.5
1565		<i>Hemiechinus auritus</i>	NE	NE	NE	NE	NE	NE
1566		<i>Allactaga sibirica</i>	f	NE	129	191	64	45
1567		<i>Dipus sagitta</i>	f	NE	100.5	159	57.6	19
1568		<i>Meriones meridianus</i>	f	NE	101.6	92	27.2	11
1569		<i>Cricetulus eversmanni</i>	f	NE	79.6	18.4	15.1	13.5
1570	Burqin	<i>Meriones meridianus</i>	NE	NE	111	93	28.2	12
1571		<i>Meriones meridianus</i>	f	NE	138	121	36.1	16
1572		<i>Meriones tamariscinus</i>	f	NE	154	133	37.2	19
1573		<i>Meriones meridianus</i>	NE	NE	NE	NE	NE	17
1574		<i>Meriones tamariscinus</i>	m	NE	134	113	35	17
1578		<i>Meriones meridianus</i>	f	NE	105	95	26.1	13.2
1579		<i>Meriones tamariscinus</i>	f	NE	151	143	38	19.5
1580		<i>Dipus sagitta</i>	m	91	142	165	65.8	22
1581		<i>Dipus sagitta</i>	m	74.6	154	136.5	64	20
1582		<i>Dipus sagitta</i>	m	79.6	133	164	66	20
1583		<i>Dipus sagitta</i>	m	NE	135	156	63.5	20

AS no.	Loc.	Gen. sp.	Sex (m/f)	BW (g)	HB (mm)	T (mm)	HF (mm)	E (mm)
1584		<i>Dipus sagitta</i>	m	NE	137	165	63	20
1585		<i>Dipus sagitta</i>	f	69.8	125	163	63.5	19
1586		<i>Dipus sagitta</i>	m	66.9	119	171	67	21
1587		<i>Dipus sagitta</i>	m	NE	130	155	64.5	19
1588		<i>Dipus sagitta</i>	f	93.8	131	171	68.2	20.5
1589		<i>Dipus sagitta</i>	m	75.8	135	155	64.5	19
1590		<i>Dipus sagitta</i>	m	75.4	128	178	64	20
1591		<i>Dipus sagitta</i>	m	81.3	139	167	65.5	21
1592		<i>Dipus sagitta</i>	m	71.6	136	145	64	19
1593		<i>Allactaga sibirica</i>	m	NE	137	205	69.5	44
1594		<i>Allactaga sibirica</i>	m	NE	133	159	69	41
1595		<i>Dipus sagitta</i>	m	78.8	137	154	68	20
1596		<i>Meriones meridianus</i>	m	32.9	108	95	27	13
1597		<i>Meriones meridianus</i>	f	NE	101	NE	25.5	14
1598	Hanashi L	<i>Clethrionomys rutilus</i>	m	NE	97	32	16.5	14.5
1599		<i>Clethrionomys rutilus</i>	f	NE	85	32	17	13
1600		<i>Clethrionomys rutilus</i>	m	NE	89.5	32	17	15
1601		<i>Clethrionomys rutilus</i>	f	NE	99	35	16	14
1602		<i>Clethrionomys rutilus</i>	m	NE	90	34	18	14.5
1603		<i>Clethrionomys rutilus</i>	m	NE	71	27.5	16.1	11
1604		<i>Clethrionomys rutilus</i>	f	NE	87	29	16.1	12
1605		<i>Apodemus uralensis</i>	m	NE	79.5	72	19.3	14
1606	Jadenggu	<i>Spermophilus undulatus</i>	f	NE	203	106	41.8	NE
1607		<i>Spermophilus undulatus</i>	f	NE	215	96	41	13
1608		<i>Spermophilus undulatus</i>	f	NE	218	99	40	13
1609		<i>Spermophilus undulatus</i>	m	NE	217	107	41.5	9.7
1610		<i>Spermophilus undulatus</i>	f	NE	194	100	39	10
1611		<i>Spermophilus undulatus</i>	f	NE	181	105	40	NE
1612		<i>Spermophilus undulatus</i>	f	NE	234	104	41.5	9?
1613		<i>Apodemus uralensis</i>	f	NE	73	79	21.5	12.1
1614		<i>Microtus arvalis</i>	f	NE	97	32	15.2	10
1615		<i>Microtus arvalis</i>	f	NE	95	33	14.5	11.5
1616		<i>Microtus arvalis</i>	m	NE	99	33.5	15	10
1617		<i>Microtus arvalis</i>	m	7.6	68.5	25	13.5	8
1618		<i>Microtus arvalis</i>	NE	10.6	71	25	13.7	9
1619		<i>Microtus arvalis</i>	m	9.8	70	26.5	14.1	10.1
1620		<i>Cricetus cricetus</i>	m	NE	175	40	33	26
1621		<i>Clethrionomys rutilus</i>	m	NE	93.5	31	17.9	12
1622		<i>Clethrionomys rutilus</i>	m	NE	94	32	16.8	15
1623		<i>Clethrionomys rutilus</i>	f	NE	86	31.5	17.2	12.5
1624		<i>Clethrionomys rutilus</i>	m	NE	95	29	17.2	13.7
1625		<i>Clethrionomys rutilus</i>	m	NE	88.5	33	17	14
1626		<i>Clethrionomys rutilus</i>	f	NE	82.5	31.5	16.4	13.5
1627		<i>Clethrionomys rutilus</i>	m	NE	90.5	29	17.1	13
1628		<i>Clethrionomys rutilus</i>	f	NE	92	28	16.1	11
1629		<i>Apodemus uralensis</i>	f	NE	85.5	86.5	22.2	14
1630		<i>Apodemus uralensis</i>	f	NE	87	81.6	21.5	14
1631		<i>Apodemus uralensis</i>	f	NE	72	86.1	22.1	12.2
1632		<i>Apodemus uralensis</i>	f	NE	93.5	69	22	14
1633		<i>Apodemus uralensis</i>	m	NE	90.5	85	22.7	13
1634		<i>Apodemus uralensis</i>	m	NE	89	88.5	23	NE
1635		<i>Microtus arvalis</i>	f	NE	93.5	31	17.2	12.4
1636		<i>Microtus arvalis</i>	m	NE	114	32	16.4	13
1637	Fuyun	<i>Lagurus luteus</i>	f	NE	125	13.5	18	5
1638		<i>Allactaga sibirica</i>	f	103.5	144	192	69	44
1639		<i>Allactaga sibirica</i>	f	72.4	120	200	71.5	42
1640		<i>Allactaga sibirica</i>	m	69.3	131	200	72.5	44.5
1641		<i>Allactaga sibirica</i>	m	104.5	141.5	203	70.5	45
1642		<i>Allactaga sibirica</i>	f	99.7	142.5	198	71	48.5
1643		<i>Meriones meridianus</i>	f	31	94.5	92	25.7	13.5
1644		<i>Meriones meridianus</i>	m	28.1	95	85	27.2	12.2
1645		<i>Cricetulus migratorius</i>	m	28.8	103.5	25.5	16.3	15.8
1646	Kamushite	<i>Lagurus luteus</i>	NE	NE	NE	NE	NE	NE
1647		<i>Lagurus luteus</i>	m	67.1	118	9	18	5.5
1648		<i>Citellus erythrogenys</i>	m	155.3	179	29	34	7.5
1650		<i>Citellus erythrogenys</i>	m	NE	174	29	33	5.5
1651		<i>Lagurus luteus</i>	m	43.4	112.5	16	17.8	6