A taxonomic study of small mammals (Erinaceomorpha, Soricomorpha and Rodentia) was conducted in order to find out the scientific names which have been used in Korea. The synonymy of each species and taxonomical research was reviewed and confirmed in this study. The species names are rearranged based on recent studies. Among the various confused names, available names were adopted such as follows: C. shantungensis shantungensis known as Crocidura suaveolens; C. shantungensis quelpartis known as C. dsinezumi; Rattus tanezumi known as R. rattus, called black rat, roof rat and ship rat, respectively. Apodemus sylvaticus (Muridae, wood mouse) is excluded in the checklist based on indistinct previous records and ambiguous habitation on the Korean Peninsula, and neighbors. In addition, we provide a new Korean vernacular name for Myocastor coypus, called the “Nutria” in Korea. We reflect that several species are repositioned to other genera. A checklist of Korean small mammals and synonym list for each species is provided to avoid confusion of scientific names in Korea. In this study, the list of small mammals in Korea is arranged to 33 species, 20 genera, 8 families, and 3 orders.

Keywords: checklist, synonym, rodent, shrew, vole, hamster, valid name

INTRODUCTION

Small mammals such as rodents, voles, hamsters, and shrews, are related to human life in terms of pets and disease. Hence, there has been a lot of study of this group in many countries. Rodentia is the largest mammalian order, accounting for 42% of mammals in the world, and has over worldwide distribution comprising about 2,277 species (Carleton and Musser, 2005).

Many local names and subspecies names have been used in the past century in Korea because many species have a wide distribution (Woon, 1967; Won, 1968; Yoon et al., 2004). Korean species of small mammals have been insufficiently described without such as keys and diagnostic description between siblings or near species in the past, but recently they are being rearranged by many studies analyzing molecular genes. Several species of Rodentia and Soricomorpha from Korea and neighboring countries were reexamined from the results of analyses using RNA and mtDNA sequences by Koh et al. (2000, 2008a, 2008b, 2009b, 2010, 2012a, 2012b, 2013). Phylogenetic relationships of Korean Rodentia was performed by Jung et al. (2010), based on mtDNA and nuclear DNA. Additionally, taxonomic positions of several Soricidae in Korea were studied by several researchers: Ohdachi et al. (2003, 2004, 2005, 2012), Tatsuo et al. (2005), and Kartavtseva and Park (2010).

The order Insectivora has been divided into several orders by phylogenetic systematics studies (Stanhope et al., 1998; Asher, 1999, 2001). The species of Insectivora in Korea belong to two orders: Erinaceomorpha, and Soricomorpha. Practically, the Insectivora are asserted to be a polyphyletic group, and the word has not been used in scholarly papers ever since...
Hutterer’s paper (1993) (Hutterer, 2005). However, most of the researchers investigating the natural environment in Korea have been using the list provided from the Ministry of Environment in 2006 (Kim YK, personal communication). Many taxonomic changes have occurred with the development of molecular systematics in the 2000s. As a result, scientific names are confused with many synonyms these days. Websites for mammal taxonomy in many countries are going to reflect these recent studies.

These days of vigorous international trade in biological resources are producing the megadata for the management of global biodiversity and providing data directly to the general public. These data are used to do the fundamental listing for international conventions such as IUCN Red-List, and fair and equitable sharing of benefits arising from the use of genetic resources in each country. In particular, a clear concept of the species, that is, the current valid scientific name, essential element for interests between countries. The comprehensive rearrangement of the kinds of small mammals inhabiting the Korean Peninsula is needed in order to reflect the newly known results of studies, since taxonomic studies are reported fragmentarily at local levels, such as comparisons about genetic independence between sibling species or lower taxa levels.

Therefore, in this study, the checklist of the Korean mammals was rearranged based on recently available publications and synonymic lists about each species in Korea.

**MATERIALS AND METHODS**

A literature search was undertaken to determining out the distributional history of Korean small mammals. First, the general distribution and basis of the list mainly depend on Woon (1967) and Yoon et al. (2004). Additionally, bibliographic data search engines, such as ‘Google Scholar’, ‘National Discovery for Science Leaders (NDSL)’, ‘Biodiversity Heritage Library (BHL)’, ‘Archive’, ‘Jstor’, ‘Zoological Record’, ‘Kyoto Univ. Digital Library’, were queried using keywords about Korean small mammals. To identify Korean localities, we used specimen information which was preserved in the National Institute of Biological Resources (NIBR) in South Korea. In some species which have not specimen and information of locality, we cited literatures with description of those species in this study.

Based on the available literature, the taxonomic account for each species is listed, made up of synonyms, common name, Korean locality, distribution, and remarks.

**HISTORICAL REVIEW**

The records of small mammals on the Korean Peninsula were first reported for *Crocidura lasiura* Dobson by Giglioli and Salvadori(1887). Thomas (1907b) reported 14 species, including two new species: *Mogera wogura coreana* and *Mogera latouchei*. At the same time, he published research papers about mammals of Japan, China, and Manchuria, including the Korean Peninsula. Japanese mammalogist Kuroda (1934) reported 24 species including several new species, such as *Mus bactrianus yamashinai*, *Crocidura dsinezumi quelpartis*, *C. yamashinai*, and *C. neglecta*. American mammalogists Johnson and Jones (1955a) published two papers about subspecies belonging to the Rodentia from Korea. Among these, three new subspecies of the genera *Apodemus* and *Mycromys* were later synonyms, but recently the subspecies name of the Siberian chipmunk has proven to be a distinct species, by Koh et al. (2009b). After that, they reported two research papers, in 1960 and 1965, entitled ‘Review of the Insectivores of Korea’, with identification key(s) and morphological characters for 15 species belonging to Insectivora, and ‘Synopsis of the Lagomorphs and Rodents of Korea’, about morphological characters of 3 hares and 26 rats.

The Korean mammalogist, Woon (1967) reported 100 species, 53 genera, 22 families, and 7 orders including 13 species, 4 genera, and 3 families of Insectivora, and 16 species, 11 genera, and 2 families of Rodentia. The North Korean mammalogist, Won (1968) classified as 77 species, 46 genera, 20 families, and 6 orders about mammals of Korea including 12 species, 5 genera, and 3 families of Insectivora, and 20 species, 13 genera, and 5 families of Rodentia.

Yoon and Koh (1997) listed total 104 mammal species which belong to 24 families of 8 orders, including 12 species, 3 families of Insectivora and 21 species, 3 families of Rodentia.

Won and Smith (1999) briefly mentioned the history of Korean mammal studies, and the shrews and rodents were listed as 32 species in their study.

Since the year 2000, Han et al. (2000) have published papers about new records of two *Sorex* species from South Korea, and Yoon et al. (2004) have rearranged as 122 species, 51 genera, 38 families, and 8 orders in Korea including 13 species, 5 genera, and 3 families of Insectivora, and 20 species, 17 genera, and 4 families of Rodentia. Ohdachi et al. (2005) reported a new subspecies belonging to *Sorex caecutiens* based on specimens collected at Mt. Halla, Jeju, in South Korea. Since then, there are no additional reports.

Based on available publications, the list of small mammals on the Korean Peninsula is 33 species, 20 genera, 8 families, and 3 orders.
TAXONOMIC ACCOUNTS

1*Class Mammalia
2*Order Erinaceomorpha
3*Family Erinaceidae
4*Subfamily Erinaceinae
5*Genus Erinaceus Linnaeus, 1758
6*Erinaceus amurensis Schrenck, 1858
Erinaceus europaeus var. amurensis Schrenck, 1858: 100 (type locality: NE China, Gulssoja); Yoon et al., 2004: 20.
Erinaceus orientalis Allen, 1903: 179 (type locality: E Russia, Vladivostock).
Erinaceus ussuriensis Satunin, 1907: 170 (type locality: Korea).

Common name. Amur Hedgehog.
Korean locality. Entire region.
Distribution. Korea, E China, Russia (Amur River and tributaries).
Remarks. This species was included in the europaeus group in the past, but classified as a separate species by Hutterer (2005). Oka et al. (2010) confirmed that the species inhabiting Korea was E. amurensis, by comparison with mitochondrial DNA D-loop region of two other species, E. europaeus and E. concolor.

7*Order Soricomorpha
8*Family Soricidae
9*Subfamily Crocidurinae
10*Genus Crocidura Wagler, 1832

11* Crocidura lasiura Dobson, 1890
Crocidura lasiura Giglioli and Salvadori, 1887: 580 (nomen nudum).
Crocidura lasiura lasiura Dobson, 1890a: 31 (type locality: SE Siberia, Ussuri River); Thomas, 1907b: 462; Woon, 1967: 277.
Crocidura suaveolens shantungensis Miller, 1901: 158 (type locality: China, Chimeh, Shantung); Woon, 1967: 275.
Crocidura coreae Thomas, 1906: 860 (type locality: Korea, Mungyong); Jones and Johnson, 1960: 567; Yoon and Koh, 1997: 299.
Crocidura thomasi Sowerby, 1917: 318 (type locality: Korea, Mungyong); Woon, 1967: 277.
Crocidura lizenkani Kishida and Mori, 1931: 377 (nomen nudum).

Common name. Ussuri white-toothed shrew.
Korean locality. Entire region (exclude Jeju Island and Ulleung Island).
Distribution. Korea, NE China, Russia (Ussuri).
Remarks. This species is one of the largest of Korean shrew and mainly found in inland basins.
Neomys fodiens watasei Kuroda, 1941: 114 (type locality: Russia, Toyohara City, Sakhalin Island); Kaneko and Maeda, 2002: 5.

**Common name.** Eurasian water shrew.

**Korean locality.** Northern region.

**Distribution.** North Korea, China (Tien Shan, Jilin), NW Mongolia, Most of Europe.

**Remarks.** This species is distributed in highlands of North Korea, but not has been confirmed in South Korea (Yoon et al., 2004).

6*Tribe Soricini
7*Genus Sorex Linnaeus, 1758

8*Sorex minutissimus Zimmermann, 1780

9*Subgenus Sorex Linnaeus, 1758

10*Sorex (Sorex) caecutiens caecutiens Laxmann, 1788
stat. comb.
Sorex annexus Thomas, 1905: 859 (type locality: Korea, Mungyong).
**Sorex (Sorex) caecutiens**: Hutterer, 2005: 285.

**Common name.** Laxmann’s shrew.

**Korean locality.** Entire forests region.

**Distribution.** Korea, NE China, Japan, E Europe to E Siberia, Ukraine, N Kazakhstan, Altai Mountains, Mongolia.

**Remarks.** The population found on Jeju Island has proven to be a subspecies of *S. caecutiens*. The species *S. caecutiens* was divided and treated as several subspecies in the world. The species name expresses the species rank (*S. caecutiens*) on the continent as the nominate subspecies (*S. caecutiens caecutiens*).

\[1^* Sorex (Sorex) caecutiens hallamontanus Abe and Oh, 2005\]

*Sorex caecutiens hallamontanus*: Ohdachi et al., 2005: 355 (type locality: S Korea, Jeju, Mt. Halla); Koh et al., 2012b: 215.

**Common name.** Halla shrew.

**Korean locality.** Mt. Halla, Jeju.

**Distribution.** South Korea.

**Remarks.** This species has proven to have subspecies from islands of Korea and Japan by Ohdachi et al. (2005), with an endemic subspecies in Korea.

\[2^* Sorex (Sorex) daphaenodon Thomas, 1907\]

*Sorex daphaenodon* Thomas, 1907a: 407 (type locality: Darine, Sakhalin Island); Yoon et al., 2004: 31.

*Sorex (Sorex) daphaenodon*: Hutterer, 2005: 287.

**Common name.** Siberian large-toothed shrew.

**Korean locality.** Mt. Baekdu region.

**Distribution.** North Korea, China (Manchuria), Japan, Russia (SE Siberia).

**Remarks.** It was confirmed that the species inhabited the Baekdu Highlands of North Korea in 2001, but further faunal or survey results were not reported about this species (Yoon et al., 2004). This species is treated as five subspecies in the world, but it is not sure which subspecies is inhabited Korea. It is necessary to research about the Korean habitat.

\[3^* Sorex (Sorex) gracillimus Thomas, 1907\]

*Sorex minutus gracillimus* Thomas, 1907a: 408 (type locality: Russia, Darine, Sakhalin Island); Ellerman and Morrison-Scott, 1951: 48; Jones and Johnson, 1960: 561; Woon, 1967: 269.

*Sorex minutus*: Won, 1968: 58 (auct. non).

[Sorex (Sorex) gracillimus]: Yoon and Koh, 1997: 299; Yoon et al., 2004: 32.

**Common name.** Slender shrew.

**Korean locality.** North region.

**Distribution.** North Korea, China (Manchuria), Japan, Russia (SE Siberia).

**Remarks.** Like *S. (S.) daphaenodon*, this species was confirmed from specimens inhabited in the Baekdu Highlands of North Korea in 2001, and then no further faunal or survey results were reported about this species (Yoon et al., 2004). This species is treated as five subspecies in the world, but it is not sure which subspecies is inhabited Korea. It is necessary to research about the Korean habitat.

\[4^* Sorex (Sorex) isodon Turov, 1924\]

*Sorex araneus tomensis isodon* Turov, 1924: 111 (type locality: Russia, Siberia, River Sosovka, Bargusinsk taiga, Lake Baikal).

*Sorex isodon princeps montanus* Skalon and Rajevsky, 1940: 199.

*Sorex isodon princeps* Skalon and Rajevsky, 1940: 198.

*Sorex isodon sachalinensis* Okhotina, 1993: 58.


*Sorex isodon*: Han et al., 2000: 141; Yoon et al., 2004: 33.

*Sorex (Sorex) isodon*: Hutterer, 2005: 289.

**Common name.** Taiga shrew.

**Korean locality.** Baekdudaegan mountain range.

**Distribution.** Korea, NE China, SE Norway, Finland through Siberia to Russia (Kamchatka, Sakhalin Island, Kurile Island).

**Remarks.** This species was confirmed as inhabiting Korea by Han et al. (2000) for the first time.

\[5^* Sorex (Sorex) unguiculatus Dobson, 1890\]

(Korean name: *Ginbaltobduizui*).

*Sorex unguiculatus* Dobson, 1890b: 155 (type locality: Russia, Sakhalin Island); Won, 1968: 54; Yoon et al., 2004: 35.

*Sorex daphaenodon yesoensis* Kishida, 1924: 168 (type locality: Japan, Hokkaido, Province of Nemuro); Kuroda, 1928: 222; Ellerman and Morrison-Scott, 1951: 54; Kaneko and Maeda, 2002: 2.

*Sorex (Sorex) unguiculatus*: Hutterer, 2005: 298.

**Common name.** Long-clawed shrew.

**Korean locality.** Northeast region.

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Korean name: 1*한라산뒤쥐, 2*백두산뒤쥐, 3*쇠뒤쥐, 4*큰발뒤쥐, 5*긴발톱뒤쥐(개칭)
**Distribution.** North Korea, Japan (Hokkaido), Russia (Siberia from Vladivostok to the Amur, Sakhalin Island).

**Remarks.** This species has not been confirmed with collections in South Korea, but was collected until the 1960’s in the northern part of the Korean Peninsula. A changed Korean name ‘Gimbaltobduizui’ is proposed, matching other species names including in the same genus.

18. **Subgenus Ognevia** Heptner and Dolgov, 1967

29. **Sorex (Ognevia) mirabilis** Ognev, 1937

*Sorex mirabilis* Ognev, 1937: 268 (type locality: Russia, E Siberia, Kiskinka River valley, Ussuri region); Won, 1968: 52; Han et al., 2000: 141; Yoon et al., 2004: 34.

*Sorex mirabilis kutscheruki* Stroganov 1956: 6 (type locality: N Korea, Byeokdong-eub); Jones and Johnson, 1960: 560; Won, 1968: 52.

*Sorex (Ognevia) mirabilis*: Hutterer, 2005: 292.

**Common name.** Ussuri shrew.

**Korean locality.** Central and Northern region.

**Distribution.** Korea, NE China, Russia (Ussuri).

**Remarks.** This species was suggested belonging to the other subgenus by Hutterer (1982), because of a closer relationship with *Sorex (Homalurus) alpines* (type species of *Sorex*), based on shared and derived features (synapomorphy) of genital morphology.

38. **Family Talpidae**

48. **Subfamily Talpinae**

58. **Tribe Talpini**

68. **Genus Mogera** Pomel, 1848

78. **Mogera wogura robusta** Nehring, 1891

*Talpa wogura* Temminck, 1842: 19 (type locality: Japan, honshu, Yokohama).

*Mogera robusta* Nehring, 1891: 96 (type locality: Siberia, Vladivostok).

*Mogera wogura* coreana Thomas, 1907b: 463 (type locality: Korea, Gimhwa); Kuroda, 1934: 238; Won, 1968: 45.


*Talpa wogura* coreana: Jones and Johnson, 1960: 572.

*Talpa wogura robusta* Jones and Johnson, 1960: 573.


*Mogera wogura* coreana: Koh et al., 2012a: 408.

**Common name.** Japanese mole.

**Korean locality.** Entire region (except Jeju Island and Ulleung Island).

**Distribution.** Korea, NE China, Japan.

**Remarks.** The Korean population of the species was known as *M. wogura* in the past, but classified as *M. w. robusta* by Kawada et al. (2001), based on specimen karyosystematic relationships between Korean and Japanese specimens.

88. **Order Rodentia**

98. **Suborder Sciuromopha**

108. **Family Sciuridae**

118. **Subfamily Sciurinae**

128. **Tribe Sciurini**

138. **Genus Sciurus** Linnaeus, 1758

148. **Subgenus Sciurus** Linnaeus, 1758

158. **Sciurus (Sciurus) vulgaris mantchuricus** Thomas, 1909

*Sciurus vulgaris mantchuricus* Thomas, 1909: 501 (type locality: China, Manchuria, Khingan Mountains); Ognev, 1940: 364; Ellerman and Morrison-Scott, 1951: 474; Koh et al., 2006: 1.


*Sciurus vulgaris coreaus* Kishida, 1924: 153.


*Sciurus (Sciurus) vulgaris mantchuricus*: Thorington and Hoffmann, 2005: 764; Koh et al., 2006: 1.

**Common name.** Eurasian red squirrel.

**Korean locality.** Entire region.

**Distribution.** Palearctic region.

**Remarks.** Two subspecies, *S. v. coreae* and *S. v. manchuricus*, were suggested for the same species by Koh et al. (2006), as a result of comparisons of mtDNA of both. The species, *S. v. orientalis* was reported which inhabited in the Korea by Thomas (1909), Ognev (1940), and Ellerman and Morrison-Scott (1951) in the past. It was not confirmed the Korean habitat in this study. It is not certain whether the reason is due to the misidentification or the extinction. It is likely to be to the Korean population.
**Tribe Pteromyini**

1*Genus Pteromys

**Pteromys volans volans** (Linnaeus, 1758)

*Sciurus volans* Linnaeus, 1758: 64 (type locality: Finland).

*Sciuropterus aluco* Thomas, 1907b: 464 (type locality: Korea, Kaloguai).

*Sciuropterus rassicus aluco* Kuroda, 1934: 231.


**Common name.** Siberian flying squirrel.

**Korean locality.** Entire forest region.

**Distribution.** Korea, China, Russia, N Palearctic region (Jackson, 2012).

**Remarks.** The Korean population has proven to be the same species in China and eastern Russia by Koh et al. (2008b) and Lee et al. (2008). The type locality of *S. aluco* was known as Kaloguai, but the place name is not confirmed in Korea. The name is speculated which is misspelled to ‘Gargarol’ in Gangwon-do, Korea.

**Subfamily Xerinae**

5*Tribe Marmotini

6*Genus Tamias Illiger, 1811

7*Subgenus Eutamias Trouessart, 1880

**Tamias (Eutamias) sibiricus barberi** (Johnson and Jones, 1955)

*Eutamias sibiricus barberi* Johnson and Jones, 1955b: 175 (type locality: Korea, Central National Forest); Jones and Johnson, 1965: 366.

*Sciurus sibiricus* Laxmann, 1769: 69 (type locality: Siberia, Barnaul).


**Tamias orientalis** Bonhote, 1899: 385 (type locality: Russia, E Siberia, Sungatscha River, Upper Ussuri); Thomas, 1907b: 465.


**Tamias sibiricus** Yoon et al., 2004: 109.

**Tamias (Eutamias) sibiricus orientalis** Thornton and Hoffmann, 2005: 817.

**Tamias (Eutamias) sibiricus barberi** Pisanu et al., 2013: 1201.

**Common name.** Siberian chipmunk.

**Korean locality.** Entire region.

**Distribution.** South Korea, France (Ile-de).

**Remarks.** The subspecies name was reused by Koh et al. (2009b), based on the results of their phylogenetic works about *T. s. barberi* and *T. s. orientalis*. This species has been known as endemic in Korea, but the species was recently confirmed inhabiting France by Pisanu et al. (2013). They explained that the species settlement in France came about through trade between European countries and Korea in the 1980`s. This species has been used together with three subspecies, *T. s. asiaticus*, *T. s. orientalis*, and *T. s. barberi* in the past. The species inhabited in Korea was confirmed by recent study (Koh et al., 2009b, 2010; Pisanu et al., 2013). The species, *T. s. asiaticus* reported in the past, is not certain whether it is existed or not.

**Suborder Myomorpha**

9*Superfamily Dipodoidea**

10*Family Dipodidae

**Subfamily Sicistinae**

13*Genus Sicista Gray, in Griffith et al., 1827

**Sicista caudata** Thomas, 1907

*Sicista caudata* Thomas, 1907a: 413 (type locality: Russia, Sakhalin Island); Won, 1968: 167; Yoon et al., 2004: 115; Holden and Musser, 2005: 888.
Common name. Long-tailed Birch Mouse.
Korean locality. Northern region.
Distribution. Korea, NE China, Russia (Primorski Kray, Sikhote-Alin range, Sakhalin Island).
Remarks. This species is inhabiting the northern part of the Korean Peninsula.

5* Lasiopodomys mandarinus (Milne-Edwards, 1871)
Arvicola mandarinus Milne-Edwards, 1871: 93 (type locality: China, N Shansi, Saratsi).
Lasiopodomys mandarinus: Carleton and Musser, 2005: 985.

Common name. Mandarin vole.
Korean locality. South and Central-South region.
Distribution. Korea, NE and C China, N Mongolia, Russia (Transbaikal region and E and SE Siberia).
Remarks. One specimen is housed in the Gyung Hee University Natural History Museum, South Korea.

6* Genus Microtus Schrenck, 1798
7* Subgenus Alexandromys Ognev, 1914

8* Microtus (Alexandromys) fortis Büchner, 1889
Microtus fortis Büchner, 1889: 99 (type locality: S Mongolia, Valley of north loop of Hwangho River, border of Ordos Desert); Yoon et al., 2004: 135.
Microtus calamorum Thomas, 1902: 167 (type locality: China, Kiangsu, North bank of Lower Yangtsekiang River).
Microtus michnoi Kastschenko, 1910: 288.
Microtus pelliceus Thomas, 1911: 383 (type locality: Russia, E Siberia, Ussuri River).
Microtus fortis uliginosus Jones and Johnson, 1955: 193 (type locality: Korea); 1965: 377.

Common name. Reed vole.
Korean locality. Western and northern part, Dadodhaehaesang National Park.
Distribution. Korea, E and C China, Russia (Transbaikal, Amur region and Sakhalin Island).
Remarks. This species is collected sometimes on the banks of ponds in farmland.

9* Genus Myodes Pallas, 1811

10* Myodes regulus (Thomas, 1906)

Craseomys regulus Thomas, 1906: 863 (type locality: Korea, Mungyong); 1907b: 466.

Common name. Korean Red-backed vole, Royal vole.
Korean locality. Entire region (Korean endemic species).
Remarks. The genetic affiliation of the species was moved to the genus Myodes by Carleton et al. (2003).

11* Myodes rufocanus (Sundevall, 1846)
(Korean name: Daeryukdeulzui)

Hypudaeus rufocanus Sundevall, 1846: 122 (type locality: Sweden, Lappland).
Crethronomys rufocanus rufocanus: Ellerman and Morrison-Scott, 1951: 666.
Myodes rufocanus: Carleton and Musser, 2005: 1026.

Common name. Grey red-backed vole, Grey-sided vole.
Korean locality. Northern region.
Distribution. N Palearctic region.
Remarks. The genetic affiliation of the species was moved to the genus *Myodes* by Carleton et al. (2003). The Korean name is renamed ‘Namaegokreu’ in this study because the position of the genus being moved to *Myodes*.

18*Myodes rutilus* (Pallas, 1778)
*Mus rutilus* Pallas, 1778: 246 (type locality: W Siberia, East of the Obi).
*Arvicola (Hypudaeus) amurensis* Schrenck, 1858: 129 (type locality: E Siberia, Mouth of River Amur).
*Clethrionomys rutilus*: Won, 1968: 207; Yoon et al., 2004: 134.
*Myodes rutilus*: Carleton et al., 2003: 96; Carleton and Musser, 2005: 1027.

Common name. Northern red-backed vole.
Korean locality. Northern region.
Distribution. N Palearctic region.
Remarks. The genetic affiliation of the species was moved to the genus *Myodes* by Carleton et al. (2003).

2OGenus *Ondatra* Link, 1795

30*Ondatra zibethicus* (Linnaeus, 1766)
*Castor zibethicus* Linnaeus, 1766: 79 (type locality: E Canada).
*Ondatra zibethicus*: Won, 1968: 200; Willner et al., 1980: 1; Yoon et al., 2004: 140; Carleton and Musser, 2005: 1033.

Common name. Muskrat.
Korean locality. Northern region.
Distribution. NE Korea, China, Japan, Russia, C and N Europe, N America, Mexico, Argentina.
Remarks. This species has been bred for fur, but recently on escaped population is disturbed in the ecosystem in Korea.

4SSubfamily Cricetinae
50*Genus Cricetulus* Milne-Edwards, 1867

60*Cricetulus barabensis* (Pallas, 1773)
*Mus barabensis* Pallas, 1773: 704 (type locality: Russia, W Siberia, Kasmalinskii Bor, banks of Ob River).
*Cricetulus griseus fumatus* Thomas, 1909: 503 (type locality: China, Manchuria, Chu-chia-t’ai, Kirin Prov.).
*Cricetulus barabensis*: Won, 1968; 197; Yoon et al., 2004: 138; Carleton and Musser, 2005: 1041.

Common name. Striped Dwarf hamster.
Korean locality. North region.
Distribution. NE Korea, China, Russia (S Siberia, Ussuri).
Remarks. This species is inhabiting the northern part of the Korean Peninsula.

70*Genus Tscherskia* Ognev, 1914

80*Tscherskia triton* (de Winton, 1899)
*Cricetulus (Cricetulus) triton* de Winton and Styan, 1899: 575 (type locality: China, N Shantung); Won, 1968: 194.
*Cricetulus nestor* Thomas, 1907b: 466 (type locality: Korea, Gimhwa); Thomas, 1908a: 9.
*Asioricetus bampensis* Kishida, 1929: 150 (type locality: Korea).
*Asioricetus yamashinai* Kishida, 1929: 156 (type locality: Korea).
*Tscherskia triton*: Yoon et al., 2004: 139; Carleton and Musser, 2005: 1046.

Common name. Greater long-tailed hamster.
Korean locality. Entire region.
Distribution. Korea, NE China, Russia (Ussuri).
Remarks. This species is known inhabiting the entire region of the Korean Peninsula, but the numbers are not many from field surveys.

9Family Muridae
10Subfamily Murinae
11*Genus Apodemus* Kaup, 1829

12*Apodemus agrarius* (Pallas, 1771)
*Mus agrarius* Pallas, 1771: 454 (type locality: Russia, Sim-
**Mus agrarius mantchuricus** Thomas, 1898: 774 (type locality: China, Manchuria); 1907b: 465; Ellerman and Morrison-Scott, 1951: 575; Jones and Johnson, 1965: 385.


**Apodemus agrarius pallescens** Johnson and Jones, 1955a: 169 (type locality: Korea, Gunsan); Won, 1958: 447; Jones and Johnson, 1965: 386.


**Micromys speciosus peninsulae** Thomas, 1906: 862 (type locality: Korea, Mungyong); 1907b: 465.

**Micromys speciosus giliacus** Thomas, 1907a: 411 (type locality: Russia, Saghalien, Korsakoff).

**Apodemus sylvaticus giliacus** : Ellerman and Morrison-Scott, 1951: 571.


**Apodemus flavicollis peninsulae** : Ellerman and Morrison-Scott, 1951: 566.


**Apodemus peninsulae nigritalus** Hollister, 1913: 1 (type locality: Russia, Siberia, Tapucha, Altai Mountains).

**Apodemus praetor** Miller, 1914: 89.

**Apodemus peniulsa sowerbyi** Jones, 1956: 337 (type locality: China, N Shansi).

**Apodemus peninsulae qinghaiensis** Feng, Zheng and Wu, 1983: 108.

**Apodemus peniulsa** : Miller, 1914: 89; Yoon et al., 2004: 127; Carleton and Musser, 2005: 1271.

**Common name.** Korean wood mouse, Korean field mouse.

**Korean locality.** Entire region (except Jeju Is. and Ulleung Island).

**Distribution.** Korea, N China, Japan (Hokkaido), NE Asia, Russia (Sakhalin).

**Remarks.** This species is a candidate to be a specific environmental indicator for forest naturalness in Korea (Yoon et al., 2004).

**Genus Micromys** Dehne, 1841

**Micromys minutus** (Pallas, 1771)

**Mus minutus** Pallas, 1771: 454 (type locality: Russia, Simbirsk).

**Mus minutus ussuricus** Barrett-Hamilton, 1899: 344 (type locality: Russia, SE Siberia, Ussuri).


**Micromys minutus hertigi** : Won, 1968: 188; Yoon et al., 2004: 123; Carleton and Musser, 2005: 1384.

**Common name.** Harvest mouse.

**Korean locality.** Entire region (except Ulleung Island).

**Distribution.** Korea (include Jeju Island), NW China, Japan, Taiwan, Vietnam, N Burma, NE India, Russia, Most of Europe.

**Remarks.** This species is known inhabiting the entire region, except for Ulleung Islands, on the Korean Peninsula.

**Genus Mus** Linnaeus, 1758

**Mus musculus** Linnaeus, 1758

**Mus molossinus** Temminck, 1845: 51 (type locality: Japan); Woon, 1967: 249.


**Mus molossinus utsuryonis** Mori, 1938: 16 (type locality: Japan).
Mus bactrianus yamashinai Kuroda, 1934: 234 (type locality: Korea, Mokpo).
Mus (Mus) musculus: Carleton and Musser, 2005: 1398.

Common name. House mouse.
Korean locality. Entire region.
Distribution. Whole world except Antarctica.
Remarks. This species is known inhabiting the entire region, including all islands, of the Korean Peninsula. Five subspecies were reported in the world. Additional researches are needed to find out which is inhabitating the Korea.

18Genus Rattus Fischer de Waldheim, 1803

28Rattus norvegicus (Berkenhout, 1769)
Mus norvegicus Berkenhout, 1769: 5 (type locality: Britain).
Mus caraco Pallas, 1778: 91 (type locality: Russia, E Siberia).

Common name. Brown rat, Norway rat.
Korean locality. Entire region.
Distribution. Whole world (residential area of humans).
Remarks. This species is known inhabiting the entire region, including all islands, of the Korean Peninsula.

38Rattus tanezumi (Temminck, 1844)
(Korean name: Dongyangjibzui)
Mus tanezumi Temminck, 1844: 51 (type locality: Japan, Kyushu Island).
Mus alexandrinius Geoffroy, 1803: 192.
Rattus norvegicus longicaudus Mori, 1937: 42 (type locality: Korea, Ulleung Island).

Rattus tanezumi: Carleton and Musser, 2005: 1489.

Common name. Oriental house rat, Asian rat, Tanezumi rat.
Korean locality. Entire region.
Remarks. The population of R. rattus tanezumi was known inhabiting South Korea by Koh (1992). R. rattus tanezumi was raised to species grade by Carleton and Musser (2005). Two species, R. rattus and R. tanezumi, are known as inhabiting Korea, but we cannot confirm form as R. rattus among those specimens. Thus, R. rattus is excluded from the Korean checklist in this study. A new Korean name ‘Dongyangjibzui’ is proposed for the species R. tanezumi.

48Suborder Hystricomorpha
58Infraorder Hystricomorpha
68Family Myocastoridae
78Genus Myocastor Kerr, 1792

88Myocastor coypus (Molina, 1782)
(Korean name: Keunmulzui)
Mus coypus Molina, 1782: 287 (type locality: Rio Santiago Prov.).
Myocastor coypus Kerr et al., 1792: 225.

Common name. Coypu, Nutria.
Korean locality. South region.
Distribution. Korea, S Brazil, Paraguay, Uruguay, Bolivia, Argentina, Chile.
Remarks. This species is the famous animal pest in Korea. Many numbers escaped and are breeding in nature, and so designated as an injurious wild animal. A new Korean name ‘Keunmulzui’ is proposed for the species M. coypus.

TAXONOMIC NOTES AND REMARKS

Apodemus sylvaticus (Muridae, wood mouse) was reported indistinctly in the 1970s. Since then, the species has not been
reported at all (Yoon et al., 2004). The species has been distributed from Europe to South Africa. We cannot confirm habitat information for the species in Korea and neighbors, such as China, Japan, and Russia. Therefore, we exclude the species from the checklist.

*Rattus rattus*, also called the black rat, roof rat and ship rat, is a sibling species with *R. tanezumi*. The species known as *R. rattus* has proven to be *R. rattus tanezumi* by Koh (1992). *Rattus rattus tanezumi* was raised to the species grade by Carleton and Musser (2005). We gave the species, a Korean name *R. tanezumi*.

The species known as *Crocidura suaveolens* in Korea was changed to *C. shantungensis* by Jiang and Hoffmann (2001). The species inhabiting Jeju Island and called *C. dsinezumi* was known by different characters from specimens of *C. dsi-nezumi* from Japan by Motokawa et al. (2003). The population in Jeju Island was placed as a subspecies of *C. shantungensis*. Therefore, *C. shantungensis* was divided into two subspecies: *C. shantungensis shantungensis* and *C. shantungensis quelparts*.

*Myocastor coypus*, called the Nutria, is the famous animal pest gnawed into the river wall and crops in Korea. Even if the species is exotic, we gave the species a new Korean name because the species is breeding in Korea.

The species name of *Tamias (Eutamias) sibiricus barberi*, called Siberian chipmunk, inhabiting Korea, was used again by Koh et al. (2009b) based on their phylogenetic works. This species is exotic, we gave the species a new Korean name *Siberian chipmunk, inhabiting Korea*, was used again because the species is breeding in Korea.

Three species included in the genera *Eothenomys* and *Clethrionomys* were transferred to the genus *Myodes*: *Myodes regulus*, *M. rufocanus*, and *M. rutilus* (Carleton and Musser, 2005). The genus *Sorex* has been divided with two subgenera, *Sorex and Ognevia*, for the Korean shrew (Hutterer, 2005). Therefore, the next ten species are added to subgenus: *Sorex (Sorex) caucutiens*, *S. (S.) daphaeodon*, *S. (S.) gracilimus*, *S. (S.) isodon*, *S. (S.) unguiculatus*, *S. (Ognevia) mirabilis*, *Sciurus (Sciurus) vulgaris mantchuricus*, *Tamias (Eutamias) sibiricus barberi*, *Microtus (Alexandromys) fortis*, *Mus (Mus) musculus*.

Because *Sorex caucutiens hallamontanus* was reported for the first time by Ohdachi et al. (2005), as a subspecies of *S. caucutiens*, the species name on the continent was transcribed to subspecies rank (*S. caucutiens caucutiens*). We changed the Korean name of the species and reorganized the taxonomic position. These species are as follows: *C. shantungensis quelparts*, *S. (S.) unguiculatus*, and *Myodes rufocanus*.

A large number of synonyms of each species and taxonomical researches were revaluated while performing this study. Since many papers of taxonomical result have been reported fragmentarily, researchers who use the scientific names are confused in determinations and the use of available names. We hope that this paper helps the researchers studying the Korean small mammals.

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