

## Cryptophagidae (Coleoptera) from North Korea\*

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**Abstract** - 16 species belonging to 8 genera of Cryptophagidae are recorded from North Korea. 14 species are new to Korea. With 4 figures.

The present study is based on the cryptophagid material collected by the expeditions of the Hungarian Natural History Museum to the Democratic People's Republic of Korea in 1970 (MAHUNKA & STEINMANN 1971), 1971 (PAPP & HORVATOVICH 1972), 1975 (PAPP & VOJNITS 1976), 1977 (DELY & DELY-DRASKOVITS 1978), 1978 (VOJNITS & ZOMBORI 1979), 1979 (STEINMANN & VÁSÁRHELYI 1980), 1980 (FORRÓ & TOPÁL 1981), 1982 (FORRÓ & RONKAY 1983), 1985 (VOJNITS & ZOMBORI 1987), 1987 (KORSÓS & RONKAY 1988) and 1988 (MERKL & SZÉL 1989). A total of 364 specimens belonging to 16 species of 8 genera have been examined. Most species are recognized from Korea for the first time.

### LIST OF LOCALITIES

The subsequent list has been obtained from the numbered lists of zoological samples published in the reports on the expeditions mentioned in the introduction. The investigated specimens have variously transliterated Korean geographic names on their locality labels. In this list, the names are given according to the unified transliteration system submitted by VOJNITS & ZOMBORI (1979).

- No. 87: Kangwon Province: Kungang-san, Samil-po, 1 June 1970, MAHUNKA & STEINMANN. - Singled from lakeside vegetation.
- No. 96: Kaesong City: Pagyon-san, Pagyon-po, about 27 km SW Kaesong, 7 June 1970, MAHUNKA & STEINMANN. - Berlese, Nematode and Tardigrade samples from northwestern lateral valley near waterfall.
- No. 143: Pyongyang City: Pyongyang, Hotel Pyongyang, 6 Aug 1971, PAPP & HORVATOVICH. - Singled material at lamp.
- No. 145: Pyongyang City: Daesong-san, 7 Aug 1971, PAPP & HORVATOVICH. - Netting the grass and shrub levels of coniferous forest.
- No. 164: South Pyongan Province: Sa Gam, 45 km N Pyongyang, 12 Aug 1971, PAPP & HORVATOVICH. - Netting on shrubs, weeds and grass of riverside.
- No. 185: Pyongyang City: Pyongyang, Hotel Pyongyang, 17 Aug 1971, PAPP & HORVATOVICH. - Singled material at lamp.
- No. 227: Pyongyang City: Pyongyang, city park between river Te-dong and Hotel Pyongyang, 1 Sept 1971, PAPP & HORVATOVICH. - Netting on grass and bushes of the park.
- No. 276: Ryanggang Province: Hyesan, room of Hotel Hyesan, 22 July 1975, PAPP & VOJNITS. - Collected at MV lamp.

\* Zoological collectings by the Hungarian Natural History Museum in Korea, No. 98.

- No. 282: Ryanggang Province: Chann-Pay plateau, Samjiyon, 1700 m, 24 July 1975, PAPP & VOJNITS. - Netting in shrubby and grass vegetation of *Larix-Betula* forest.
- No. 298: Pyongyang City: Pyongyang, Hotel Te-dong, 29 July 1975, PAPP & VOJNITS. - Collected at MV lamp.
- No. 302: Pyongyang City: Pyongyang, Hotel Te-dong, 30 July 1975, PAPP & VOJNITS. - Collected at MV lamp.
- No. 309: Pyongyang City: Pyongyang, Hotel Te-dong, 2 Aug 1975, PAPP & VOJNITS. - Collected at MV lamp.
- No. 329: Pyongyang City: Pyongyang, Hotel Te-dong, 9 Aug 1975, PAPP & VOJNITS. - Collected at MV lamp.
- No. 338: South Pyongan Province: Nampo, Vaudo, about 60 km SW Pyongyang, 3 July 1977, DELY & DELY-DRASKOVITS. - Soil and litter samples from the slopy and grassy riverside, extracted by Berlese apparatus.
- No. 346: South Pyongan Province: Sa Gam, about 30-40 km N Pyongyang, 5 July 1977, DELY & DELY-DRASKOVITS. - Netting in the grass and shrubby vegetation (*Salix*) on the bank of the river.
- No. 352: Kangwon Province: Kumgang-san, Ryukhwa-am, about 7 km W Hotel Kumgang, 10 July 1977, DELY & DELY-DRASKOVITS. - Netting in grass vegetation of a clearing between the asphalt road and the coniferous forest.
- No. 376: Ryanggang Province: Samjiyon, 19 July 1977, DELY & DELY-DRASKOVITS. - Netting in the grass vegetation on the shore of a small lake.
- No. 403: Pyongyang City: Pyongyang, Garden of Hotel Pyongyang, 25 Sept 1978, VOJNITS & ZOMBORI. - Material collected by beating the foliage of a climber trained over a trellis near lampshades just before a torrential rain.
- No. 423: North Hwanghae Province: Sariwon, 28 sept 1978, VOJNITS & ZOMBORI. - Collecting at mixed light in hotel's window.
- No. 431: South Pyongan Province: Kyollong Reservoir, c. 30 km of Pyongyang, 30 Sept 1978, VOJNITS & ZOMBORI. - Turning over stones in a half dry puddle and singling the material.
- No. 451: Ryanggang Province: Samjiyon, 4 Oct 1978, VOJNITS & ZOMBORI. - Singled material in taiga forest.
- No. 504: Kangwon Province: Kumgang-san, 12 km from rest-house along serpentine road to Kwinyon-am, 14 Oct 1978, VOJNITS & ZOMBORI. - Singled material from under stones.
- No. 550: Pyongyang City: Pyongyang, 19 Sept 1979, STEINMANN & VÁSÁRHELYI. - At the light of a 160 W MW bulb in the window of Hotel Tae Dong.
- No. 562: South Pyongan Province: Nampo, Vaudo, 22 Sept 1979, STEINMANN & VÁSÁRHELYI. - Netted on bulrush and reed on small spot inundated by brackish water.
- No. 559: Pyongyang City: Pyongyang, 20 Sept 1979, STEINMANN & VÁSÁRHELYI. - At the light of a 160 W MV bulb in the window of Hotel Tae Dong.
- No. 624: Pyongyang City: Pyongyang, 9 Sept 1980, FORRÓ & TOPÁL. - At the light of a 160 W MV bulb on the terrace of Hotel Tsangkan-san.
- No. 647: Chagang Province: Myohyang-san, Chongchon-gang valley, 12 Sept 1980, FORRÓ & TOPÁL. - Singled in the valley of the brook.
- No. 648: Chagang Province: Myohyang-san, Chongchon-gang valley, 12 Sept 1980, FORRÓ & TOPÁL. - Sifted litter to be extracted in Berlese-funnel.
- No. 697: Kangwon Province: Kumgang-san, 18 Sept 1980, FORRÓ & TOPÁL. - Netting at the middle of the footpath to Kuryong-popo.
- No. 729: Kangwon Province: Wonsan, 20 sept 1980, FORRÓ & TOPÁL. - Netting in the park Songdowon, mainly around a small pond.
- No. 783: North Pyongan Province: Myohyang-san, Hotel Myohyang-san, 13 July 1982, FORRÓ & RONKAY. - Collecting from white sheet illuminated by a mixed light on the balcony of the hotel.
- No. 871: Pyongyang City: Pyongyang, Hotel Pyongyang, 28 July 1982, FORRÓ & RONKAY. - Singled material collected around lampshades in the garden of the hotel.
- No. 894: South Hwanghae Province: Haeju, Suyong-san, 31 July 1982, FORRÓ & RONKAY. - Collecting from white sheet illuminated by a mixed light lamp.
- No. 930: North Pyongan Province: Myohyang-san, 21 May 1985, VOJNITS & ZOMBORI. - Swept along road-side by the river Hyangsan-chon.
- No. 980: Ryanggang Province: Samjiyon, 3 June 1985, VOJNITS & ZOMBORI. - Collecting in old *Picea* stand by using the sweeping net.
- No. 1059: Kangwon Province: Kumgang-san, pathway Kuryong, 21 Oct 1987, KORSÓS & RONKAY. - Sifted litter material, to be extracted by Moczarsky-Winkler funnel.
- No. 1353: Ryanggang Province: Paekdu-san-milyong, 1500 m, 27 June 1988, MERKL & SZÉL. - Sweeping and singling from the vegetation.
- No. 1355: Ryanggang Province: NW of Samjiyon, 31 km on Paekdu-san road, 2000 m, 28 June 1988, MERKL & SZÉL. - Sweeping and singling from the vegetation.

## LIST OF SPECIES

**Telmatophilus** HEER, 1841

**Telmatophilus typhae** (FALLÉN, 1802) - Material examined: No. 562 (3 specimens). - Distribution: Common, widely distributed species. Europe, Caucasus, Siberia, Maritime Province (USSR), Japan. New to Korea.

**Leucohimatium** ROSENHAUER, 1856

**Leucohimatium langei** SOLSKY, 1866 (Fig. 1) - Material examined: No. 164 (1 specimen); No. 227 (1 specimen). - Distribution: Common, widely distributed species. Central, Southern and Eastern Europe, Caucasus, Kazakhstan, Middle Asia (USSR), Mongolia. New to Korea.

**Cryptophagus** HERBST, 1792

**Cryptophagus cellaris** (SCOPOLI, 1763) - Material examined: No. 647 (1 specimen). - Distribution: Common species of extremely wide distribution. Europe, North Africa, Caucasus, Middle Asia (USSR), Afghanistan, Iraq, Siberia, Maritime Province (USSR), Japan, North America. New to Korea.

**Cryptophagus pilosus** GYLLENHALL, 1828 - Material examined: No. 451 (1 specimen). - Distribution: Common species of extremely wide distribution. Europe, North Africa, Caucasus, Kazakhstan, Middle Asia (USSR), Siberia, Maritime Province (USSR), Japan, North America. New to Korea.

**Cryptophagus ? convexus** GROUVELLE, 1919 - Material examined: No. 648 (1 specimen). - Distribution: Rare species, formerly known only from Japan (Honshu : Kyoto). New to Korea.

**Cryptophagus deceptor** GROUVELLE, 1919 - Material examined: No. 87 (1 specimen). - Distribution: Rare species, formerly known only from Japan (Honshu: Kyoto). New to Korea.

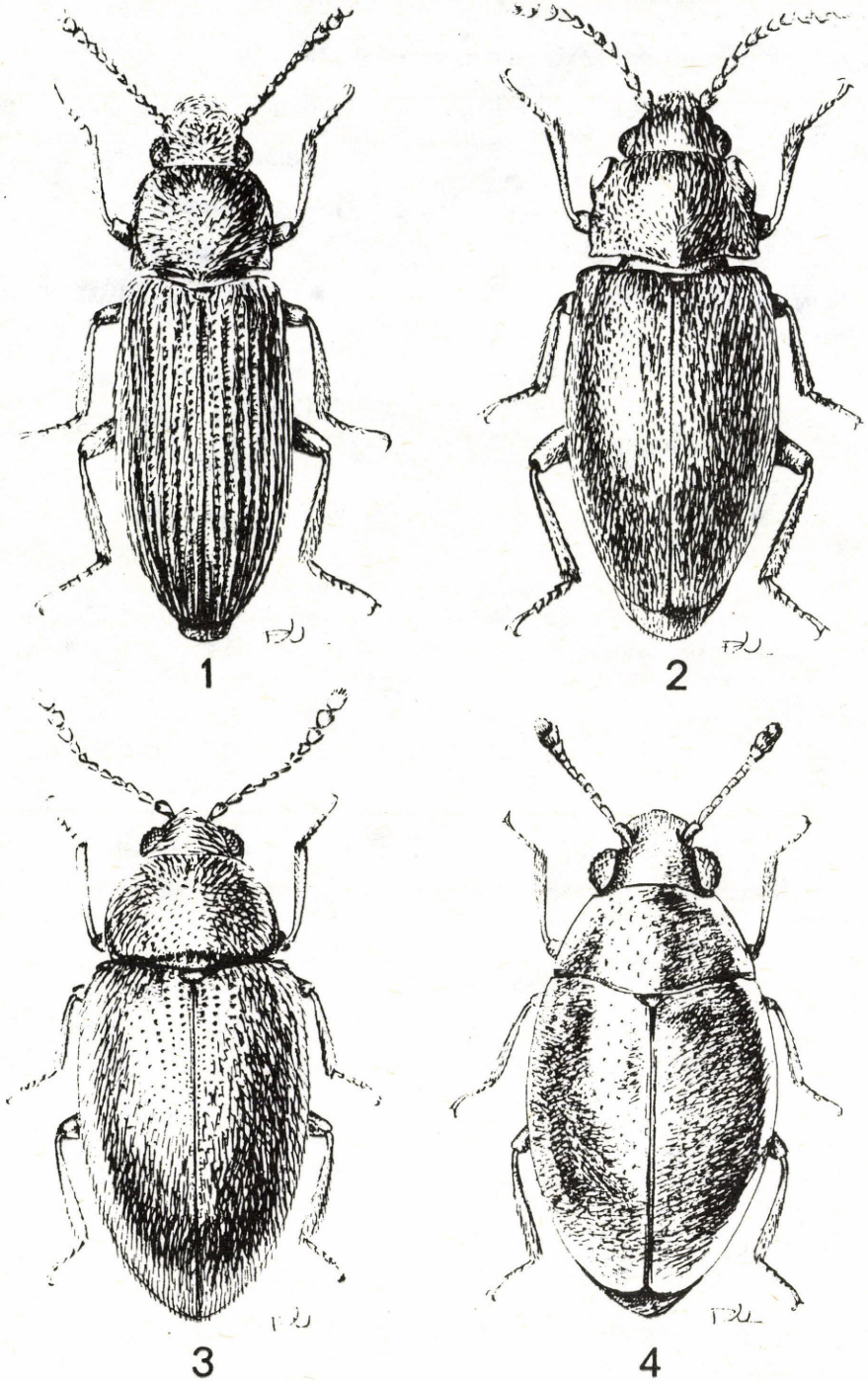
**Cryptophagus latangulus** REITTER, 1889 (Fig. 2) - Material examined: No. 282 (2 specimens); No. 376 (2 specimens); No. 697 (1 specimen); No. 930 (1 specimen). - Distribution: Rare species, formerly known only from Japan (Honshu: Fukui), recently found in Maritime Province (USSR). New to Korea.

**Micrambe** C. G. THOMSON, 1863

**Micrambe abietis** (PAYKULL, 1798) - Material examined: No. 980 (2 specimens); No. 1353 (1 specimen); No. 1355 (8 specimens). - Distribution: Common, widely distributed species. Northern, Central and Eastern Europe, Caucasus, Southern Siberia, Transbaicalica, Maritime Province (USSR). New to Korea.

**Caenoscelis** C. G. THOMSON, 1863

**Caenoscelis sibirica** REITTER, 1889 - Material examined: No. 1059 (1 specimen). - Distribution: Widely distributed species. Europe, Caucasus, Siberia, Maritime Province (USSR), Sakhalin. New to Korea.



Figs 1-4: 1 = *Leucohimatium langei* SOLSKY, 2 = *Cryptophagus latangulus* REITTER, 3 = *Atomaria lederi* JOHNSON, 4 = *Curelius japonicus* REITTER.

**Atomaria** STEPHENS, 1830

**Atomaria (Anchicera) convexiuscula** REITTER, 1887 - Material examined: No. 298 (2 specimens); No. 338 (5 specimens). - Distribution: East Asian species. Siberia, Maritime Province (USSR), Korea.

**Atomaria (Anchicera) horridula** REITTER, 1877 - Material examined: No. 145 (1 specimen); No. 198 (2 specimens); No. 302 (3 specimens); No. 309 (1 specimen); No. 329 (7 specimens); No. 338 (6 specimens); No. 346 (1 specimen); No. 403 (1 specimen); No. 423 (1 specimen); No. 550 (2 specimens); No. 559 (1 specimen); No. 783 (23 specimens); No. 894 (4 specimens). - Distribution: Common East Asian species. Maritime Province (USSR), North China, Japan. New to Korea.

**Atomaria (Anchicera) lederi** JOHNSON, 1970 (Fig. 3) - Material examined: No. 96 (1 specimen). - Distribution: East Asian species. Eastern Siberia, Maritime Province (USSR), Mongolia, North China, Korea

**Atomaria (Anchicera) lewisi** REITTER, 1877 - Material examined: No. 185 (1 specimen); No. 276 (4 specimens); No. 298 (4 specimens); No. 329 (1 specimen); No. 338 (5 specimens); No. 352 (2 specimens); No. 403 (9 specimens); No. 423 (181 specimens); No. 431 (2 specimens); No. 504 (1 specimen); No. 550 (6 specimens); No. 559 (13 specimens); No. 624 (12 specimens); No. 697 (1 specimen); No. 729 (1 specimen); No. 783 (5 specimens); No. 871 (1 specimen) - Distribution: Very common species of extremely wide distribution. Europe, Caucasus, Middle Asia (USSR), Afghanistan, Siberia, Maritime Province (USSR), Mongolia, India, China, Taiwan, Vietnam, Japan, South Africa, North America, South America, Australia, New Zealand. New to Korea.

**Atomaria (Anchicera) turgida** ERICHSON, 1846 - Material examined: No. 379 (1 specimen). - Distribution: Europe, Caucasus, Siberia, Maritime Province (USSR). New to Korea.

**Curelius** CASEY, 1900

**Curelius japonicus** (REITTER, 1877) (Fig. 4) - Material examined: No. 298 (12 specimens); No. 423 (2 specimens). - Distribution: Formerly known only from Japan. New to Korea.

**Cryptophilus** REITTER, 1874

**Cryptophilus integer** (HEER, 1841) - Material examined: No. 143 (1 specimen). - Distribution: Rather common, widely distributed species. Europe, North Africa, Caucasus, Middle Asia (USSR), Afghanistan, Maritime Province (USSR), South America.

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