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Curculionidae from Cheju Island, Korea, with Descriptions of Three New Species (Insecta, Coleoptera)[1), 2)]

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Abstract

Collection of the family Curculionidae from Cheju Island, Korea made in 1990 under the Korea-Japan Co-operative Science Program comprises 57 species, in which 8 species are new to science and 17 species are new to the fauna of Korea. A list of species collected and descriptions of 3 new species are given in this paper. The remaining new species are to be described in the next paper.

Cheju island is volcanic in her origin in the Tertiary, and has constituted a southern periphery of the Korean peninsula or an island as in the present status during the Quartenary according to the topographic changes controlled by the glacial eustacy and local up- and down movements. Plants and animals have moved northwards or southwards in accordance with the climatic changes and the straits intervened the migration.

At the period of the Maximum Würm Glacial about 20 thousand years before present, Japan, Cheju and Taiwan constituted the eastern periphery of the continent. Sea level was 140 m lower and the temperature was nearly 10-12 °C lower than the present. In the cold phase of the Pleistocene, the cool-temperate elements became dominant in the western Japan and problalbly in Cheju Island. The Holocene is the age when the Japan and Cheju Island finally become insulated now observable.

In the Plio-Plistocene, Cheju and Japan was in a continental stage and their insect faunae were believed to be largely common. Most of these insects might be perished later by the low temperature, and

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2) Contribution from the Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka (Ser. 4, No. 38)

some archaic forms were diminished by the migration of the advanced ones. The remnants of this age were limited to the species living in the special habitats such as in soil, in cave or in the heart of large tree trunk, and speciated locally.

Distribution of these genera or species-groups in question are discontinuous. Many endemic species might be originaed in this period.

In the Plistocene, temperature was generally 2-12 °C lower than the present in the majority of times. Consequently, the insect faunae of Cheju and Japan were seemed to be constituted by the cool- or cold components. In the glacial stages, especially in the Maximum Wiirm Glacial, northern elements migrated to Cheju Island and Japan from north across land bridges. In the interglacial stages, temperature became mild, but apterous insects could not migrate because of the formation of straits. Most of the apterous populations had probably distributed in both sides of strait in this period.

In the Holocene, the northern elements changed their distribution to the north or to the hight mountains in accordance with the regression of cold temperature. Some relic insects are known to occur near the summit of Mt.Hallasan, the highest mountain in Korea. These insects are the same with or at most slightly different to form subspecies from the mainland population. At the same time, the warm-temperate or subtropical elements have migrated across sea from south, and many species tolerated to the climatic change remain to live in this area.

The detailed analyses of the weevil fauna on Cheju Island will be made after the identification of the mainland species, but the weevils enumerated in this paper are all common with western part of Japan except for 5 species, of which 3 species are edaphic.

The first authentic report on the weevils from Cheju Island was made by Okamoto (1924), and subsequent reports have been made by Cho (1963), Seok (1970), Lee et al. (1985) and Kwon & Lee (1986), and 41 species of the Curculionidae (excluding Attelabidae, Apionidae and Rhynchophoridae) are known to occur in this island.

Present material taken in 1990 comprises 57 species, in which 8 species are new to science and 17 species are new to the fauna of Korea. Three new species out of 8 are described in this paper and the rest is to be described together with the mainland material in the next paper.

We wish to express our sincere thanks to Mr. Yoon Kee Kim, Director, and Messrs. Seong Jin Kang and Sei Ho Jung, of the Cheju-do Folklore and Natural History Museum for their kindness in various ways. Our thanks are also to Dr. S. Miyamoto and the co-workers of the present program for their kind cooperation. Some other material taken by Drs. K. Yasumatsu and T. Shirôzu are incorporated.

Subfamily Sitoninae

L *Eugnathus distinctus* Roelofs, 1873

Specimens examined: Ora-dong, 4 exs., 23 & 28.vii.1990, K. Morimoto & S. Miyamoto leg.; Kujwa, 9 exs., 19. v. 1990, K. Morimoto leg.; Orimok, 1 ex., 20.v. 1990, K. Morimoto leg.; Yongshil, 1 ex., 27.viii.1990, K. Morimoto leg.; Campus of Junior College, 3 exs., 20.v.1990, S. Nomura leg.

Distribuiton: Japan (Honshu, Shikoku, Kyushu, Tsushima, Ryukyus), Korea, China, Taiwan.

Biological note: Adults were captured on the leaves of *Lespedeza* spp. and *Pueraria thunbergiana*.

2. *Sitona japonicus* Roelofs, 1873

Specimens examined: Ora-dong, 15 exs., 21.v.1990, K. Morimoto leg.
Distributoion: Japan (Honshu, Shikoku, Kyushu, Tsushima), Korea.
Biological note: Specimens were captured from *Trifolium repens* by sweeping.

3. *Parasitones gravidus Sharp*, 1896

Specimen examined: Taecheon-dong, Songdang-ri, 1 ex., 29.ix.1990, K. Morimoto leg.
Distribution: Japan (Honshu), Korea-new record, Primorsky kray.
Biological note: This is rare and confined its distribution to Nagano, Gunma, Fukushima and Miyagi Prefectures in Japan. Additional materials were captured at several places in Gyeongsangnam-do by sweeping grasses including *Humulus japonicus.*

Subfamily Otiorhynchinae

4. *Myosides* sp.

Specimens examined Ora-dong, 4 exs., 28.vii.1990; 2 exs., 28.ix.1990, K. Morimoto leg.
Note: This is apparently new species and is to be described in the next paper.

5. *Calomycterus setarius* Roelofs, 1873

Specimens examined: Ora-dong, 1 ex., 21.v.1990, K. Morimoto leg.; Yongshil, 6 exs., 24.vii.1990, S. Kamitani leg.; Songsan, 1 ex., 19.v.1990, K. Morimoto leg.
Distribution: Japan (Honshu, Shikoku, Kyushu, Sado), Korea.

6. *Hyperstylus pallipes* Roelofs, 1873

Specimen examined Ora-dong, 1 ex., 23.vii.1990, S. Kamitani leg.
Distribution: Japan (Honshu, Shikoku, Kyushu, Tsushima, Ryukyus), Korea.

7. *Anosimus decoratus* Roelofs, 1873

Specimen examined: Youngsil, 1 ex., 27.vii.1990, S. Kamitani leg.
Distribution: Japan (Honshu, Shikoku, Kyushu), Korea.

8. *Myllocerus nipponensis* Zumpt, 1938

Specimens examined: Orimok, 8 exs., 20.v.1990, K. Morimoto & S. Nomura leg.; Yongshil, 1 ex.,

20.v.1990, S. Nomura leg.

Distribution: Japan (Honshu, Kyushu, Tsushima), Korea (Cheju-do)-new record.

Biological note: Adults were captured on *Quercus* spp.

9. *Cyrtepistomus castaneus* (Roelofs, 1873)

Specimens examined: Orimok, 6 exs., 20.v.1990, K. Morimoto & M.T. Chûjô leg.; Yongshil, 2 exs., 24.vii.1990, K. Morimoto leg.; Kaewol Bridge, 1 ex., 27.vii.1990, K. Morimoto leg.

Distribution: Japan (Honshu, Shikoku, Kyushu, Tsushima), Korea, U.S.A.(introduced).

Biological note: This is known to be parthenogenetic, and feed on leaves of *Quercus* spp. and related trees.

10. *Episomus turritus* (Gyllenhal, 1833)

Specimens examined: Ora-dong, 1 ex., 23.vii.1990, K. Morimoto leg.; Orimdk, 1 ex., 20.v.1990, K. Morimoto leg.; Tonnek'o, 1 ex., 28.ix.1990, M.T. Chûjô.

Distribution: Japan (Honshu, Shikoku, Kyushu, Tsushima), Korea, China.

Biological note: Adults feed on *Lespedeza bicolor.*

11. *Trachyphloeosoma advena* Zimmerman, 1956

Specimens examined: Kuwanum Temple, 4 exs., 29.ix.1990, S. Nomura leg.; Songp'anak, 3 exs., 28.ix.1990, S. Nomura leg.

Distribution: Japan (Honshu, Shikoku, Kyushu, Tsushima), Korea (Cheju-do)-new record, U.S.A. (Hawaii, Alabama, Florida-introduced).

Biological note: Adults were captured by sifting litter in the forest.

12. *Trachyrhinus* sp.

Specimens examined: Yongshil, 3 exs., 20. v. 1990, S. Nomura leg.; 3 exs., 24. vii. 1990, S. Nomura leg.; Orimok, 1 ex., 20.v.1990 & 2 exs., 27.vii.1990, S. Nomura leg.; Kaewol Bridge, 12 exs., 26.vii.1990, S. Nomura leg.

Note: This edaphic genus is conspicuous by its local speciation and present species will be described after the comparison of the mainland material.

13. *Asphalmus* sp.

Specimens examined: Orimok, 10 exs., 20.v.1990, S. Nomura leg.; Yongshil, 18 exs., 20.v.1990, S. Nomura.

Note: This is also edaphic species and collected by sifting litter.

14. *Pseudocneorhinus obesus* Roelofs, 1873

Specimens examined: Ora-dong, 1 ex., 23.vii.1990, K. Morimoto leg.; Yongshil, 1 ex., 24.vii.1990, C. Y. Yeo leg.

Distribution: Japan (Honshu, Kyushu), Korea, China.

Biological note: This species is parthenogentic in Japan and the male has been recorded from Cheju Island and China (Fukien).

15. *Scepticus uniformis* Kôno, 1930

Specimens examined: Chungmun Beach, 4 exs., 18.v.1990, K. Morimoto leg.; Songsan, 2 exs., 19.v.1990, K. Morimoto leg.; Iho Beach, 4 exs., 26.vii.1990, K. Morimoto & M.T. Chûjô leg.

Distribution: Japan (Honshu, Shikoku, Kyushu, Ryukyus), Korea (Cheju-do)-new record.

Biological note: Distribution of this species is restricted to sandy coast.

16. *Sympiezomias lewisi* (Roelofs, 1879)

Specimens examined: Kannonji, 2 exs., 12.vii.1963, T. Shirôzu leg.; Seogwipo, 2 exs., 22.v.1975, K. Yasumatsu leg.

Distribution: Japan (Honshu, Shikoku, Kyushu), Korea (Cheju-do).

Subfamily Cleoninae

17. *Lixus acutipennis* (Roelofs, 1873)

Specimen examined: Ora-dong, 1 ex., 275.1990, K. Morimoto leg

Distribution: Japan (Honshu, Shikoku, Kyushu, Tsushima), Korea, China.

Biological note: Adult was found on an *Artemisia.*

18. *Lixus impressiventris* Roelofs, 1873

Specimens examined: Yongshil, 1 ex., 27.vii.1990, S. Kamitani leg.

Distribution: Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima, Okinawa), Korea, Siberia, China.

19. *Larinus latissimus latissimus* Roelofs, 1873

Specimens examined: Kujwa, 2 exs., 19.v.1990, K. Morimoto & S. Nomura leg.

Distribution: Japan (Honshu, Shikoku, Kyushu), Korea.

Subfamily Hyperinae

20. *Listroderes costirostris* Schoenherr, 1826

Specimens examined: Ora-dong, 2 exs., 27.ix.1990, K. Morimoto leg.

Distribution: Japan (Honshu, Shikoku, Kyushu, Ryukyus), Korea (Cheju-do)-new record, Taiwan, Australia, New Zealand, Africa, North and South America.

Biological note: This is a famous pest commonly known as " the vegetable weevil" and is introduced into many countries from South America.

21. *Hypera basalis* (Voss, 1937)

Specimens examined: Kujwa, 1 ex., 19.v.1990, K. Morimoto leg.; Ora-dong, 1 ex., 21.v.1990, K. Morimoto leg.

Distribution: Japan (Honshu, Shikoku, Kyushu), Korea, China.

Subfamily Cioninae

22. *Cionus tamazo* Kôno, 1930

Specimen examined: Kaewol Bridge, 1 ex., 23.vii.1990, S. Kamitani leg.

Distribution: Japan (Hokkaido, Honshu, Shikoku, Kyushu), Kurils, Korea.

Subfamily A

23. *Anthonomus rectirostris* (Linnaeus, 1758)

Specimens examined: Orimok, 7 exs., 20.v.1990, K. Morimoto leg.; Yongshil, 4 exs., 20.v.1990, S. Nomura leg.

Distribution: Japan (Hokkaido, Honshu, Shikoku, Kyushu), Korea, China, Siberia, Europe.

24. *Anthonomus pomorum* (Linnaeus, 1758)

Specimen examined: Orimok, 1 ex., 20. v. 1990, K. Morimoto leg.

Distribution: Japan (Honshu), Korea, China, Siberia, Europe.

25. *Anthonomus yuasai* Kôno, 1939

Specimen examined: Orimok, 1 ex., 20.v.1990, K. Morimoto leg.

Distribution: Japan (Honshu, Shikoku, Kyushu), Korea.

Subfamily Curculioninae

26. *Curculio sikkimensis* (Heller, 1927)

Specimens examined Kaewol Bridge, 3 exs., 27.ix.1990, K. Morimoto leg.
Distribution: Japan (Honshu, Shikoku, Kyushu), Korea, China, India.

27. *Curculio distinguendus* (Roelofs, 1874)

Specimen examined: Yongshil, 1 ex., 24.vii.1990, K. Morimoto leg.
Distribution: Japan (Honshu, Kyushu), Korea (Cheju-do)-new record, Siberia.

28. *Curculio flavoscutellatus* (Roelofs, 1874)

Specimens examined: Orimok, 5 exs., 20.v.1990, K. Morimoto leg.; Yongshil, 1 ex., 27.vii.1990, S. Kamitani.
Distribution: Japan (Honshu, Shikoku, Kyushu), Korea (Cheju-do)-new record.
Biological note: Adults were captured on the flower of *Elaeagnus umbellata*.

29. *Curculio yanoi* Morimoto, 1962

Specimen examined: Ora-dong, 1 ex., 21.v.1990, K. Morimoto leg.
Distribution: Japan (Honshu, Shikoku, Kyushu), Korea (Cheju-do)-new record.

30. *Curculio* (*Balanobius*) sp.

Specimens examined: Orimok, 2 exs., 20.v.1990, K. Morimoto leg.
Note: This is seemed to be a new species and is to be described in the next paper together with mainland material.

31. *Curculio* (*Balanobius*) *esakii* Morimoto, 1962

Specimen examined: Songpanak, 1 ex., 28.ix.1990, K. Morimoto leg.
Distribution: Japan (Kyushu), Korea (Cheju-do)-new record.

Subfamily Acalyptinae

32 *Acalyptus trifasciatus* (Roelofs, 1874)

Specimens examiend: Ora-dong, 28 exs., 28.vii.1990; 20 exs., 27.ix.1990, K. Morimoto leg.
Distribution: Japan (Shikoku, Kyushu), Korea.

Biological note: Adults were found on *Melia asedarach.*

Subfamily Tychiinae

33. *Tychius ovalis* Roelofs, 1874

Specimens examined: Beopho-dong, 3 exs., 28.ix.1990, K. Morimoto leg.
Distribution: Japan (Kyushu), Korea (Cheju-do)-new record.
Biological note: These specimens were captured on *Lespedeza cuneata.*

34. *Gryporrhynchus obscurus* Roelofs, 1873

Specimen examined: Yongshil, 1 ex., 27.vii.1990, S. Kamitani leg.
Distribution: Japan (Honshu, Shikoku, Kyushu), Korea (Cheju-do)-new record.

Subfamily Smicronychinae

35. Smicronyx rubricatus Kôno, 1930

Specimen examined: Ora-dong, 1 ex., 23.vii.1990, S. Miyamoto leg.
Distribution: Japan (Kyushu), Korea (Cheju-do)-new record, China.

36. *Smicronyx dentirostris* sp. nov.

(Figs. J-O)

Male. Reddish brown; suture, ventral surface and coxae often chestnut brown; scales brownish grey.

Head alutaceous, dull, sparsely with indefinite small punctures, each puncture with a minute seta. Rostrum weakly curved, punctures dense at base, gradually obliterate towards middle, then almost impunctate to apex, with a row of weak punctures along dorsal margin of scrobe on each side, dorsal margin of scrobe sharply costate, dentate above the apical margin of scape when it is in repose, scales thinly distributed at punctate base, subserect scales forming a pair of fascicles at base. Antennae inserted juste before the middle of rostrum, scape slender, almost of the same width to apical 1/3, then clavate, scape seven-segmented, first segment 2.5 times as long as broad and slightly longer than the second and third combined, club oblong oval, sutures hardly visible.

Pronotum transverse (6:5), broadly rounded at sides, broadest behind the middle, basal margin 1.3-1.4 times as broad as anterior margin; disc evenly covered with oval shallow punctures, which obliquely confluent to form closely arranged anterolateral rows from the middle line, interspaces often impunctate and shiny, punctate area alutaceous, antero-median triangular area alutaceous with tine puncutres; scales either ovate or elongate, oriented from sides toward a few anteriorly oriented antero-interiorly, anteriorly directing median scales forming an indefinite median stripe, ovate scales forming a short basal stripe on

each side, scales are often a little denser longitudinally at admedian areas, Scutellum small, oval, convex, shiny.

Elytra broadest at middle, almost parallel-sided or very slightly narrowed to shoulders, punctured-striae narrow, intervals flat, finely wrinkled transversely; scales arranged in poorly defined wavy transverse fasciae, and short stripe at the base of third interval.

Underside of thorax and abdomen a little darker; prosternum deeply emerginate, antecoxal depression punctate, scaled and alutaceous, each side obtusely ridged; mesosternal process weakly convex; metasternum equidistantly punctate and scaled, metepisternum with a row of weak punctures. Venter with basal two segments depressed in the middle, as densely punctate and scaled as on metasternum, third and fourth segments each with two rows of scales, one in the middle and the other along posterior margin, fifth ventrite truncate at apex. Legs with femora clavate, each with a small but distinct tooth, tibiae weakly expanded both internally and externally at apex; tarsi robust, claws connate to near middle and nearly parallel.

Aedeagus with internal sac asperate, with sclerites at ostium.

Female. Rostrum slender, shiny, almost smooth except for the punctate base; antennae inserted in the middle of rostrum. Venter not depressed, but flat in the middle, with broadly rounded apex.

Body length (excluding rostrum) 2.4-2.6 mm.

Holotype: male, Ora-dong, Cheju City, 28.vii.1990, S. Miyamoto leg. (in coll. Kyungpook Univ.)

Paratypes: 1 male & 4 females, same data as holotype, S. Miyamoto & K. Morimoto leg.; 1 male, Azamo, Tsushima, 19.v.1961, Y. Kimura leg.; 1 female, Beppu, Oita Pref., 23.viii.1981, S. Sasaki leg.

Distribution : Japan (Kyushu, Tsushima), Korea (Cheju-do).

Note: This new species is characteristic in having a pair of denticles near the base of rostrum on the underside. *S. cyaneus* Gyllenhal in Europe has the similar denticles on the rostrum, but the integument is blue.

Scales are almost falled off from the pronotum and elytra in the female specimens.

Subfamily Rhynchaeninae

37. *Rhynchaenus fasciculatus* (Faust, 1882)

Specimens examined: Orimok, 2 exs., 20.v.1990, K. Morimoto leg.

Distribution: Korea-new record, Far East Russia.

Biological note: This species is commonly found on the young leaves of *Quercus* spp. in montane area of Korea.

38. *Rhynchaenus* sp.

Specimen examined: Yongshil, 1 ex., 24.vii.1990, S. Miyamoto leg.

Subfamily Baridinae

39. *Acythopeus parabasimaculatus* sp. nov.

(Figs. A-I)

Male. Black, with a hairy short basal patch on third interval of elytra.

Head alutaceous, with indefinite weak punctures. Rostrum sharply delimited from head by a transverse depression, thick at the base and slightly tapering apically in lateral aspect, almost parallel-sided, alutaceous, densely with shallow punctures except for apex, each puncture bearing a fine recumbent hairy scale, without carinae nor sulci. Antennae inserted in the middle of rostrum, scape not reaching the base of rostrum, first segment of funicle almost as long as three following segments combined, fourth to seventh segments successively wider.

Pronotum as long as broad, parallel-sided on basal half, rectangular at basal angle, bisinuate at base; disc alutaceous, bare, densely punctate, interstices between punctures narrower than their diameter, without median carina. Scutellum as long as broad, slightly convex, alutaceous.

Elytra 2/3 times as broad as the length of suture, parallel-sided on basal half, then gradually narrowed apically in a curve, side margins slightly sinuate; striae clear-cut, tenth stria entire, with shallow distant punctures; intevals alutaceous, flat from base to declivity, convex from V-shaped striae thence posteriorly to apex, each interval with a row of indefinite shallow weak punctures, each puncture with a minute brownish seta,

Pygidium with apical part posterior to the carina exposed, alutaceous, wtih shallow punctures.

Legs with fore pair distinctly longer than the posteriors; femora edentate, fore femora a little thicker and less clavate than the posteriors, alutaceous, with shallow punctures, each puncture with a greyish small seta; fore tibiae longer than the the posteriors, weakly curved outwardly, fringed with greyish long hairs internally, tibiae of the posterior two pairs almost straight, weaky expanded externally at apex; tarsi with third segment deeply bilobed, fore tarsi with long inner fringe like fore tibiae; claws of the same size, free.

Sternites and pleurites densely punctate, each puncture with a small seta. Prosternum with a pair of oval deep foveae before coxae, their outer margin ( )-shapedly ridged; mesosternum flat to form a same plane with pro- and metasterna; metepisternum slightly narrowed in the middle, with irregular two rows of punctures. Venter evenly punctate, each puncture with a seta of the same or smaller size than those on metasternum; first two ventrites flattened in the middle, teminal margin subtruncate, without any special fringe.

Aedeagus as figured, struts of penis very long, reaching proximally to the anterior margin of mesothorax, internal sac and flagellum also very long.

Female. Rostrum slenderer, apical 1/3 shiny and **sparsely** punctate. Fore legs not fringed internally with long hairs. Venter weakly convex transversely.

Length: 2.2-2.8 mm. (excluding rostrum).

Holotype: male (Type no. 2880, Kyushu Univ.), Unzen, Nagasaki Pref., 17.viii.1976, K. Morimoto leg.

Paratypes: 1 female, Mt. Amariyama, Yamanashi Pref., 16.vii.1956, H. Kamiya leg.; 1 female, Mt. Hira, Shiga Pref., 3.vi.1957, Y. Shibata leg.; 2 males, Mt. Sasa, Hata-gun, Kochi Pref., 29.vii.1953, K. Morimoto leg.; 1 male & 1 female, Mt. Sefuri, Fukuoka Pref., 15.v.1955, H. Kamiya leg.; 1 male & 2 females, Mt. Taradake, Saga Pref., 31.v.1986, T. Ogata leg.; 1 female, Mt. Sobosan, Oita Pref., 31.vii.1931, K. Yasumatsu leg.; 1 female, same data as holotype; 1 female, Mt. Miyanouradake, Yakushima I., 21.vii.1974, T. Mikage leg.; 2 females, Kosugidani, Yakushima I., 10.vii.1952, Y. Kurosawa leg. & 24.vii.1974, T.

Mikage leg.; 2 males, Kaewol Bridge, Cheju-do, 26.vii.1990, S. Kamitani leg.; 1 female, Yongshil, Cheju-do, 24.vii.1990, S. Miyamoto leg.; 1 female, Shiitakegoya, Mt. Halla (800m), Cheju-do, 14.vii.1968, T. Shirozu leg..

Distribution: Japan (Honshu, Shikoku, Kyushu, Yakushima I.), Korea (Cheju-do).

Note: Present new species is very close to ***A. basimaculatus*** Voss, 19.58 from China (Fukien), and another two unnamed species in the collection of Kyushu University are also close relatives to them in having the following common characters: Black, with a short basal hairy patch on third interval of elytra; male fore legs longer than the posteriors, fore tibiae bent externally, and fore tibiae and tarsi fringed with long setae internally; rostrum sharply delimited by a transverse groove from head, thick at the base and tapered anteriorly in lateral aspect. Voss(1958) mistook the male and female vice versa in the description of ***A. basimaculatus.***

Present new species can be separable from the relatives by the following key.

1(4) Hind femora almost of the same width in entire length; fore femora distinctly constricted near the base; median area of venter shiny and sparsely with small punctures in male.

2(3) Pronotum and elytra shiny, pronotum as long as broad; body length 2.5-3.9 mm. Taiwan and Fukien. ..... ***Acythopeus basimaculatus*** Voss

3(2) Pronotum and elytra dull, pronotum broader than long; body length 4.5-5.6 mm. Taiwan. ..... ***Acythopeus*** sp. 1.

4(1) Hind femora weakly clavate, broadest at apical l/3, thence distinctly narrowed basally; fore femora with basal constriction absent or at most with a faint depression on the ventral surface; first and second ventrites evenly punctate.

5(6) Rostrum scarcely curved; foveae on prostemum larger ..... ***Acythopeus parabasimaculatus*** sp. nov.

6(5) Rostrum evenly curved; foveae on prostemum smaller. Ryukyus (Yaeyama group). ..... ***Acythopeus*** sp. 2.

40. *Baris orientalis* Roelofs, 1875

Specimen examined: Iho Beach, 1 ex, 26.vii.1990, K. Yahiro leg.

Distribution: Japan (Honshu, Shikoku, Kynshu), Korea.

Biological note: Adults were commonly found on ***Chenopodium album in*** Japan and Korea.

41. *Psilarthroides humuli* Morimoto et Miyakawa, 1985

Specimens examined: Ora-dong, 2 exs., 23.vii.1990; 1 ex., 27.vii.1990, S. Miyamoto leg.

Distribution: Japan (Honshu, Kyushu), Korea.

Biological note: Adults were collected from ***Humulus japonicus.***

Subfamily Zygopinae

42. *Metialma cordata* Matrshall, 1948

Specimen examined: Kujwa, 1 ex., 19.v.1990, K. Morimoto leg.
Distribution: Japan (Honshu, Kyushu), Korea, Taiwan, China, Burma.

43. Macrotelephae ichihashii Morimoto, 1960

Specimen examined: Chungmun Beach, 1 ex, 18.v.1990, M.T. Chûjô leg.; Yongshil, 1 ex., 24.vii.1990, M.T. Chûjô.
Distribution: Japan (Honshu, Kyushu, Tsushima), Korea (Cheju-do)-new record.

Subfamily Ceutorhynchinae

44. *Rhinoncus jakovlevi* Faust, 1893

Specimens examined: Songsan, 2 exs., 19.v.1990, K. Morimoto leg.; Ora-dong, 1 ex., 21.v.1990, K. Morimoto leg.
Distribution: Japan (Hokkaido, Honshu, Shikoku, Kynshu), Korea, Siberia.
Biological note: Adults were found on *Rumex acetosa.*

45. *Rhinoncus perpendicularis* (Reich, 1797)

Specimen examined: Chonjiyon, 1 ex., 27.vii.1990, S. Miyamoto leg.
Distribution: Japan (Honshu, Shikoku, Kyushu), Korea, Siberia, Europe.

46. *Rhinoncus cribricollis* Hustache, 1916

Specimen examined Kaewol Bridge, 1 ex., 26.vii.1990, S. Kamitani leg.
Distribution: Japan (Hokkaido, Honshu, Shikoku, Kyushu), Korea.

47. *Ceutorhynchus shaowuensis* Voss, 1958

Specimens examined: Ora-dong, 1 ex., 28.vii.1990, & 11 exs, 27.ix.1990, K. Morimoto leg.; Orimok, 1 ex., 20.v.1990, K. Morimoto leg.
Distribution: Japan (Honshu, Shikoku, Kyushu), Korea, China.
Biological note: Adults were collected from *Humulus japonicus.*

48. *Ceuthorhynchidius albosuturalis* (Roelofs, 1875)

Specimens examined: Kujwa, 5 exs., 19.v.1990, K. Morimoto leg.
Distribution: Japan (Hokkaido, Honshu, Shikoku, Kyushu), Korea, China.

49. *Zacladus fallax* (Boheman, 1845)

Specimens examined Taechon-dong, 8 exs., 28.ix.1990, K. Morimoto leg.
Distribution: Korea (Cheju-do)-new record, East Siberia, Kamchatka.

50. *Homorosoma chinense* (Wagner, 1944)

Specimen examined Ora-dong, 1 ex., 18.v.1990, K. Morimoto leg.
Distribution: Japan (Honshu, Kyushu), Korea, China.
Biologaical note: This specimen was taken from *Humulus japonicus.*

Subfamily Acicnemidinae

51. *Acicnemis suturalis* Roelofs, 1875

Specimen examined: Yongshil, 1 ex., 24.vii.1990, S. Miyamoto leg.
Distribution: Japan (Honshu, Shikoku, Kyushu), Korea (Cheju-do)-new record.

52. *Trachodes subfasciatus* Voss, 1957

Specimen examined: Songp'anak, 1 ex., 28.ix.1990, S. Nomura leg.
Distribution: Japan (Honshu, Shikoku, Kyushu), Korea(Cheju-do)-new record.

Subfamily Carciliinae

53. *Carcilia tenuistriata* Heller, 1941

Specimens examined: Yongshil, 2 exs., 24.vii.1990, S. Nomura & M.T. Chûjô leg.
Distribution: Japan (Hokkaido, Honshu, Shikoku, Kyushu), Korea (Cheju-do)-new record, East Siberia.

Subfamily Cryptorhynchinae

54. *Acallinus tuberculatus* Morimoto, 1962

Specimens examined: Yongshil, 2 exs., 24.vii.1990, S. Nomura leg.
Distribution: Japan (Honshu, Kyushu), Korea, Far East Russia.

55. *Hyotanzo uenoi* Morimoto, 1962

Specimen examined Ora-dong, 1 ex., 18.v.1990, K. Morimoto leg.
Distribution: Japan (Honshu, Shikoku, Kyushu), Korea (Cheju-do)-new record.

56. *Simulatacalles pustulosus* sp. nov.

(Figs. P,Q)

Black, antennae and tarsi reddish brown, anterior part of rostrum and basal part of coxae often dark reddish brown, lateral margins of metasternum and metepisterna usually dark reddish brown; derm dull, alutaceous, with shiny pustules; scales greyish brown to brown, often with an indefinite ash-grey patches on third interval behind the middle.

Head wrinkled punctate, each puncture with a small greyish brown scale, scales maller and denser on vertex, dull, with a median fovea. Rostrum weakly curved, weakly and evenly narrowed in the middle, the apex as broad as the base, dorsum with two rows of punctures on each side, punctures of inner row 5-7 in number and obsolete on apical 1/3, punctures in the lateral row smaller, the septa between rows subcarinate. Antennae inserted in the middle of rostrum, scape clavate, funicle 7-segmented, first segment clavate, twice as long as broad, second segment slender, slightly shorter than first, third to fifth as long as broad, sixth and seventh transverse, club as long as five preceding segments combined, basal segment 2/3 as long as the length.

Prothorax a little broader than long (11:10), broadest at the middle, basal margin slightly bisinuate; disc dull, with large punctures and scattered small shiny pustules, larger punctures in the median area flat at the bottom, bearing a dark brown scale in the middle, smaller puctures in the basal and apical margins bearing a greyish brown scale each, interstices between punctures with small convex shiny pustules, various in the states of punctures and pustules. Scutellum absent.

Elytra convex, broadest at basal 1/4; interval with a row of shiny pustules, pustules along basal margin and apical area smaller,, oval, those on the major area larger, much longer than broad, each pustule bearing a prostrate dark brwonish small scale on its posterior slope, interstices between pustules on the same level as striae and evenly alutaceous, dull, first to third striae reaching apex, fourth and fifth striae conjoined at apical fourth, punctures in striae small and distant, greyish brown scales 3 to 7 in number often forming a definite patch on third interval at apical 1/3.

Femora unarmed, scarcely narrowed to the base, fore femora with triangular flat area for receiving tibia before the middle, middle and hind femora flattened or shallowly depressed in entire length on the inner margin for receiving tibia, these area smooth, alutaceous and bare, derm with large punctures, which are arranged in longitudinal rows, each puncture with a greyish scale; tibiae straight, slightly bisinuate internally, punctures smaller than those on femora; tarsi with second segment as long as broad, half as long as first, third segment biiobed, claws free, small.

Mesosternal receptacle prominent, keeled at the middle of posterior wall; metasternum very short, as long between meso- and metacoxae as third ventrite, with a transverse row of punctures between coxae; venter with first and second ventrites each with 2 irregular rows of punctures, suture between them entire, third and fourth ventrites impunctate, fifth ventrite densely punctate.

Male unknown.

Length: 2.8-3.7mm.

Holotype: female (Type no. 2881, Kyushu Univ.), Mt. Tachibana, Fukuoka City, 24.ix.1984, S. Nomura leg.

Paratypes all female: Sado I., 1 ex., 26.vi.1965, K. Baba leg.; 1 ex, Miyazaki, Toyama Pref., 9.ix.1962, K. Baba leg.; 2 exs., Ishidoshuku, Kitamoto C., Saitama Pref., 9.x.1991, S. Nomura leg.; 2 exs., Ohtarumi Pass, Mt. Takao, Tokyo, 10.x.1991, S. Nomura leg.; 1 ex., Miyagino, Hakone, Kanagawa Pref., 10.x.1991, S. Nomura leg.; 1 ex., Totsukawa, Mozuho-cho., Kyoto, 10.vi.1986, S. Nomura leg.; 1 ex., Yoshinoyama, Nara Pref., 27.v.1985, S. Nomura leg.; 3 exs., Minoo, Osaka Pref., 3.vi.1960, K. Ueda & 29.iv.1960, Y. Kimura leg.; 1 ex., Mt. Nachi, Wakayama Pref., 26.iii.1953, K. Sawada;2 exs., Ikuma, Niimi-cho., Okayama Pref., 21.v.1985, S. Nomura leg.; 1 ex., Kada, Ino-cho, 7.x.1990, S. Nomura leg.; 1 ex., Sakagawa, Tosayamada-cho, Kochi Pref., S. Nomura leg.; 1 ex., Rakandoh Cave, Ehime Pref., 11.x.1990, S. Nomura leg.; 1 ex., Kanesaki, Fukuoka Pref., 6.ix.1983, S. Nomura leg.; 1 ex., Mt. Fukuchi, Nogata City, 21.iv.1985, S. Nomura leg.; 2 exs., Mt. Joyama, Munakata City, 8.iii.1986, S. Nomura & 26.iv.1986, K. Kido leg.; 6 exs., same locality as holotype, 23.iv.1984, 25.vii.1984, 29.viii.1984, 24.ix.1984, S. Nomura leg.; 2 exs., Kashiigu, Fukuoka City, 2.ii.1984, 8.viii.1984, S. Nomura; 1 ex., Higumi Valley, Kuroki-machi, Fukuoka Pref., 31.viii.1991, S. Nomura leg.; 5 exs., Mt. Mifune, Takeo City, Saga Pref., 22.v.1984 & 16.iv.1985, S. Nomura leg.; 3 exs., Suga Shrine, Ogi-cho, Saga Pref., 26.iv.1985, S. Nomura leg.; Mt. Seira, Imari City, Saga Pref., 28.v.1984, S. Nomura leg.; 1 ex., Mt. Unzen, 27.ix.1977, S. Imasaka leg.; 9 exs., Katafuchi, Nagasaki City, 2.v.1985, S. Nomura leg.; 11 exs., Suwa Shrine, Nagasaki City, 2.v.1985, S. Nomura leg.; 1 ex., Nakayama, Notsu-machi, Oita Pref., 29.xi.1990, S. Sasaki leg.; 1 ex., Izuhara, Tsushima, 20.x.1983, S. Nomura leg.; 2 exs., Himi, Tsushima, 6.v.1990, S. Nomura leg.; 1 ex., Mt. Inutabudake, Tokunoshima I., 5.v.1988, S. Nomura leg.; 1 ex., Kuwanum Temple, Mt. Hallasan, Cheju-do; 29.ix.1990, S. Nomura leg.

Distribution : Japan (Honshu, Shikoku, Kyushu, Tsushima, Tokunoshima), Korea (Cheju-do).

Most specimens were collected by sifting litter in the forests.

Species of *Simulatacalles can* be classified by the following key.

l(2) Elytron with 8 striae, sixth stria obsolete; pronoutm with a median carina, dorsal area of elytra more or less reddish brown. Body length: 3.5-3.6 mm. Japan (Izu-Oshima I., Shikoku, Kyushu).

..... *Simulatacalles oshimaensis* Morimoto et Miyakawa, 1985

2(1) Elytron with 9 stariae; pronotum rarely with a median carina; elytra black or at most with sutures and around scutellum reddish brown.

3(4) Pronotum as long as broad, broadest behind the middle, punctate, not tuberculate nor pustuiate; elytra at most with a few indefinite tubercles in a interval. Body length 2.2-3.0 mm. Japan (Honshu, Izu Isis, Kyushu, Tokara-Nakanoshima I., Amami-Oshima I.)

..... *Simulatacalles watanabei* Morimoto et Miyakawa,1985

4(3) Pronotum broader than long, broadest at the middle; elytra tubercuiate or pustulate.

5(6) Elytra with a row of shiny granules on each interval, which are of the same size and equidistant; pronotum reticulately punctate, without or at most with a few indefinite granules. Body length 3.5-5.2 mm. Japan (Honshu, Izu Isis., Shikoku, Kyushu,Tsushima, Ryukyus).

..... *Simulatacalles simulator* (Roelofs, 1875)

6(5) Pronotum and elytra strongly pustulate, pustules on elytra various in size and number, those at the bases and apices smaller and oval, the other pustules much longer. Body length 2.8-3.7 mm.

..... *Simulatacalles pustulosus* Sp. nov.

Subfamily Cossoninae

57. *Heterarthrus lewisii* Wollaston, 1873

Specimens examined: Kujwa, 1 ex., 19.v.1990, K. Morimoto leg.; Ora-dong, 1 ex., 23.vii.1990, K. Morimoto leg.

Distribution: Japan (Honshu, Shikoku, Kyushu, Tsushima), Korea.

References

Cho, P. S., 1957. A systematic catalogue of Korean Coleoptera. Humanities *and Sciences, Korea Univ.*, 2: 173-338.

——— 1963. Insects of Querpaert Island (Cheju-do). *Humanities and Sciences, Korea Univ.*, 6:159-242. (in Korean)

Kôno, H. and H. G. Kim, 1937. Kurculioj de Koreujo. *J.* Chosen *Nat. Hist. Soc.*, 22: 9-31. (ii Japanese)

Kwon, Y. J. and S. M. Lee, 1986. Check-list of weevils from Korea (Coleoptera: Curculionoidea). *Znsecta Koreana, 6:* 57-86.

Lee, Y. I., W. T. Kim and D. H. Kim, 1985. Insect fauna of Mt.Halla. *Report of the* Academic Survey of *Hallasan (Mountain) Natural Preserve, Cheju-do,* 351-455. (in Korean with English summary)

Morimoto, K. and S. Miyakawa, 1985. Weevil fauna of the Izu Islands, Japan (Coleoptera). *Mushi*, 50: 19-85.

Okamoto, H., 1924. The insect fauna of Quelpart Island (Saishiu-to). *Bull. Agric Expt.* Stat. *Gov.-Gen. Chosen,* I(2): iv + 47-233, X pls.

Seok, D. M., 1971. The insect fauna of the Is. Querpart. 186 pp., Bojinjae, Seoul.

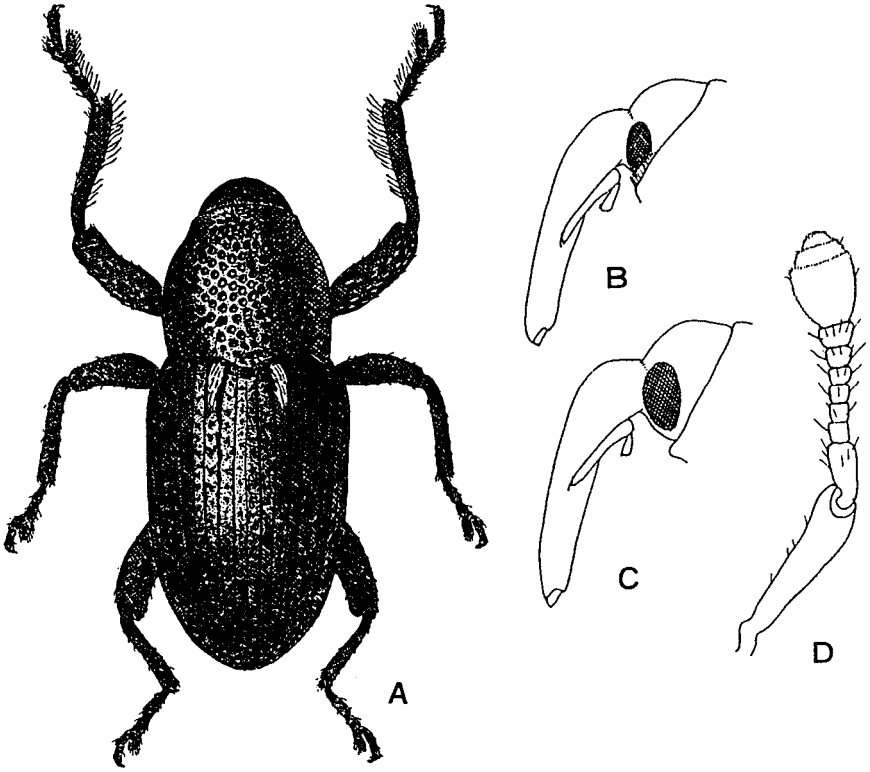
Voss, E., 1958. Em Beitrag zur Kenntnis der Curculioniden im Grenzgebiet der Orientalischen zur Paläarktischen Region (Col., Curc.). *Decheniana*, Beihefte 5: 1-139.

Explanation of figures

A-I: *Acythopeus parabasimaculatus* sp. nov. A: Holotype, male. B: Male head, lateral. C: Female head, lateral. D: Antenna. E: Apex of penis, dorsal. C: Parameres. G: Penis, lateral. H: Tergum of abdomen, male. I: Fore leg, male.

J-O: *Smicronyx dentirostris* sp. nov. J: Male head, lateral. K: Female head, lateral. L: Antenna. M: Penis, dorsal. N: Penis, lateral. 0: Strut of ninth stemite.

P, Q: *Simulatacalles pustulosus* sp. nov. P: Holotype, female. Q: Ditto, lateral.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B
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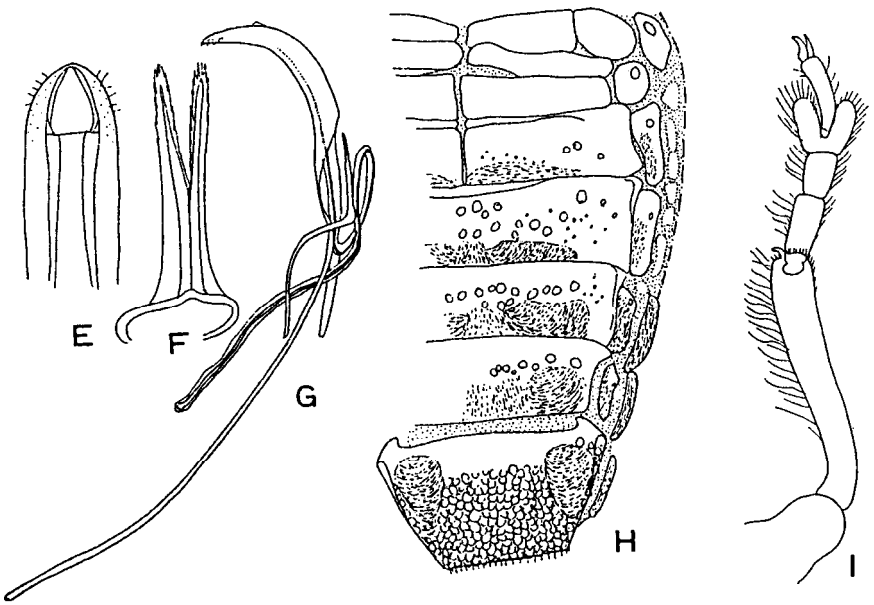
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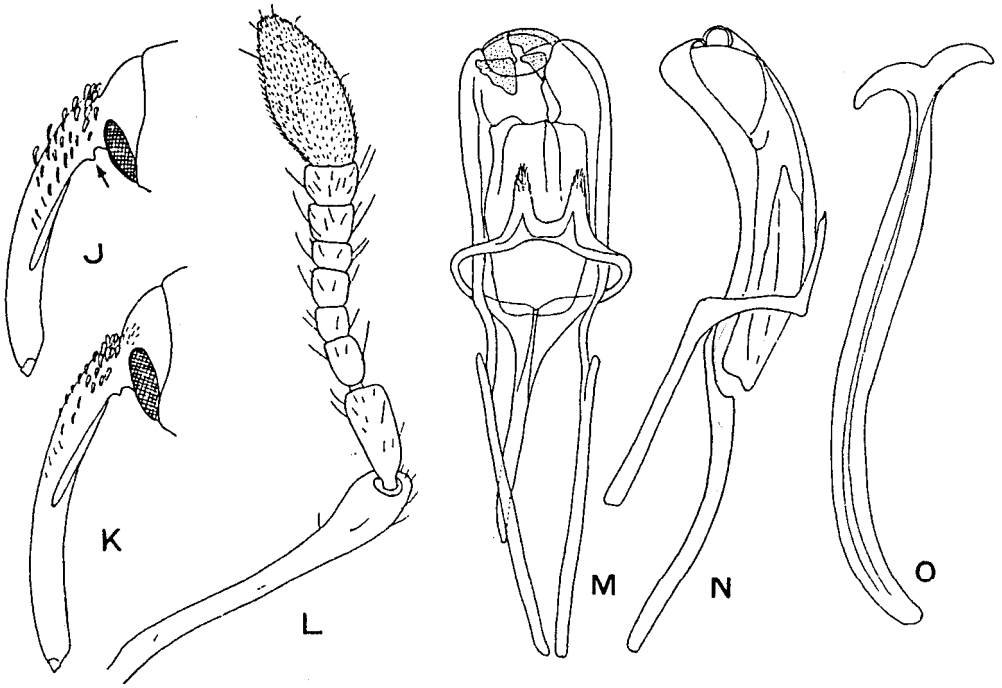
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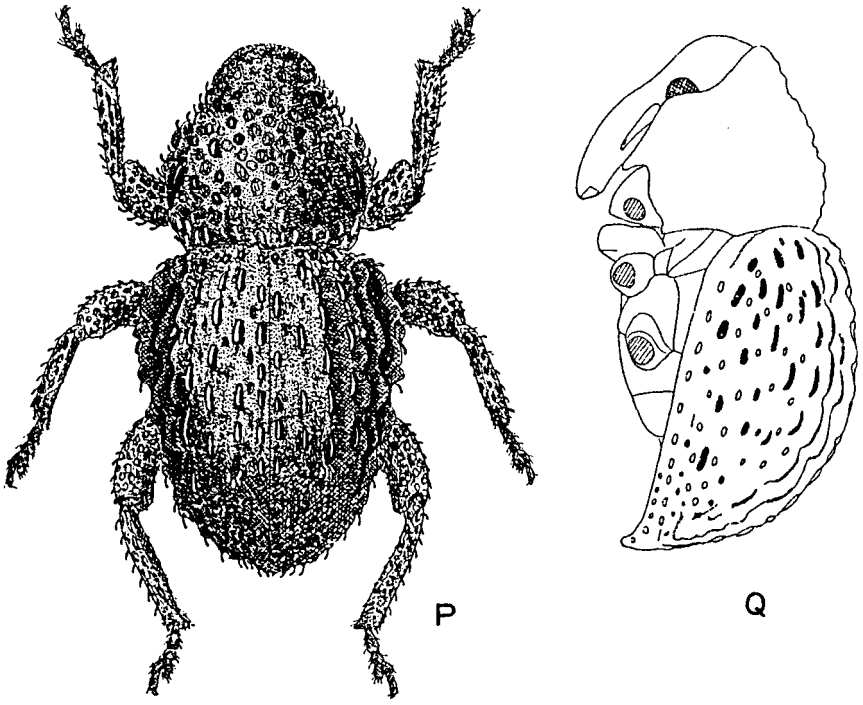
P
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