

# ENTOMOLOGICAL RESULTS FROM THE SCIENTIFIC SURVEY OF THE TOKARA ISLANDS

## Coleoptera : Chrysomelidae

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The scientific survey of the Tokara Islands was carried out in 1953 from 25 th of May to 13 th of June in two islets of the Tokara Islands, Takarajima and Nakano-shima, under the leadership of Mr. Yoshitaka Tsutsui, director of the Osaka Museum of Natural History.

In the present paper the authors report the results of the studies on the Chrysomelid-beetles, based on the collections of the present survey and the Entomological Laboratory, Kyushu University, Fukuoka, the latter made by the late Dr. Esaki in 1934 in Kotakarajima. The type specimens of new species described in this paper are preserved in the collections of the Osaka Museum of Natural History and the Entomological Laboratory, Kyushu University, and in the authors' collection.

Before going further the authors wish to express their sincere thanks to Mr. Y. Tsutsui and other members of the Tokara scientific survey for their kind help in offering them those valuable materials. The authors are much indebted to the late Dr. T. Esaki, Drs. K. Yasumatsu, M. Chûjô, J. L. Gressitt, P. J. Darlington, Jr., Messrs. E. B. Britton, G. E. Bryant, and Dr. K. Delkescamp for their favourable assistance given them during the course of the studies.

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## Subfamily CRIOCERINAE

*Lilioceris (Lilioceris) neptis* (Weise, 1922)

(= *Lilioceris impressa* subsp. *loochooana* Nakane, 1956)

Nakanoshima (2 exs., 3-13. VI. 1953, H. Y. Kono leg.).

This species was originally described from Fukien, S. China and has been recorded from Formosa.

*Lema paagai* Chûjô, 1933

Nakanoshima (1 ex., 3-13. VI. 1953, H. Y. Kono leg.).

This is the northernmost record of this species, which has been recorded as occurring from Formosa to Amami.

## Subfamily CRYPTOCEPHALINAE

*Coenobius obscuripennis* Chûjô, 1935

Takarajima (9 exs., 26, 29 & 30. V. 1953, T. Nakane & S. Miyamoto leg.). Nakanoshima 1 ex., 8. VI. 1953, T. Nakane leg.).

*Cryptocephalus perelegans* Baly, 1873

Takarajima (35 exs., 26, 29 & 30. V. 1953, S. Miyamoto, T. Nakane & S. Ueno leg.). Nakanoshima (13 exs., 25. V. 1953, & 53 exs., 3-13. VI. 1953, S. Miyamoto, T. Nakane & S. Ueno leg.).

The colour pattern of the specimens from Nakanoshima varies extraordinarily. In some of the specimens, the discal patches of the head and pronotum are reddish brown as in the specimens from Japan main islands but in others the patches are blackish as in the specimens from Takarajima and the Loochoos. Variation of the elytral pattern is much more remarkable. In some examples the black colour of the elytra is greatly extended to nearly the whole surface and leaving only small ill-defined spots on the scutellar, lateral and apical areas, while in a few other examples the black colour reduced almost entirely. Even in the typically spotted individuals the yellow spots of the elytra vary in size and often confluent with each other.

## Subfamily EUMOLPINAE

*Basilepta davidi* (Lefèvre, 1877)

Nakanoshima (39 exs., 4-13. VI. 1953, S. Miyamoto & T. Nakane leg.).

This is the northernmost record of this species in the Japanese Archipelago.

Commonly found at Nakanoshima on various plants.

As already stated by Nakane (1958), the examples from Nakanoshima are nearly identical with *B. pallidulum* from Japan main islands in the external structure, but in the male genitalia differs from the latter in the shape of the penis apex. This species may be clearly separated from *pallidulum* by the characteristic shape of the pronotum, being the widest in the basal 1/3 but not almost in the middle. The specimens taken from the Loochoos are slightly different from S. Chinese or S. E. Asian ones, in having finely but distinctly punctured pronotum. In the nominate form the pronotum is almost impunctate.

*Basilepta uenoi* Nakane, 1958

Nakanoshima 1 ex., 5. VI. 1953, S. Ueno leg.).

This species was described as a subspecies of *hirticolle* (Baly), from Japan, but should be recognized as an independent species.

"The present form differs from the nominate one in the following characteristics: Body above bearing distinct bronzy or greenish coppery tinges, and pro- and metasternum with faint metallic tinges; punctures on head and pronotum coarser and stronger than in the nominate form, so that the interspace convex and somewhat rugose; seriate punctures on elytra also somewhat stronger than in the latter race."

*Nodina chalcosoma* Baly, 1874

Nakanoshima (66 exs., 4-12. VI. 1953, S. Miyamoto, T. Nakane & S. Ueno leg.).

Of the 25 specimens collected at Nakanoshima, five are different from others in having entirely cyaneous dorsal surface.

*Colposcelis signata* Motschulsky, 1858

Nakanoshima (1 ex., 6. VI. 1953, T. Nakane leg.)

*Scelodonta sauteri* Chûjô, 1938

Nakanoshima (2 exs., 3-13. VI. 1953, H. Y. Kono leg.). Cape Sata, Kagoshima Pref., Kyushu (1 ex., 29. IV, 1953, S. Kimoto leg.).

This is the first record of the species from the Japanese territory.

The species is very close to *S. lewisii* Baly from Japan, but may be separated from it by much more slender subapical antennal segments.

*Lypesthes fulvus* (Baly, 1878)

Takajima (12 exs., 26, 29 & 30. V. 1953, S. Miyamoto & T. Nakane leg.). Nakano-shima (2 exs., 4. VI. 1953, S. Miyamoto leg.).

*Demotina sasakawai* Nakane et Kimoto, 1959

Nakanoshima (1 ex., 13. VI. 1953, T. Nakane leg.).

*Xanthonia placida* Baly, 1874

Nakanoshima (1 ex., 4. VI. 1953, T. Nakane leg.).

The unique example from Nakanoshima differs from the nominate form in having sutural and outer margins (including narrow epipleurae) blackish.

*Colasposoma oberthuri* Jacoby, 1896

Takarajima (24 exs., 26. V. - 1. VI. 1953, S. Miyamoto & T. Nakane leg.). Nakanoshima (4 exs., 3-13, VI. 1953, O. Tsuzimoto & S. Ueno leg.).

Abundantly found at Takarajima on *Ipomoea Pes-Caprae* Roth. Hitherto known from the Loochoos (Amami-Oshima, Okinawa, Ishigaki, Iriomote) and Formosa.

*Acrothinium gaschkevitchii* subsp. *tokaraense* Nakane, 1956

Nakanoshima (16 exs., 25. V. 1953, 4-12. VI. 1953, T. Nakane, S. Ueno & O. Tsuzimoto leg.).

'Closely allied to the nominate subspecies in structure, but the coloration of body is quite different.

Golden green, rarely bright coppery; antennae reddish, with 1st joint infusate above, 5th and 6th more or less darker in colour and club (5 apical joints) black; labrum and palpi (except apical joint) reddish brown; legs black with femora bearing greenish or brassy tinge. Body above a little more finely punctured than in the nominate form; interspace of punctures of elytra more flat.'

## Subfamily CHRYSOMELINAE

*Chrysolina aurichalcea* (Mannerheim, 1825)

Nakanoshima (10 exs., 4-9. VI. 1953, S. Miyamoto & T. Nakane leg.).

*Phaedon brassicae* Baly, 1874

Nakanoshima (1 ex., 25. V. 1953, T. Nakane leg.).



*Phola octodecimguttata* (Fabricius, 1775)

Takarajima (54 exs., 25. V. -1. VI. 1953, S. Miyamoto, T. Nakane & H. Y. Kono leg.). Nakanoshima (4 exs., 6. VI. 1953, T. Nakane leg.).

Very commonly found at Takarajima on *Vitex rotundifolia* L. fil., growing on the sea beach.

## Subfamily GALERUCINAE

*Aulacophora femoralis* (Motschulsky, 1857)

Takarajima (10 exs., 26 & 29. V. 1953, T. Nakane leg.). Nakanoshima (25 exs., 25. V. 1953, T. Nakane leg.).

## Subfamily ALTICINAE

*Psylliodes angusticollis* Baly, 1874

Nakanoshima (1 ex., 8. VI. 1953, T. Nakane leg.).

*Psylliodes difficilis* Baly, 1874

Nakanoshima (9 exs., 6, 12 & 13. VI. 1953, T. Nakane leg.).

*Chaetocnema (Chaetocnema) basalis* Baly, 1877

Nakanoshima (2 exs., 6. VI. 1953, T. Nakane leg.).

*Chaetocnema (Tlanoma) discreta* Baly, 1877

Nakanoshima (5 exs., 4 & 6. VI. 1953, T. Nakane & S. Miyamoto leg.).

*Manobia parvula* (Baly, 1874)

Nakanoshima (1 ex., 5. VI. 1953, S. Miyamoto leg.).

*Ochrosis* sp.

Takarajima (1 ex., 26. V. 1953, T. Nakane leg.).

This species is resembling *O. recticollis* (Jacoby) from Japan, being almost entirely reddish brown, but may be separated from it by the much weaker antebasal transverse impression of the pronotum, less thickened anterior corner of the pronotum and more distinctly thickened preapical antennal segments.

Unless much more materials become available, the authors do not wish to describe this as a new species.

*Sphaeroderma quadrimaculata* Chûjô, 1935

Takarajima (4 exs., 25 & 26. V. 1953, T. Nakane & S. Miyamoto leg.). Nakanoshima (4 exs., 5 & 9. VI. 1953, T. Nakane & S. Ueno leg.).

*Hemipyxis balyi* (Bates) f. *cinctipennis* (Weise, 1890)

Nakanoshima (8 exs., 3-15, 5 & 6. VI. 1953, H. Y. Kono, S. Miyamoto & T. Nakane leg.). Kotakarajima (2 exs., 16. V. 1934, T. Esaki leg.).

*Altica cyanea* (Weber, 1801)

Takarajima (10 exs., 26. V. 1953, T. Nakane leg.). Nakanoshima (1 ex., 6. VI. 1953, S. Ueno leg.).

*Ogloblinia flavicornis* (Baly, 1874)

Nakanoshima (1 ex., 3. VI. 1953, T. Nakane leg.).

*Ogloblinia* sp.

Nakanoshima (1 ex., 9. VI. 1953, S. Ueno leg.).

This species is resembling *O. lewisii* (Baly), from Japan, but may be separated from it by much larger size (2.3 mm) and much more elongate shape of the insect, and not oblique and ovate but rather vertical and triangular shape of the frontal tubercles.

Unless much more materials become available, the authors do not wish to describe this as a new species.

*Zipangia picea* sp. nov.

Piceous; antennae almost entirely reddish brown, in some cases apical segments slightly infusate, legs reddish brown, with blackish posterior femora.

Head impunctate, very minutely wrinkled, the frontal tubercles distinctly raised, short, rounded triangular or obliquely oval, contiguous, bounded behind by a transverse groove; carina indistinct, labrum obscure flavous. Antennae closely approached each other at the base and those interspace very narrow, rather robust and long, the 2nd roundish, one and half times as long as wide, and half as long as 1st, 3rd slightly longer than 2nd and subequal to each of 4th to 7th.

Thorax transverse,  $2/3$  as long as wide, widest in the middle, rather weakly rounded to the front and rather strongly to the base, anterior angles truncated and sharply pointed at the posterior end, posterior ones broadly rounded but with a pair of subacute teeth, the surface impressed near the base, usually with a shallow transverse

groove, the disc distinctly but not very closely punctured. Elytra a little widened towards the apex, humeri distinct, much more strongly and closely punctured than the thorax.

Legs largely reddish brown, posterior femora blackish.

Length : 2.0-2.5 mm.

Holotype : Nakanoshima (25. V. 1953, T. Nakane leg.).

Paratopotype : 6 exs., same as in Holotype.

Paratype : Nakanoshima (14 exs., 3, 5, 6, 8 & 12. VI. 1953, S. Miyamoto, S. Ueno & T. Nakane leg.).

This species is very close to *obscura* Jacoby from Japan, but may be separated from it by short, raised and triangular frontal tubercles which are closely connected with each other at the longitudinal line, not parallel-sided but distinctly rounded lateral border of pronotum, and almost entirely reddish brown antennae.

*Longitarsus lewisii* (Baly, 1874)

Takarajima (3 exs., 29. V. 1953, S. Miyamoto leg.). Nakanoshima (17 exs., 3, 4, 9 & 12. VI. 1953, S. Miyamoto leg.).

*Longitarsus haemorrhoidalis* Jacoby, 1885

Nakanoshima (4 exs., 6 & 8. VI. 1953, T. Nakane & S. Miyamoto leg.).

*Longitarsus amicus* (Baly, 1874)

Nakanoshima (2 exs., 4. VI. 1953, S. Miyamoto leg.).

*Longitarsus tokaranus* sp. nov.

Body light reddish brown, with subapical antennal segments somewhat infuscate, legs yellowish brown, of which anterior and middle ones are much paler than posterior one.

Head impunctate, vertex finely impressed with transverse wrinkles, frontal tubercles not elevated and indistinct, and interantennal space distinctly elevated. Antennae rather stout, about as long as 3/4 of body, 1st antennal segment longer than 2nd and 3rd combined, 2nd thicker than 3rd and slightly longer, or subequal to, 3rd, each of the remainders subequal to each other and one and half times as long as 3rd.

Prothorx subquadrate, sides rounded, anterior angles somewhat thickened and obliquely truncate; surface evenly convex, with a faint microsculpture, finely punctured. Scutellum semicircular in outline, surface impunctate. Elytra broader than prothorax at the base, the humeri rather prominent, the surface closely and strongly punctured. Body beneath and legs closely furnished with yellowish pubescence.

First segment of hind femora distinctly longer than half the length of the tibiae.

Length: 2.0 mm

Holotype: Takarajima (29. V. 1953, T. Nakane leg.).

Paratopotypes: 8 exs., same as in the holotype.

Paratype: Takarajima (1 ex., 30. V. 1953, T. Nakane leg.).

This species is close to *L. lewisii* Baly, from Japan, but may be separated from it by much strongly impressed punctures in the elytra, especially in the lateral parts, much slenderer antennae and entirely reddish brown elytra.

From *L. amicus* Baly, from Japan, this species may be separated by much strongly impressed punctures in the elytra, and much robuster antennae which are distinctly shorter than the elytra.

*Longitarsus morinonus* Chûjô, 1935

Nakanoshima (1 ex., 5. VI. 1935, S. Miyamoto leg.).

This is the first record of this species from the Japanese territory.

*Phyllotreta striolata* (Fabricius, 1803)

Takarajima (8 exs., 25, 26 & 29. V. 1953, T. Nakane leg.).

*Hespera formosana* Chûjô, 1936

Nakanoshima (2 exs., 12. VI. 1953, T. Nakane leg.).

*Aphthona splendens* Weise?

(=*Aphthona varipes* Jacoby?, Nakane et Kimoto, 1959, from Amami-Oshima)

Nakanoshima (1 ex., 6. VI. 1953, T. Nakane leg.).

In this stage, the authors identify this specimen as above, because of being required much materials and further studies on relative species. The Formosan specimens identified as *varipes* Jacoby for a long time (originally described from N. China) are not a true *varipes* but an extremely close one to *splendens* Weise (originally from N. W. China), except for a little stronger pronotal punctures. According to Kimoto's studies on the types of *varipes*, *splendens* and other related species, in the collections of Harvard University, U. S. A., British Museum (N. H.), England, Zoological Museum of the Humbolt University, Germany, *varipes* is synonymous with *perminutus* Baly from Japan. The type of *varipes* is somewhat an feebly sclerotized specimen.

On the other hand, there is a possibility that this is nothing but a variation of *formosana* Chen. In this specimen, pronotal wrinkles are hardly visible, and this is an important characteristic of this species. In *A. formosana* the pronotal wrinkles

vary considerably and in some specimens, this structure is almost invisible. This might suggest the possibility of the species to be identical with *formosana*.

Subfamily CASSIDINAE

*Cassida (Taiwania) circumdata* (Herbst, 1799)

Takarajima (1 ex., 26. V. 1953, T. Nakane leg.).