

Tenebrionid Beetles of the Genus *Promefhis* *Pascoe* from Nansei Islands, Japan (Coleoptera)

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Tenebrionid Beetles of the Genus *Promethis* Pascoe from Nansei Islands, Japan (Coleoptera)¹⁾

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Abstract Seven species of the *Promethis* Pascoe, 1869 from Nansei Islands are enumerated with a key to the species based on male. *P. tokunoshimana* sp. nov. is described. The records of *P. oshimana* from Takarajima Is. by Kaszab and Tokunoshima by M. T. Chûjô are obliterated from the distribution.

Key to the species of the *Promethis* from Nansei Islands on male

- 1 Middle and hind tibiae without projection at inner margin. 2
- 1' Middle and hind tibiae with projection at inner margin. 6
- 2 Pronotum with shallow median groove and shallow depressions at both sides a little behind the middle part. Iriomotejima Is. L.: 6.4-6.6 mm. *iriomotensis*
- 2' Pronotum without median groove and depressions. 3
- 3 Front tibiae with apical 1/3 rather simple. Yakushima Is. L.: 17.0-17.8 mm *exigua*
- 3' Front tibiae with apical 1/3 strongly bent ventroinward. 4
- 4 Pronotum widest at about 1/3 from base, elytra with striae very shallow, interstices nearly flat. Okinawa-Honto Island L.: 19.5-25.0 mm. *okinawana*
- 4' Pronotum widest at about 1/2 from base, elytra with striae rather deep, interstices convex. 5
- 5 Antennae with 3rd segment 2.5 times as long as 2nd, pronotum with front margin shallowly sinuate, hind tibiae nearly straight. Tokunoshima Is. L.: 19.5-28.0 mm. *tokunoshimunu* sp. nov.
- 5' Antennae with 3rd segment about 2.8 times as long as 2nd, pronotum with front margin nearly straight, hind tibiae weakly bent inwards beyond the middle. Amami-Oshima Island. L.: 23.0-27.5 mm. *oshimana*
- 6 Pronotum 1.25 times as wide as long, front tibiae at basal 1/3 obtusely dilated interiorly. Okinawa-Honto Is. L.: 18.5-24.0 mm. *subbiangulata*

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6' Pronotum 1.36 times as wide as long, front tibiae angularly projected interiorly at basal 1/3.
Yakushima Is. L.: 19.8-23.8 mm. *persimilis*

***Promethis exigua* (M. T. Chûjô, 1980)**

Setenis exigua M. T. Chûjô, 1980, Esakia, (15): 1-3, Fig. 1 (Yakushima Is.).

Promethis exigua: M. T. Chûjô, 1985, Color. Illust. Col. Japan, 3: 321, Pl. 54, Fig. 4. - Kaszab, 1988, Acta Zool. Hungarica, 34(2-3): 71 & 100, Figs. 132 & 159; id., 1988, Folia Ent. Hung., 49: 57. - Hirashima *et al.*, 1991, Check List, Japanese Ins., 1: 428.

Spec. exam.: 1 ex., Kurio, Yakushima Is., 4. vii. 1991, T. Nakamura leg.; 2 exs. (incl. holotype), see Esakia, 1980, (15): 2.

Gen. distr.: Japan [Nansei Isls. (Yakushima Is.)].

***Promethis iriomotensis* (M. T. Chûjô, 1979)**

Setenis iriomotensis M. T. Chûjô, 1979, Esakia, (12): 40-42, Fig. 1 (Iriomotejima Is.).

Promethis iriomotensis: M. T. Chûjô, 1985, Color. Illust. Col. Japan, 3: 321 & 323, Pl. 54, Fig. 5. - Kaszab, 1988, Acta Zool. Hung., 34(2-3): 73 & 104, Abb. 242-245, Taf. 6-I; id., 1988, Folia Ent. Hung., 49: 61. - Hirashima *et al.*, 1991, Check List, Japanese Ins., 1: 428.

Spec. exam.: 2 exs. (incl. holotype), see Esakia, 1979, (14): 42.

Gen. distr.: Japan [Nansei Isls. (Iriomotejima Is.)].

***Promethis okinawana* (M. T. Chûjô, 1978)**

Setenis okinawana M. T. Chûjô, 1978, Esakia, (11): 66-68, Fig. 1 (Okinawa-Honto Is.).

Promethis okinawana: M. T. Chûjô 1985, Color. Illust. Japanese Col., 3: 322, Pl. 54, Fig. 7. - Kaszab, Acta Zool. Hung., 34 (2-3): 81 & 107, Abb. 138, Taf. 8-I; id., Folia Ent. Hungarica, 49: 75. - Hirashima *et al.*, 1991, Check List, Japanese Ins., 1: 428.

Spec. exam.: 10 exs., Oku, Okinawa-Honto Is., Ryukyus, 9. vii. 1977, H. Makihara leg.; 3 exs., Yonahadake, Okinawa-Honto Is., 11-12. vii. 1977, H. Makihara leg.; 5 exs., Oku, Okinawa-Honto Is., Ryukyus, 17. v. 1978, H. Makihara leg.; 1 ex., Ie-rindo, Okinawa-Honto Is., Ryukyus, 14. iii. 1991, S. Nomura leg.; 20 exs. (incl. holotype), see Esakia, 1978, (11): 67.

Gen. distr.: Japan [Nansei Isls. (Okinawa-Honto Is.)].

***Promethis oshimana* (Miwa, 1935)**

Setenis oshimurus Miwa, 1935, Trans. Kansai ent. Soc., 6: 21-22, Pl. 3, Fig. 1 (Amami-Oshima Is.). - Nakane, 1963. Icon. Ins. Jap., col. nat. ed., II(Col.): 229, Pl. 115, Fig. 4. - M. T. Chûjô, 1966, J. Fac. Agr., Kyushu Univ., 14(1): 20. - Nakane & Masumoto, 1969, Nat.

Ins., Tokyo, 4(9): 32. - M. T. Chûjô, 1977, Esakia, (10): 10 & 16.

Promethis oshimana: M. T. Chûjô, 1985, Color. Illust. Japanese Col., 3: 321, Pl. 54, Fig. 6. - Kaszab, 1988, Acta Zool. Hung., 34(2-3): 81 & 107, Abb. 329-333, Taf. VIII-H; id., 1988, Folia Ent. Hung., 49: 74. - Hirashima et al., 1991, Check List, Japanese Ins., 1: 428.

Spec. exam.: 1 ex., Nishinakama, Amami-Oshima Is., Ryukyus, 4. vii. 1976, H. Makihara leg.; 1 ex., Nishinakama, Amami-Oshima Is., Ryukyus, 5. vii. 1976, H. Makihara leg.; 2 exs., Maruhata-rindo, Amami-Oshima Is., Ryukyus, 8. v. 1976, T. Tsutsumi leg.; 5 exs., see Esakia, 1977, (10): 10.

Gen. distr.: Japan [Nansei Isls. (Amami-Oshima Is.)].

Note: The records from Takarajima I. and Tokunoshima I., by Kaszab 1988, and also Tokunoshima I. by M. T. Chûjô, 1966, 1977, 1982 & 1985, should be obliterated due to misidentifications.

Promethis persimilis (M. T. Chûjô, 1980)

Setenis persimilis M. T. Chûjô, 1980, Esakia, (15): 3-5, Fig. 2 (Yakushima Is.).

Setenis striutipennis: M. T. Chûjô (nec Lewis), 1975, Esakia, (9): 19.

Promethis persimilis: M. T. Chûjô, 1985, Color. Illust. Col. Japan, 3: 322, Pl. 54, Fig. 12. - Kaszab, 1988, Acta Zool. Hung., 34 (2-3): 93 & 95, Abb. 48-51, Taf. 2-B; id., 1988, Folia Ent. Hung., 49: 112-113. - Hirashima et al., 1991, Check List, Japanese Ins., 1: 428.

Spec. exam.: 1 ex., Hananoego, Yakushima Is., Nansei Isls., 24. vii. 1979, H. Makihara leg.; 1 ex., Yodoko(1400m), Yakushima Is., Nansei Isls., 25. x. 1979, H. Makihara leg.; 9 exs. (incl. holotype), see Esakia, 1980, (15): 4.

Gen. distr.: Japan [Nansei Isls. (Yakushima Is.)].

Promethis subbiangulata (M. T. Chûjô, 1978)

Setenis subbiangulata M. T. Chûjô, 1978, Esakia, (11): 68-70, Figs. 2-5 (Okinawa-Honto Is.).

Promethis subbiungulutu: M. T. Chûjô, 1985, Color. Illust., Japanese Col., 3: 322, Pl. 54, Fig. 11. - Kaszab, 1988, Acta Zool. Hung., 34(2-3): 93 & 94, Abb. 9-13, Taf. I-D; id., 1988, Folia Ent. Hung., 49: 111. - Hirashima et al., 1991, Check List, Japanese Ins., 1: 428.

Spec. exam.: 1 ex., Benoki, Okinawa-Honto Is., Ryukyus, 10. vii. 1977, H. Makihara leg.; 3 exs., Mt. Yonaha-dake, Okinawa-Honto Is., Ryukyus, 6. iv. 1979, H. Makihara leg.; lex., Ie-rindo, Okinawa-Honto Is., Ryukyus, 5. iv. 1984, Y. Sawada leg.; 9 exs. (incl. holotype), see Esakia, 1978, (11): 69.

Gen. distr.: Japan [Nansei Isls. (Okinawa-Honto Is.)].

Promethis tokunoshimuna sp. nov.

Setenis oshimuna: M. T. Chûjô, 1966, J. Fac. Agr., Kyushu Univ., 14(1): 20-21 (partim). - Nakane & Masumoto, 1969, Ins. & Nat., Tokyo, 4(9): 32 (in Japanese). - M. T. Chûjô,

1977, Esakia, (10): 10 & 16.

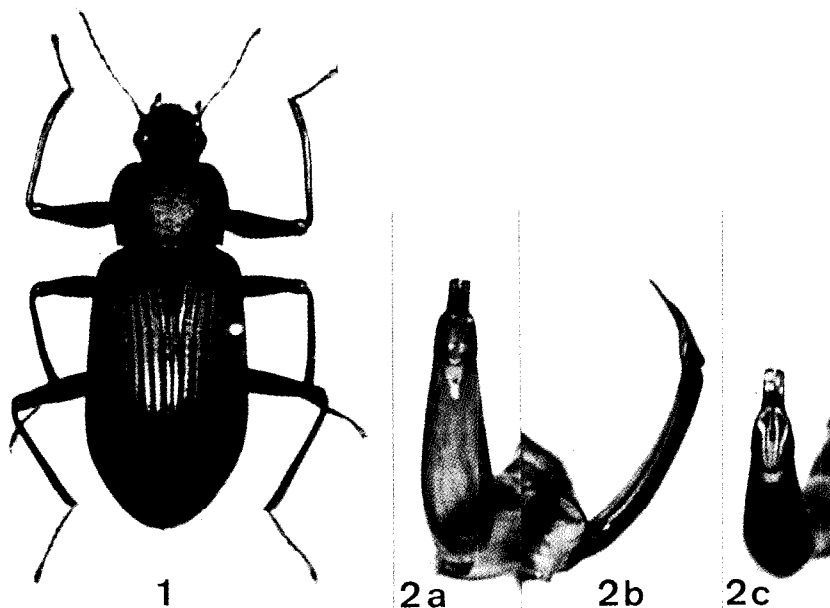
Setenis oshimana: M. T. Chûjô, 1982, Spec. Iss. Mem. Retir. Emer. Prof. M. Chûjô: 100 (in Japanese)(partim).

Promethis oshimana: Kaszab, Z. 1988, Acta Zool. Hung., 34(2-3): 81; id., 1988, Folia Em. Hung., 49: 74(partim).

Elongate, shining black.

Head very feebly convex, roughly punctate, clypeal suture vestigial, clypeus roundly bent downwards, gena rounded but not expanded outwards, frons grooved at submarginal part of eyes. Eyes rounded, strongly expanded outwards. **Labrum** nearly trapezoidal, roundly bent downwards at apex. Mentum with tuft of erected thick hairs. Gular suture invisible. Antennae slender, rather short, reaching base of prosternum, apical 6 segments making loose club, relative length of each segment from base to apex 5 : 2 : 7 : 5 : 5 : 5 : 4 : 4 : 4 : 4 : 5. Apical segment of maxillary palpi securiformed, rather elongate.

Pronotum rather transverse, about 1.14 times as wide as long, gently convex, strongly and sparsely punctate, narrowly marginate except median part of front margin, front margin shallowly sinuate, front corner not angulate, sides roundly and strongly expanded outwards, hind corners sharply pointed, hind margin bisinuate at each 1/4, roundly produced backwards at median half. Prosternum shagreened, prosternal process strongly convex at both sides, gently rounded at apex, propleura roundly convex, very shallowly aciculate. Scutellum small, tongue shaped, shagreened on dorsum.



Figs. 1: Dorsal view of *Promethis tokunoshimana* sp. nov.; 2: male genitalia (a: dorsal view; b: lateral view; c: paramere).

Elytra rather strongly convex, gradually widened towards 7/12 from base, then narrowing towards apex, deeply punctate striate, interstices convex and sparsely aciculate; rounded at each base, not marginate, shoulders oblique, sides narrowly but wholly marginate. Mesosternum with frontal half depressed, the depressed part rasped on surface except for median glitter ridge, V-shapedly convex at basal half along middle coxal cavities, bisinuate at base. Metasternum irregularly wrinkled, sparsely pubescent. Abdominal sternites densely punctate and shallowly wrinkled.

Femora rather slender and long. Front tibiae slender, long, slightly thickened towards apex, roundly bent ventrointeriorly at apical 1/3; middle tibiae gently thickened towards apex, very weakly bent inwards, hind tibiae slender, nearly straight, without oblique slit at inside of subapical part. Tarsi with terminal segment 1.5 times as long as the rest put together, strongly thickened towards apex.

Length: 19.5-28.0 mm. Width: 7.5-10.3 mm.

Holotype: male (preserved in the collection of Kagoshima Pref. Mus.), Mikyo-dake, Tokunoshima Is., Japan, 14. viii. 1980, K. Ehira leg. Paratypes: male & female, Mikyodake, Tokunoshima Is., Nansei Isls., 16. ix. 1980, K. Ehira leg.

Distribution: Tokunoshima Is. (Kagoshima Pref., Japan).

This new species is related to *Promethis oshimana* (Miwa, 1935) from Amami-Oshima Is., but is easily separated from the latter by the following characters: generally smaller, frons weakly but clearly convex, eyes more strongly expanded outwards, antennae much slenderer, relative length of antennal segments quite different, pronotum with front margin not straight but sinuate, side margin much narrower, elytral interstices more strongly convex, all legs slenderer, front tibiae more weakly bent ventrointeriorly at about 2/3 from base, middle and hind tibiae not strong but very feebly bent inwards.

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References

- Chûjô, M. T. 1966. Taxonomic study of the Tenebrionidae (Coleoptera) of the Ryukyu Islands. *J. Fac. Agr. Kyushu University*, **14**(1): 20-21.
Chûjô, M. T. 1977. Tenebrionidae of the Nansei Islands II (Coleoptera). *Esakia, Kyushu Univ. Publ. Ent.*, (10): 1-19.
Chûjô, M. T. 1978. Tenebrionidae of the Nansei Islands III (Coleoptera). *Ibid.*, (11): 63-80.
Chûjô, M. T. 1979. Tenebrionidae of the Nansei Islands V (Coleoptera). *Ibid.*, (14): 31-56.

- Chûjô, M. T. 1980. Tenebrionidae of the Nansei Islands VI (Coleoptera). *Ibid.*, (15): 1-10.
- Chûjô, M. T. 1982. Tenebrionidae of the Nansei Islands VII (Coleoptera). *Spec. Iss. Mem. Retir. Emer. Prof. M. Chûjô*: 87-101 (in Japanese).
- Kaszab, Z. 1988. Faunistische Angaben der *Promethis* Pascoe, 1869 (Coleoptera, Tenebrionidae). *Folia Ent. Hungarica*, 49: 55-116.
- Kaszab, Z. 1988. Katalog und Bestimmungstabelle der Gattung *Promethis* Pascoe, 1869 (Coleoptera, Tenebrionidae). *Acta Zool. Hungarica*, **34**(2-3): 67-170.
- Miwa, Y. 1935. Coleoptera from Amami Islands in Loo-Choo Archipelago. *Trans. Kansai Ent. Soc.*, 6: 21-22, Pl. 3, Fig. 1 (in Japanese).
- Masumoto, K. 1981. Tenebrionidae of Formosa (3). *Elytra, Tokyo*, **9**(2): 88-90 (in Japanese).
- Masumoto, K. 1982. Tenebrionidae of Formosa (5). *Elytra, Tokyo*, **10**(2): 58-61 (in Japanese).
- Nakane, T. 1963. Tenebrionidae. *Icon. Ins. Jap. col. nat. edit.*, II (Col.): 229, Pl. 115, Fig. 4.
- Nakane, T. & K. Masumoto. 1969. Tenebrionidae. *Nat. Ins., Tokyo*, **4**(9): 32.