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日本産ヒザラガヒ類の研究 (4)
Studies on Japanese Chitons (4)

瀧 庸, 瀧 巖

(By ISAO TAKI and IWAO TAKI, brothers.)

(Zoological Institute, Faculty of Science,
Imperial University of Tokyo)

(Zoological Institute, Science College,
Kyoto Imperial University)

Cryptoplax propior, new species.

(Pl. III, figs. 59-75)

General appearance: Body vermiform, rather short and elevated, with reduced valves, the anterior four valves loosely imbricate, the rest being slightly separated from each other. Tegmental surface longitudinally striated, brownish. Girdle wide, densely covered with brownish spicules.

Head valve (figs. 59-61): Horse-shoe shaped in outline, slightly narrower in front, the apex (fig. 60) not elevated, weakly beaked. Sculpture of tegmentum eroded and inconspicuous, however, it seems to be decorated with radial granulate ridges, deeply interrupted by a few concentric growth lines. Insertion plate well developed, smooth; slits 3, each of them connected with a radial shallow groove on its dorsal side. Interior with a number of deeply excavated muscle impressions (fig. 61).

Median valve (figs. 64, 67, 68): The valves behind the fourth are discontinuous, each being separated by an almost equidistant space, which is shorter than the length of any median valve; this forms one of the distinguishing characters of this species. All median valves rather flat, oblong and slightly beaked posteriorly. The second valve (figs. 67, 68) shorter but wider

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than the tail valve (fig. 65), jugum smooth, not sharply marked off from the latero-pleural area, which is provided with many low granules or inconspicuous longitudinal beaded ridges; sutural plate thick and short, auriculate, jugal sinus wide and shallow.

The other (3rd-7th) median valves (fig. 64) are nearly equal in length; jugum distinct, latero-pleural area with longitudinal ridges, showing a somewhat granulose feature; sutural plate much thickened, axially elongated; sinus rather shallow. Sculpture of latero-pleural area coarser than that of the second valve, though finer than in specimens of *C. japonica* of corresponding size.

Tail valve (figs. 65, 66): Jugum very distinct and smooth, sculpture of latero-pleural area similar to the median valve, viz., with about 8 somewhat beaded, axial ridges; mucro retracted to the terminal, protruded far behind; sutural plate short, narrowly triangular, insertion plate thick and vertical, posterior area somewhat concave; interior beneath the mucro deeply excavated.

Spicules densely clothing the girdle are of unequal sizes, slightly curved except the marginal ones; which are either very thick ($330 \times 100\mu$: fig. 62) or rather slender ($380 \times 70\mu$: fig. 71), bluntly pointed, and with numerous longitudinal weak striations; minor spicules ($100 \times 20\mu$: fig. 69; $140 \times 30\mu$: fig. 70) also occur with the larger ones. Tufts of setae inconspicuous, probably due to unfavourable preservation of material.

Ctenidia: Merobranchial, adanal, about 20 on each side, approximately corresponding to the posterior third of the entire length of the foot (fig. 74).

Colouration: Tegmental surface generally dark brown, posterior part of each valve eroded and faintly roseate. Interior pale white, sometimes greenish in the central part. Girdle unicoloured, i.e., reddish brown throughout, without any colour band as is the case in *C. japonica*.

Radula (figs. 75, a-e): General features of the radula resemble that of *C. japonica*. Central tooth (fig. 75 a) oblong, without any appendage on its tip; centro-lateral (fig. 75 b) roughly rhombic, thin, its outer margin recurved inward, with a triangular basal plate in front; major lateral (fig. 75 c) tricuspid, its median

cusp being longest and sharp, inner cusp short and thick, almost as long as the outer one, which is slender; stalk fusiform, stout, weakly longitudinally striated; major uncinus (fig. 75 *d, e*) slender, oar-shaped, curving moderately inward, with rounded end.

Measurements: The specimen in spirit measures 17.4 mm. in length, 7 mm. in breadth in its contracted and curved condition; however, if stretched, it would attain a length of as much as 33 mm. Length of individual plate is as follows:

head valve 3.3 mm., second valve 3.9 mm.,
fifth valve 4.4 mm., tail valve 4.3 mm.

Angle of divergence of the second valve (fig. 68) about 120°.

Locality: Holotype was collected in Prov. Shima by Mr. TOMOHARU YAMADA in 1929, to whom we express our sincere thanks for his kindness in placing the material at our disposal.

Remarks: As early as in 1874, TAPPARONE-CANEFRI¹⁾ recorded a *Chitonellus fasciatus* from Japan. This name, however, has not been referred to by any subsequent authors. It seems quite probable that he had meant PILSBRY's species, which he misidentified. Later, in 1898, PILSBRY²⁾ established two new species, *Cryptoplax japonicus* [sic]³⁾ and *C. rhodoplax* from Japan, with insufficient descriptions. He wished to give more detailed accounts on these species if he could procure further material available for study; but this has not been realized. THIELE (1909)⁴⁾, based on his elaborate anatomical works, placed *rhodoplax* as synonymous with *japonica*, with this view we concur. Thus, among the members of the genus *Cryptoplax* only *C. japonica* is known from Japan thus far, and the present species forms the second member of this genus occurring in Japanese waters.

The following features may be sufficient to distinguish this species from *C. japonica*.

- 1) TAPPARONE-CANEFRI, C. 1874. Zoologia del Viaggio intorno al Globo della regia fregata Magenta, durante gli anni 1863-68. Malacologia, p. 78.
- 2) PILSBRY, H. A. 1901. Proc. Acad. Nat. Sci. Philadelphia, vol. 53, p. 204.
- 3) THIELE (1909, p. 20, foot-note) has already pointed out that "plax, πλάξ" is a feminine noun.
- 4) THIELE, J. 1909. Revision des Systems der Chitonen. I. Zoologica, Bd. 22, Heft 56, S. 54.

1. The space between the 5th, 6th, 7th and 8th valves is respectively shorter than the length of each median valve.
2. Tegmental sculpture is finer than in *C. japonica*.
3. Sutural plate is much shorter and jugal sinus is shallower.
4. Mucro of tail valve strongly protruded backward.
5. Girdle spicules are thick and blunt.
6. There are no transverse brown bands on the girdle.

Cryptoplax propior (新種) イモムシガヒ (新稱) (第 III 圖版; 59-75)

本種は既知 *C. japonica* PILSBRY (= *C. rhodoplax* PILSBRY) ケムシヒザラガヒに比して、第 5-8 殻板が接近してゐて、その間隔は中間板の長さよりも短いこと、殻表の彫刻が一層緻密で縫合板は著しく短く灣入が浅く、尾板の尾殻頂が後方に突出して居り、肉體上の刺は太くて短く鋭く尖つてゐない；又褐色の横縞状の斑紋が全くないこと等より容易に區別せられる。體長 17.4 耗 (伸長すれば 33 耗にもならう)。志摩にて山田知治氏採集 (1929)。

List of the known species of the genus *Cryptoplax*.

The following is a list of the members of this genus hitherto recorded, together with their synonymies and habitats.

Genus *Cryptoplax* BLAINVILLE, 1818.

Type, *Chiton larvaformis* BURROW, 1815.

1. *CRYPTOPLAX BURROWI* (E. A. SMITH, 1884).

Chitonellus larvaformis (non BLAINVILLE) REEVE (1847) Conch. Icon., vol. 4, Chitonellus, f. 3.

Chitonellus burrowi E. A. SMITH (1884) Zool. Collect. H. M. S. "Alert," p. 85.

Cryptoplax burrowi HADDON (1886) Challenger Report, Zool. vol. 15, Polyplacophora, p. 42-45, pl. 3, f. 11a-11m; PILSBRY (1893) Man. Conch., vol. 15: 54-55, pl. 9, f. 6-10; PILSBRY (1900) Proc. Mal. Soc., 4: 152; NIERSTRASZ (1905) Siboga-Exped., monogr. 48: p. 71-73, pl. 2, f. 26, 27; pl. 5, f. 141-150; E. A. SMITH (1906) Fauna & Geography Maldives & Laccadive Arch., vol. 2: p. 596, 620; SYKES (1907) Journ. Linn. Soc. Zool., 31: 33; THIELE (1909) Rev. Syst. Chitonien, I. Zoologica, 22 (56): 53, 56; ASHBY (1923) Trans. Roy. Soc. S. Austr., 47: 242.

Wasin, East Africa (SYKES); Hulule Is., 1-6 fms, Maldives Arch. (E. A. SMITH); Straits of Macassar (BELCHER; THIELE); Sulu Arch., 15 m.; near Sulu Arch., 16-23 m.; Damar Is.; Banda Is., reef; near Banda, 141 m.; Kei Is., reef (Siboga); Port Adelaide, S. Australia (REEVE); Port Molle (COPPINGER).

2. **CRYPTOPLAX CALEDONICA** ROCHEBRUNE, 1881.
Cryptoplax caledonicus ROCHEBRUNE (1881-'82) Bull. Soc. Philom. Paris, p. 196; PILSBRY, (1893) Man. Conch., 15: 58-59; THIELE (1909) Zoologica, 22 (56): 52, 55-56, pl. 6, f. 97-102.
Cryptoplax uniciferus ROCHEBRUNE (1881), l. c., p. 197.
 New Caledonia (Paris Museum).
3. **CRYPTOPLAX ELIOTI** PILSBRY, 1900.
Cryptoplax elioti PILSBRY (1900) Proc. Malac. Soc. London, 4: 152, 153-154, pl. 14, f. 1-11; NIERSTRASZ (1905) Siboga-Exped., 75-76, pl. 2, f. 29, 30; pl. 6, f. 159-161; THIELE (1909) Zoologica, 22 (56): 56.
 Apia, Samoan Is. (Sir C. ELIOT); Upolu, Samoan Is. (Hamburg Museum); East of Timor, 27-54 m. (Siboga).
4. **CRYPTOPLAX EVANESCENS** COOK, 1913.
Cryptoplax evanescens COOK (1913) Proc. Malac. Soc., 10: 320-322, with text-figs.; THIELE (1929) Handb. syst. Weicht. 1, textf. 8.
 Funafuti, Ellice Is., South Central Pacific (J. S. GARDINER).
5. **CRYPTOPLAX HEURTELI** ROCHEBRUNE, 1881.
Cryptoplax heurteli ROCHEBRUNE (1881-'82) Bull. Soc. Philom. Paris, p. 196; PILSBRY (1893) Man. Conch., 15: 59; THIELE (1909) Zoologica, 22 (56): 52, 56, pl. 6, f. 103-107.
 New Caledonia (Paris Museum).
6. **CRYPTOPLAX IREDALEI** ASHBY, 1923.
Cryptoplax iredalei ASHBY (1923) Trans. Roy. Soc. S. Austr., 47: 238, pl. 17, f. 4.
 Port Lincoln, Gulf of St. Vincent (ASHBY); North-western Tasmania (L. MAY); South Australia, Tasmania (ASHBY).
7. **CRYPTOPLAX JAPONICA** PILSBRY, 1901.
? Chitonellus fasciatus TAPPARONE-CANEVRI (1874) Viaggio al globo fregata Magenta, Malac., p. 78.
Chitonellus larvaformis THIELE (1893) Das Gebiss der Schnecken, no. 120.
Cryptoplax japonicus PILSBRY (1901) Proc. Acad. Nat. Sci. Philad., 53: 204.
Cryptoplax japonica THIELE (1909) Zoologica, 22 (56): 4, 8, 54-55, pl. 6, f. 90-96.
Cryptoplax rhodoplax PILSBRY (1901) l. c.; THIELE (1909) l. c., p. 54-55.
 Hirado, Hizen, Japan (HIRASE); Sea of Japan (Magenta); Hakodate (HILGENDORF); Enoshima (DÖDERLEIN); Nagasaki (BUNGE).
 Kyûshû; Shikoku; Honshû (TAKI).
8. **CRYPTOPLAX LARVAEFORMIS** (BURROW, 1815).
Cryptocochus larvaformis BLAINVILLE (1815) BURROW's Elements of Conch., p. 190 (no description).
Chiton larvaformis BURROW, l. c., p. 191, pl. 28, f. 2-4.
Cryptoplax larvaformis BLAINVILLE (1818) Dict. des Sci. Nat., 12: 124; HADDON (1886) Challenger Polyplac., 37-39, pl. 3, f. 12a-12m; PILSBRY

(1893) *Man. Conch.* 15, 56-58, pl. 11, f. 31-36, 40-43; v. MARTENS (1894) SEMON's *Zool. Forsch.-reis. Austr. u. Malay. Arch.*, 5 (1): 92; PILSBRY (1900) *Proc. Mal. Soc.*, 4: 152, 154-156, pl. 14, f. 12-16; WETTSTEIN (1903) *Jena. Z. Naturw. N. F.*, 31: 473-504, pl. 10-12; NIERSTRASZ (1905) *Siboga-Exp.*, 73-74, pl. 6, f. 154-158; THIELE (1909) *Zoologica*, 22 (56): 54, pl. 6, f. 87-89; ASHBY (1922) *Trans. Roy. Soc. S. Austr.*, 46: 576; THIELE (1929) *Hb. sys. Weicht.*, 1: 15.

Chiton chitonellus BLAINVILLE (1825) *Diet. des Sci. Nat.*, 36: 550.

Chiton vermiformis BLAINVILLE (1825) *ibid.*, 36: 553.

Chitonella larvaeformis BLAINVILLE (1825) *Man. de Malacol.*, p. 603, pl. 87, f. 6.

Chiton fasciatus QUOY et GAIMARD (1834) *Voy. de l'Astrolabe*, *Zool.*, 3: 408, pl. 73, f. 21-29.

Chitonellus fasciatus DESHAYES (1836) LAMARCK's *Hist. Nat. Anim. sans Vert.*, (ed. 2) 7: 482; REEVE (1842) *Conch. Syst.*, 2: pl. 135, f. 2 (not fig. 5, which is *Cryptoplax oculata*); GOULD (1852) *U. S. Explor. Exped.*, 12: 333, atlas, pl. 28, f. 429, 429 a.

Chitonellus laevis(?) LAMARCK (1819) *l.c.* (ed. 1) 6: 317; BLAINVILLE (1825) *Man. Malac.*, p. 603, pl. 87, f. 5; DESHAYES in LAMARCK (1836) *l.c.*, 481; REEVE (1847) *Conch. Icon.*, f. 2; REEVE (1842) *Conch. Syst.*, pl. 135, f. 3, 4 [Not of REEVE (1847) *Conch. Icon.*, f. 1, = *Chioneplax strigata* SOWB.]

Not *Chitonellus larvaeformis* REEVE, *Conch. Icon.*, f. 3, which is *Chitonellus burrowi*; SMITH (1884) *Report Zool. Collect. H. M. S. "Alert"*, p. 85.

Chiton eruciformis SOWERBY (1820-'25) *Gen. Rec. Fos. Shells*, no. 12, pl. 139, f. 5.

Cryptoplax fasciata+larvaeformis ADAMS (1858) *Gen. Rec. Moll.*, vol. 1: 484; vol. 3, pl. 55, f. 6, 6a.

Cryptoplax coronatus; *C. lamarecki* ROCHEBRUNE, MSS., (fide THIELE (1909) *l.c.*, p. 54)

Cryptoplax laevis LAMARCK (1819) = *C. lamarecki* ROCHEBRUNE (cf. ASHBY (1922-3) *Trans. Roy. Soc. S. Austr.*, 46: 576, 577; 47: 239)

Dalaquete, Zebu, Philippines (CUMING); Coast of Java (Leiden Mus.); Karakelang Is.; Salibabu Is.; Saleyer; West coast of Binongka; Banda Is.; West coast of Kur (Siboga); Amboina (v. MARTENS; Leiden Mus.); New Caledonia (Paris Mus.; Amsterdam Mus.); Viti Is. (A. GARRETT); Kandavu, Fiji Is. (Challenger); Tonga Tabu, Friendly Is. (QUOY et GAIMARD); Hapai, Tonga Is. (THIELE); Samoan Is. (NIERSTRASZ); Christchurch, New Zealand (WETTSTEIN); San Diego, California ("Christiania" Mus.).

9. CRYPTOPLAX MICHAELSENI THIELE, 1911.

Cryptoplax michaelсени THIELE (1911) *Die Fauna Südwest-Austr.*, 3: 405-406, f. 11-17; ASHBY (1923) *Trans. Roy. Soc. S. Austr.*, 47: 231, 239.

Cryptoplax hartmeyeri THIELE (1911) *l.c.*; ASHBY (1929) *Tr. R. S. S. Austr.*, 53: 63-64.

Carnarvon (C. JOHNSTON); Shark Bay (THIELE); both in Western Australia.

10. **CRYPTOPLAX MYSTICA** IREDALE & HULL, 1924.
Cryptoplax mystica IREDALE & HULL (1924) Austr. Zool., 4: 100-108.
 New South Wales, Australia (IREDALE & HULL).

11. **CRYPTOPLAX OCULATA** (QUOY et GAIMARD, 1824).
Chiton oculatus QUOY et GAIMARD (1824) Voy. l'Astrolabe, 3: 410, pl. 73, f. 37, 38.
Chitonellus oculatus DESHAYES (1836) LAMARCK's Hist. Nat. Anim. s. Vert., (ed. 2) vol. 7: p. 482.
Chitonellus fasciatus REEVE (not of QUOY and GAIMARD) (1842) Conch. Syst., 2: pl. 135, f. 5 (only).
 Not *Chitonellus oculatus* REEVE (1847) Conch. Icon., f. 7a, 7b (= *Cryptoplax striata*).
Cryptoplax montanoi ROCHEBRUNE (1881-'82) Bull. Soc. Philom. Paris, p. 190; PILSBRY (1893) Man. Conch., 15: 58; fide THIELE (1909) p. 52; ASHBY (1922) Trans. Roy. Soc. S. Austr., 46: 576.
Cryptoplax oculatus HADDON (1886) Challenger Polyplac., 41-42, pl. 1, f. 10; pl. 3, f. 10a-10m; PILSBRY (1893) Man. Conch., 15, 55-56, pl. 9, f. 1-5; MELVILL & STANDEN (1899) Journ. Linn. Soc., Zool., 27: 181; PILSBRY (1900) Proc. Mal. Soc., 4: 153; PLATE (1901) Zool. Jahrb. Suppl., 5: 333-351, pl. 14, f. 353-364, pl. 15, f. 365-381; NIERSTRASZ (1905) Siboga-Exped., 74-75; THIELE (1909) Zoologica, 22 (56): 54; ASHBY (1922) Trans. Roy. Soc. S. Austr., 46: 576, 578; ASHBY (1923) *ibid.*, 47: 241-242; ASHBY (1928) *ibid.*, 52: 167.
Chitonellus sp. BLUMRICH (1891) Zeit. wiss. Zool., 52: 442-443, pl. 28, f. 37-43 (fide NIERSTRASZ (1905) p. 75).
 New Guinea or Vanikoro (QUOY et GAIMARD); Samboangan, Philippines, in 10 fms. (Challenger); Sulu (DUPUIS); Borneo; Lucon (Paris Mus.); Sunda Straits (Utrecht Mus.); Kisser (Leiden Mus.); Amboina; Ralum, Neu-Pommern, Bismarck Arch. (PLATE); Fringing Reef, Mer (Murray Is.), Torres Straits (MELVILL & STANDEN); Friendly Is. (British Mus.); Queensland (ASHBY); Algoa Bay, South Africa (BLUMRICH).

12. **CRYPTOPLAX PERONI** ROCHEBRUNE, 1881.
Cryptoplax peroni ROCHEBRUNE (1881-'82) Bull. Soc. Philom. Paris, p. 190; PILSBRY (1893) Man. Conch., 15: 58; THIELE (1909) Zoologica, 22 (56): 56.
 Australia (PERON & LESUEUR).

13. **CRYPTOPLAX PROPIOR** Is. & Iw. TAKI, 1930.
 See p. 99 of this paper.
 Prov. Shima, Japan (T. YAMADA).

14. **CRYPTOPLAX ROSTRATA** (REEVE, 1847).
Chitonellus rostratus REEVE (1847) Conch. Icon., f. 6.
Cryptoplax rostratus ASHBY (1923) Trans. Roy. Soc. S. Austr., 47: 239; ASHBY (1924) *ibid.*, 48: 319.

- Sydney (Paris Mus.); New South Wales; Queensland (ASHBY); Torres Strait (REEVE; this locality will be probably incorrect, after ASHBY).
15. **CRYPTOPLAX ROYANA** IREDALE & HULL, 1924.
Cryptoplax royana IREDALE & HULL (1924) Austr. Zool., 4: 100-108.
 Lord Howe Is., N. S. Wales (IREDALE & HULL).
16. **CRYPTOPLAX STRIATA** (LAMARCK, 1819).
Chitonellus striatus LAMARCK (1819) Hist. Nat. Anim. sans Vert., (ed. 1) 6: 317; and (ed. DESHAYES) (1836) 7: 481; SOWERBY (1820-'25) Gen. Shells, no. 12, pl. 139, f. 4; SOWERBY (1841) Conch. Illustr., p. 7, no. 85, f. 62; REEVE (1842) Conch. Syst., vol. 2: pl. 135, f. 1; REEVE (1847) Conch. Icon., f. 4a, b.
Chiton (*Chitonellus*) *striatus* SMITH (1884) Rep. Zool. Coll. II. M. S. "Alert," p. 84.
Chiton striatus BLAINVILLE (1825) Dict. des Sci. Nat., 36: 551.
Chitonellus oculatus REEVE (1847) Conch. Icon. f. 7a, b (not of QUOY and GAIMARD).
Cryptoplax striata + *gunnii* + *rostrata* ADAMS (1858) Gen. Rec. Moll., 1: 484.
Cryptoplax striatus ANGAS (1867) Proc. Zool. Soc., 224-225; HADDON (1886) Challenger Polyplac., 39-40, pl. 1, f. 9, pl. 3, f. 9a-9m; PILSBRY (1893) Man. Conch., 15: 53-54, pl. 9, f. 11-15, pl. 11, f. 37-39; SYKES (1900) Journ. Malac., 7: 164; PILSBRY (1900) Proc. Mal. Soc., 4: 153; NIERSTRASZ (1905) Siboga-Exped., p. 76; SYKES (1907) Journ. Linn. Soc., Zool., 31: 33; THIELE (1909) Zoologica, 22 (56): 53, pl. 6, f. 80-82; ASHBY (1922) Trans. Roy. Soc. S. Austr., 46: 577; ASHBY (1923) *ibid.*, 47: 237; ASHBY (1928) *ibid.*, 52: 175.
Cryptoplax torresianus ROCHEBRUNE (1881-'82) Bull. Soc. Philom. Paris, p. 195; PILSBRY (1893) Man. Conch., 15: 58; = *striata*, fide THIELE (1909) p. 52; ASHBY (1922) Trans. Roy. Soc. S. Austr., 46: 577.
 Raines Is., Torres Straits (REEVE); Flinders Is., Queensland (J. MILLIGAN); Newcastle, N. S. Wales (Dr. DIEFFENBACH); Port Jackson, N. S. Wales (COPPINGER, RICHARDSON, JUKES, KING); Quarantine Station (ASHBY); Venus Bay, Victoria (ASHBY); Philip Is., Victoria (ASHBY); Port Fairy, Victoria (IREDALE); Port Lincoln, S. Australia (J. B. HARVEY); Kangaroo Is., S. Australia (ASHBY); Tasmania (MACGILLIVRAY & GUNN); East coast of Zanzibar; Zanzibar Channel; Khor Dongola; Natal (SYKES).
- 16a. **CRYPTOPLAX STRIATA** var. **GUNNII** (REEVE, 1847).
Chitonellus gunnii REEVE (1847) Conch. Icon., f. 5.
Cryptoplax striatus var. *gunnii* PILSBRY (1893) Man. Conch., 15: 54, pl. 8, f. 14; NIERSTRASZ (1905) Siboga-Exped., 77: ASHBY (1923) Trans. Roy. Soc. S. Austr., 47: 237.
Cryptoplax gunnii PILSBRY (1900) Proc. Mal. Soc., 4: p. 153, 156-157, pl. 15, f. 17-19, 24-26; THIELE (1909) Zoologica, 22 (56): 52.
 King Is., Tasmania (ASHBY); Tasmania (REEVE; ASHBY); South Australia and Tasmania (SMITH); Port Phillip, Victoria (SYKES).

- 16b. **CRYPTOPLAX STRIATA** var. **WESTERNENSIS** ASHBY, 1923.
Cryptoplax striatus var. *westernensis* ASHBY (1923) Trans. Roy. Soc. S. Austr.,
 47: 238; ASHBY (1929) Journ. Roy. Soc. W. Austr., 15: 49-50.
 Rottnest Is.; Bathurst Point; Kangaroo Is.; Western Australia (ASHBY).
17. **CRYPTOPLAX SYKESI** THIELE, 1909.
Cryptoplax sykesi THIELE (1909) Zoologica, 22 (56) 54, pl. 6, f. 83-86.
 Giusa Bay, Red Sea (THIELE).

Fossil species:

18. **CRYPTOPLAX GATLIFFI** HALL, 1905.
Cryptoplax galliffi HALL (1905) Proc. Roy. Soc. Vict., 17 (2): 392-393, pl.
 30, f. 7-9.
 Lalifton Bank, Muddy Creek, Balcambian (Eocene), Australia (HALL).
19. **CRYPTOPLAX PRITCHARDI** HALL, 1905.
Cryptoplax pritchardi HALL (1905) l. c., 391-392, pl. 30, f. 1-6.
 McDonald's Muddy Creek, Kalimnan (Miocene), Australia (HALL).

Additions and Corrections

The Venus, vol. 1, no. 5.

p. 161 line 13 from bottom, for *Lepidopleurus* s. str.read *Leptochiton* GRAY, 1847.p. 162 line 12 from bottom, Next to "*Deshayesiella curvatus* CARPENTER
MS., p. 10;,"

insert the following:

1886 HADDON, Challenger Polyplac., p. 9.

化石 *Glycymeris yessoensis* の變異
 On the Variation of the Fossil *Glycymeris*
yessoensis

横山 次郎 By J. MAKIYAMA

ABSTRACT

The material upon which this investigation is based consists of seven series of detached valves of *Glycymeris yessoensis* (SOWERBY) obtained from the Upper Pliocene and Pleistocene rocks of this country. Series A, B, and C were collected from three fossil localities in Oga Peninsula, North Japan, and the remaining four series from the Pleistocene sands at Itabasi near Tôkyô, and three localities in Bôso Peninsula. The length of the shell was measured as usual, but diameter B

THE VENUS: II (3)

Pl. III.



Is. & Iw. TAKI: Japanese Chitons.