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from Japan (*Aliaporcellana kikuchii* gen. et
sp. nov.), with description of two
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Yukio NAKASONE and Sadayoshi MIYAKE

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**A new porcellanid crab (Anomura : Porcellanidae)
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Yukio NAKASONE⁴ and Sadayoshi MIYAKE

Zoological Laboratory, Faculty of Agriculture, Kyushu University

The genus *Polyonyx* Stimpson (1858) of the Indo-West Pacific region consists of an assemblage of eighteen species, of which a few species are not very closely related to *Polyonyx* and they should be included in a distinct genus. *Polyonyx* should be definitely restricted to the generic characters described by Stimpson (1858, p. 67; 1907, p. 194), Miyake (1943, p. 138), and Haig (1960, p. 233). Johnson (1958) reviewed fourteen species of the genus *Polyonyx* occurring in the Indo-West Pacific region and he divided into three groups, the *Polyonyx suluensis* (= *denticulatus*) group, the *Polyonyx biunguiculatus* group, and the *Polyonyx sinensis* group. In the first group the carapace is as a rule less than at least 6 mm in length, small, and armed with spines on its lateral margin; this group strongly differs in the shape of the carapace and the other many characters from the other two groups. As Johnson already pointed out, the species of this first group, *P. suluensis* (Dana, 1852), *P. pygmaeus* (De Man, 1902), *P. pugilator* Nobili, 1905, and *P. telestophilus* Johnson, 1958, appear to be transitional towards the genus *Porcellana*.

In the Indo-West Pacific region *Polyonyx* is up to date represented by eighteen species, of which the four species corresponding to the *P. suluensis* group should be transferred to a separate genus. Haig (1960, p. 233) also suggested that the Indo-West Pacific *Polyonyx* which contains a few species with spines on the lateral margin of the carapace may be referred to a distinct genus.

¹) Revision of the porcellanid crabs from Japan and adjacent waters, no. 4.

²) Contributions from the Zoological Laboratory, Faculty of Agriculture, Kyushu University, No. 403.

³) Contributions from the Amakusa Marine Biological Laboratory, Kyushu University, No. 212.

⁴) Present address: General Arts, University of the Ryukyus, Naha City, Okinawa, Japan.

Ortmann (1892, p. 268, pl. 12, figs. 2, 2e) described a new species under the name of *Polyonyx carinatus* from Amami-Oshima, the Ryukyu Islands, but no one reported it from any regions of the Indo-West Pacific since that time. Miyake (1943, p. 144) listed this species name and translated the German original description of the species into English, though he had no occasion to examine the material of the species. Johnson (1958, p. 116) stated the species *Polyonyx carinatus* Ortmann as a double species. According to the description and the figures of Ortmann, *Polyonyx carinatus* is also included in a separate genus. We think that if *Polyonyx carinatus* Ortmann is a valid species, it belongs to a new genus which we establish in the present paper, as suggested by Dr. J. Haig (in her kind personal communication).

The genus *Porcellana* Lamarck (1801) of the Indo-West Pacific region, as Haig (1965) also pointed out, is heterogeneous. Some species which has hitherto been reported as *Porcellana* were transferred to the genus *Pisidia* by a fact which the movable finger of the cheliped is contorted out of plane with the palm (see Haig 1960, pp. 207-209). About fifteen species belonging to *Porcellana* has up to date been reported from the Indo-West Pacific region, but a few species of them should also be transferred to a distinct genus, especially by a fact of the presence of the two or more fixed claws occurring in the dactylus of the walking leg.

Miers (1884, pp. 276-277, pl. 30, figs. D, d) reported a new species *Porcellana quadrilobata* from Port Denison and states that the genera of the Porcellanidea are much in need of revision, and he, more, added that "I doubt the constancy of the characters derived by Stimpson from the size and number of the denticulations of the dactylus of the ambulatory legs as generic distinctions." This species shows a transition towards the genus *Porcellanella*, especially in the shape of the fixed claws of the dactylus of the walking leg.

Southwell (1909, pp. 112-113, pl., figs. 1-3) reported a new species *Porcellana gaekwari* from Challai Paar, the Gulf of Mannar, but this species is identical with *Porcellana quadrilobata* Miers. He pointed out that the species differs from the genus *Porcellana* in the shape of the dactylus of the walking leg and the other points, but he included the species in *Porcellana*, because of the fact which the general characters of this species have more those of *Porcellana* than of any other genus. In *P. quadrilobata* (= *gaekwari*) the dactylus of the walking leg has two subequal and one or two small fixed claws and this species should also be included in a distinct genus, as suggested by Miers and Southwell.

Haswell (1882, p. 758) described a new species *Porcellana nitida* from Port Denison and the species has two subequal fixed claws and a single movable spinule on the dactylus of the walking leg. After two years, Miers (1884, pp. 274-275)

reported a variety *Porcellana nitida* var. *rotundifrons*, which is a synonym of *P. nitida* Haswell, from the various localities of Australia, as well as Port Denison. He pointed out that the dactylus of the walking legs of the variety resembles that of the species of *Polyonyx*, from which differs in the relatively longer carapace, which resembles that of the other species of *Porcellana*. Therefore, *P. nitida* also has mixed characters of both these genera and should be referred to a separate genus.

Haig (1965, pp. 110-111, text-fig. 2) reported a new species *Porcellana furcillata* from Western Australia, but it may be included in a separate genus, on account of the two strong, subequal fixed claws of the dactylus of the walking leg. In the present paper, we describe a new species from Japan which belongs to a group of species bearing such the fixed claws.

As mentioned above, it is naturally able to group the *Polyonyx suluensis* group and the species of *Porcellana* bearing the two or more distinct fixed claws on the dactylus of the walking leg. We include those species in a single genus and propose a new genus *Aliaporcellana*. Nine species which are contained within *Aliaporcellana* may be summarized as follows.

1. *Aliaporcellana suluensis* (Dana, 1852) (Type species for the new genus)
2. *Aliaporcellana nitida* (Haswell, 1882)
3. *Aliaporcellana quadrilobata* (Miers, 1884)
4. *Aliaporcellana carinata* (Ortmann, 1892)
5. *Aliaporcellana pygmaea* (De Man, 1902)
6. *Aliaporcellana pugilator* (Nobili, 1905)
7. *Aliaporcellana telestophila* (Johnson, 1958)
8. *Aliaporcellana furcillata* (Haig, 1965)
9. *Aliaporcellana kikuchii* sp. nov.

On the basis of such the characters, the above-mentioned species are best to transfer to *Aliaporcellana* separately from *Polyonyx* and *Porcellana* and it is convenient to treat them as a group of species of the new genus. These species as a rule show a tendency taken from various bottoms and are sometimes found in commensal or association with other organisms.

We are most grateful to Dr. Taiji Kikuchi of the Amakusa Marine Biological Laboratory for placing the material at our disposal and to Dr. Janet Haig of the Allan Hancock Foundation, University of Southern California for reading through the manuscript and her kind comments. Our thanks are also due to Dr. D. J. G. Griffin of the Australian Museum for sending a paper of McNeill (1968).

Aliaporcellana, new genus

Type species: *Porcellana suluensis* Dana, 1852

Carapace generally small, as broad as long, or a little broader, or longer; dorsal surface strongly convex front to back and with or without hairs. Front trilobate; median lobe prominent, narrow or broad and deflexed downward, or horizontal; its lobe visible or not in dorsal view. Outer orbital angle produced into a spine. Hepatic margin with spines or spinules, or rarely absent. Epibranchial spine present, acute, or rarely absent. Lateral margin of carapace behind cervical groove usually armed with spines, or rarely unarmed. Eyes small, retractile.

Basal segment of antennule large and armed with teeth or spines on its anterior margin.

First segment of antenna strongly produced forward, forming a partial suborbital margin and partly visible in dorsal view, and broadly in contact with anterior margin of carapace; movable segments far removed from orbit.

Chelipeds usually unequal, or subequal in size; arm with a well-developed lobe on inner margin and its lobe armed with at least spinules or spines; wrist usually armed with at least distinct spines or teeth on inner margin, or rarely unarmed.

Propodus of walking leg with spinules on posterior margin; dactylus with two or more well-developed fixed claws and with or without movable spinules on posterior margin.

Telson of abdomen seven-plated.

Remarks: This new genus should be separated from the genus *Polyonyx* by the following characters: (1) the carapace is armed with spines on its lateral margin, (2) a meral (arm-) lobe of the cheliped is armed with at least spines or spinules, (3) the basal segment of the antennule is armed with spines or teeth on its anterior margin, (4) one or both of the movable segments of the antenna are at least provided with spine or spinule, (5) the wrist is at least armed with distinct spines or teeth on its inner margin. And it is also distinguished from the genera *Porcellana* and *Pisidia* by a character bearing two or more subequal fixed claws on the dactylus of the walking leg.

A reason which the above-mentioned *suluensis* group was included in the genus *Polyonyx* appears to be based on the two strong subequal fixed claws occurring in the dactylus of the walking leg, as mentioned by Nobili (1906, p. 73), that is, he stated that the dactylus of the walking leg has a typical shape of the genus *Polyonyx* in his six specimens of *Polyonyx pugilator* from the Red Sea. It seems to us that Paulson (1961) reported *Polyonyx denticulatus*, which is not closely related to *Polyonyx*

in the other characters, on the basis of the fact which Stimpson (1858, p. 67) stated "the dactylus of the walking leg is provided with two or more unguicles." It appears to be questionable that these species are included in *Polyonyx* in the two fixed claws of the dactylus of the walking leg alone, though its two fixed claws are a character of the genus *Polyonyx*.

The genus name is derived from the Latin *alius* (other, another) and *Porcellana*.

Aliaporcellana suluensis (Dana, 1852), new comb.

(Text-fig. 1)

- Porcellana suluensis* Dana 1852, p. 414—Sulu Sea (Type locality); 1855, pl. 26, fig. 4.
Polyonyx hexagonalis Zehntner 1894, p. 187, pl. 8, figs. 18, 18a—Amboina.
Polyonyx denticulatus: Nobili 1906, p. 138—Red Sea.
Polyonyx denticulatus: Riddell 1911, p. 263—Sudanese Red Sea.
Polyonyx denticulatus: Balss 1915, p. 8—Suez.
Porcellana suluensis: Rathbun 1924, p. 30, pl. 1, figs. 15-16—Cape Jaubert, W. Australia.
Polyonyx denticulatus: Laurie 1926, p. 151—Seychelles; Saya de Malha; Cargados Carajos.
Porcellana suluensis: Gordon 1935, p. 9, text-fig. 4—Eiland Enoe.
Polyonyx hexagonalis: Shen 1936, p. 276.
Polyonyx denticulatus: Shen 1936, p. 277.
Porcellana suluensis: Miyake 1942, p. 354, text-figs. 15-16—Ngadarák Reef, Palau Is.; 1943, p. 128, text-fig. 49a-b—no new locality.
Polyonyx denticulatus: Johnson 1958, p. 100, text-fig. 1—off Singapore.
Polyonyx denticulatus Paulson 1961, p. 95, pl. 11, fig. 6—Red Sea.
Polyonyx suluensis: Haig 1964, p. 373, text-fig. 3—Kyushu (Japan), Formosa Strait, Hong Kong, Philippine Is., Gulf of Siam, Singapore, Sunda Strait, Java Sea, Celebes, Amboina and Amboina Bay, Banda, Kei Is.; 1965, p. 112—W. Australia; 1966a, pp. 46, 47—no new locality.
Polyonyx suluensis: McNeill 1968, p. 37—Great Barrier Reef.

Description: The carapace is as broad as long; the dorsal surface is nearly smooth and covered with scattered long hairs. The front is very broad and trilobate; a median lobe is so much deflexed downward that it can not be seen from above, and is prominent and acute; its lateral lobe forms the inner orbital angle; the anterior margin of the front is minutely serrulated. The lateral margin of the carapace is armed with two spinules behind the outer orbital angle and armed with a small epibranchial spine; the mid-branchial margin is armed with four spines. The side wall of the carapace is as figured.

The basal segment of the antennule is a little broader than long; its anterior margin is armed with two lobe-like teeth and a few additional spinules, and the upper surface is covered with a few granulated ridges running transversely; the ventral surface is nearly smooth, but it is covered with a few faint transverse striae. The first segment of the antenna is strongly produced forward and forms a

suborbital margin; the other segments are cylindrical and smooth, but the second and the third segments are armed with a single spine at the anterodistal end, respectively.

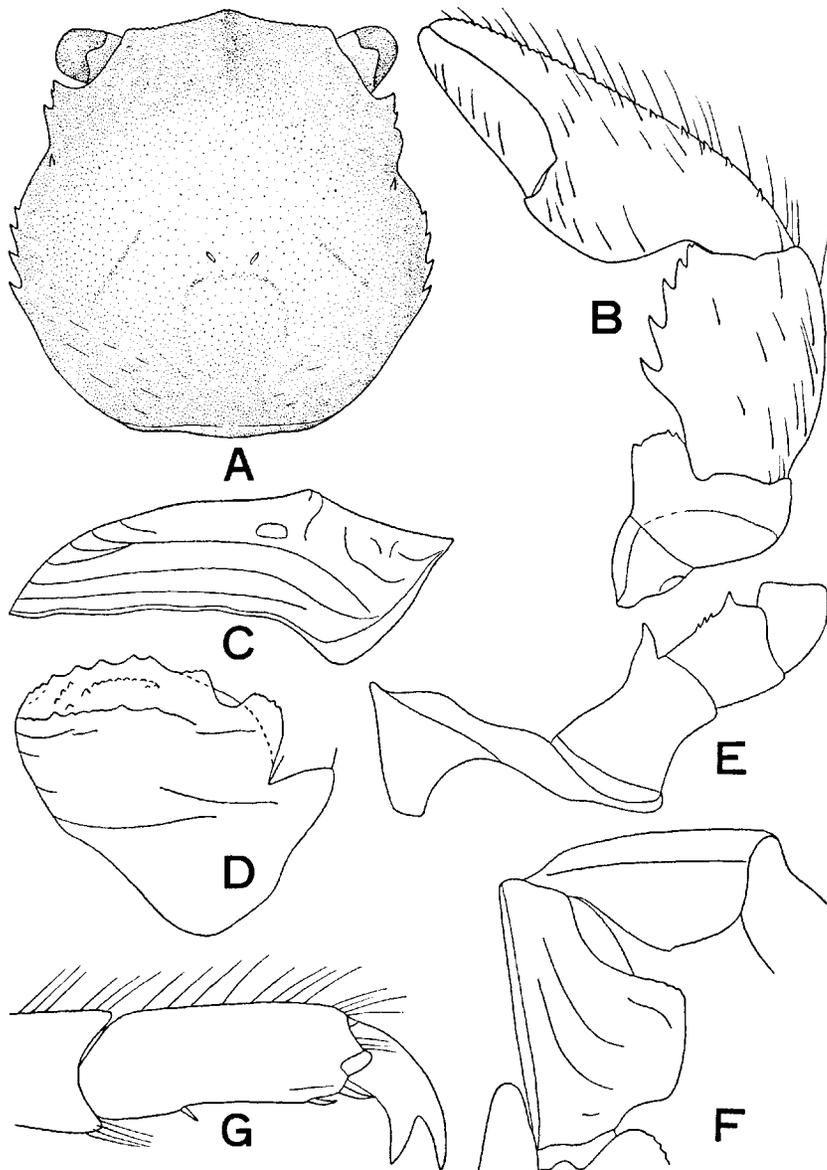


Fig. 1. *Aliaporcellana suluensis* (Dana). A, Carapace of female, $\times 20$. B, cheliped, $\times 20$. C, side wall of carapace, $\times 29$. D, basal segment of antennule, $\times 58$. E, antenna, $\times 58$. F, third maxilliped, $\times 58$. G, first walking leg, $\times 40$.

The merus of the third maxilliped is provided with a longitudinal and a few transverse striae on the ventral surface and its carpus has a longitudinal stria along near the outer margin.

The chelipeds are unequal in size and sparsely covered with long hairs. The arm has a prominent lobe on the inner margin and its lobe is armed with a few spinules. In the major cheliped, the wrist is armed with three strong spines on the inner margin and unarmed on the outer margin; the outer margin of the chela is produced into a row of fine spinules and covered with long hairs and there is a row of crests bearing long hairs from the proximal part of the palm to its distal one-third, along near the outer margin; the dorsal surface is devoid of hairs; the immovable finger has a conical protuberance on the midway of its cutting edge. In the minor cheliped, the wrist is armed with four strong spines on the inner margin and unarmed on the outer margin; the outer margin of the chela is armed with five or six small spines on its proximal half and its distal half is armed with a row of fine spinules, and the outer margin and the dorsal surface are covered with scattered long hairs.

The walking legs are sparsely hairy; the merus and the carpus are unarmed; the propodus is armed with four spinules on the posterior margin including a pair of spinules at its distal end; the dactylus deeply clefts into two large, subequal fixed claws, and is unarmed on the posterior margin.

Colour: In the specimen preserved in 70 per cent alcohol, the whole body of the animal is colourless.

Material examined:

Ngadarák Reef, Palau Islands: 1 ♀, carapace-length (cl.) 3.0 mm, carapace-breadth (cb.) 3.0 mm, ZLKU No. 13479, May 21, 1939, S. Miyake leg. Taken from *Acropora* sp. on the reef flat.

Remarks: This species has hitherto been referred to either *Porcellana* or *Polyonyx*, for the species has mixed characters of those genera. In order to avoid such a confusion, the *suluensis* group should be referred to the new genus *Aliaporcellana* separately from *Polyonyx* and *Porcellana*. Haig (1964, p. 375) showed that *P. denticulatus* Paulson is identical with *A. suluensis* (Dana) and she for the first time reported this species from Kyushu, Japan (32°42'54'' N, 129°44'20'' E), where appears to be corresponding to the Nagasaki Peninsula. The present species has been reported from various localities, as gave under each species name.

Aliaporcellana quadrilobata (Miers, 1884), new comb.

(Text-figs. 2-3)

Porcellana quadrilobata Miers 1884, p. 276, pl. 30, figs. D, d—Port Denison (Type locality).*Porcellana* (*Porcellana*) *quadrilobata*: De Man 1888, p. 418—Noordwachter, Java.*Porcellana gaekwari* Southwell 1909, p. 112, pl., figs. 1-3—Challai paar, Gulf of Mannar.*Porcellana nitida*: Miyake 1942, p. 359, text-figs. 20-22—Palau Is.; 1943, p. 129, text-fig. 50—no new locality (Not *Aliaporcellana nitida* (Haswell)).*Porcellana quadrilobata*: Haig 1966a, p. 44—Madagascar; 1966b, p. 59—Iranian Gulf and Gulf of Oman.*Porcellanella gaekwari*: Gravely 1927, p. 141—no new locality.*Porcellanella quadrilobata*: Barnard 1950, p. 819—off Inhambane, Portuguese East Africa.

Colour: In the specimens preserved in 70 per cent alcohol, the whole body of the animal is colourless and no markings are visible.

Material examined:

China Sea (27°30'5'' N, 122°28'5'' E—27°26'2'' N, 122°36'1'' E): 1 ovig, ♀, cl. 4.6 mm, cb. 3.5 mm, ZLKU No. 8512, Feb. 23, 1961, H. Yamashita leg. 90-98 meters, sandy bottom.

China Sea (27°30'5'' N, 127°30'0'' E): 3 ♂♂, cl. 3.6-6.7 mm, cb. 2.9-5.3 mm, 1 ovig. ♀, cl. 5.9 mm, cb. 4.7 mm, ZLKU No. 10299, 1955, T. Tsujita leg.

Gulf of Tong King: 8 ♂♂, cl. 2.4-4.3 mm, cb. 2.0-3.9 mm, 5 ovig. ♀♀, cl. 2.1-4.6 mm, cb. 1.7-3.8 mm, ZLKU No. 13540, July 5, 1952, R. Ishiyama leg.

Babldaõb I., Palau Islands: 1 ♂, cl. 5.0 mm, cb. 4.5 mm, ZLKU No. 13263, July 14, 1939, H. Ohshima and S. Miyake leg. Taken from a soft coral dredged in depth of 28 meters.

Arafura Sea: 1 ovig. ♀, cl. 3.6 mm, cb. 3.0 mm, 2 damaged specimens, sex unknown, ZLKU No. 4647, 1953, Attached to *Callispongia* sp.

Remarks: The specimens which we have examined agree very well with the species *Aliaporcellana quadrilobata* (Miers) described by Miers, but differs from it in a few points and it seems that this species considerably varies in the armature of the wrist and its length-breadth ratio.

As Southwell (1909) stated, the wrist of the species is either armed with spines or teeth on its inner margin or unarmed, entire and varies in its length-breadth ratio; the wrist expanded is distally and forms a lobe-like margin. The spinules on the anterior margin of the front varies in the number and size, and the mid-branchial margin is armed with one to three spines. The side wall of the carapace is armed with one to three spinules on its anterior upper margin and the propodus of the walking leg is usually armed with three (very rarely four) spinules on the posterior margin including a pair of spinules at its distal end. In a single specimen

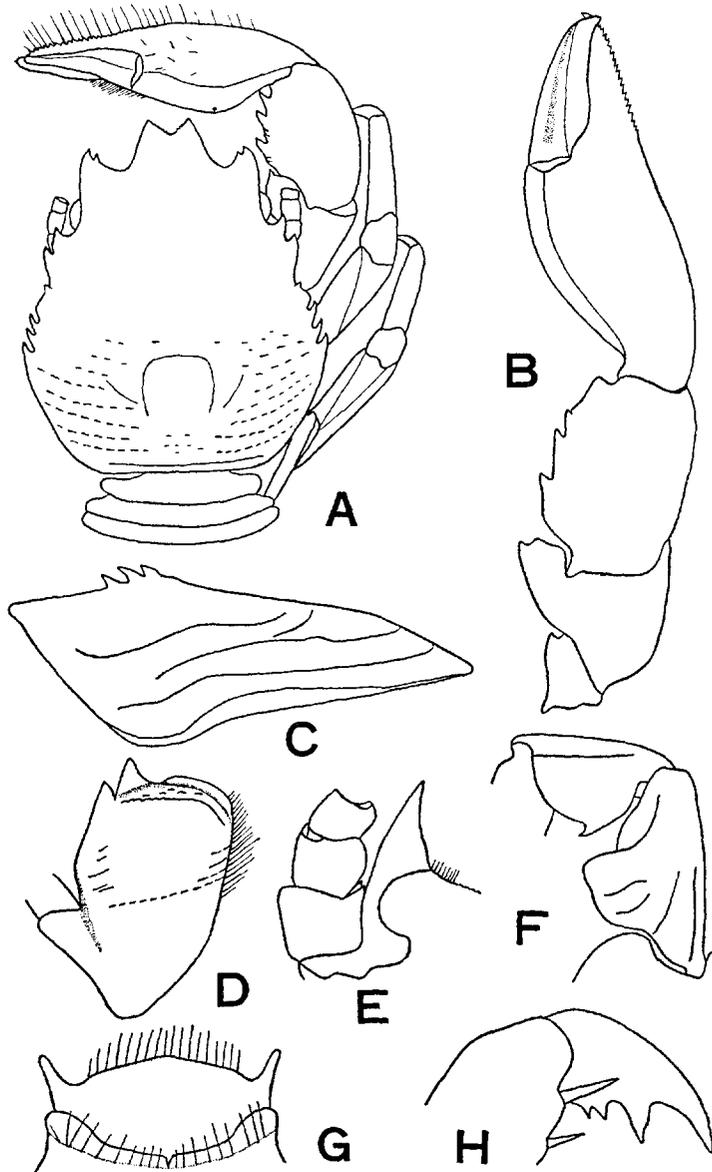


Fig. 2. *Aliaporcellana quadrilobata* (Miers). A, Carapace of ovigerous female, $\times 11$. B, right cheliped of another specimen, $\times 11$. C, side wall of carapace, $\times 23$. D, basal segment of antennule, $\times 34$. E, antenna, $\times 34$. F, third maxilliped, $\times 23$. G, sternum attaching third maxilliped, $\times 34$. H, dactylus of first walking leg, $\times 23$.

from the China Sea the palm is armed with four spines or spinules on its outer margin.

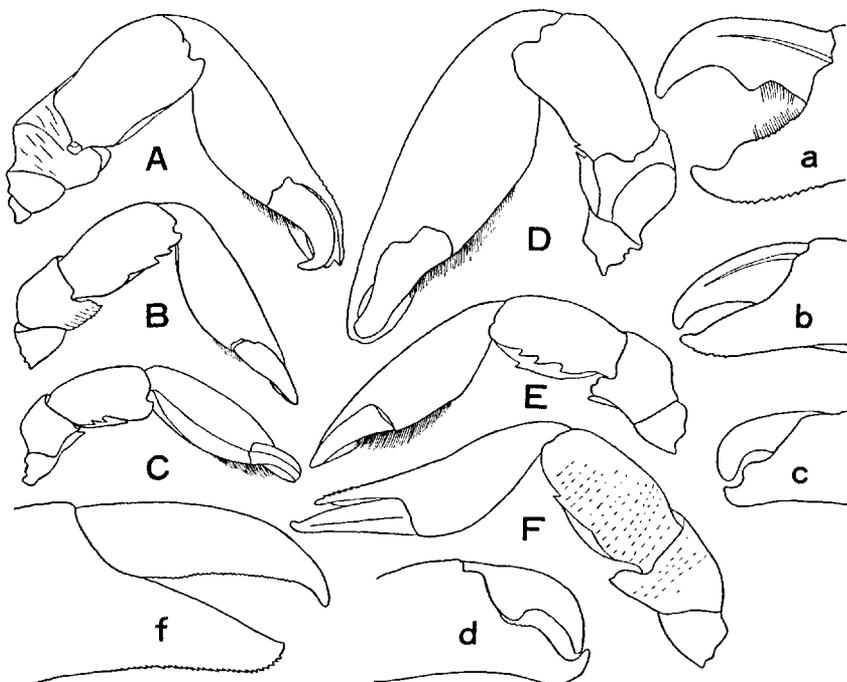


Fig. 3. *Aliaporcellana quadrilobata* (Miers). A F, Variation of cheliped: A D, $\times 8$, E F, $\times 11$. a-f, cutting edges of each cheliped (cutting edge of E is the same type with c): a b, $\times 11$, c, $\times 16$, d, $\times 8$, f, $\times 11$.

Miyake (1942, p. 360, text-fig. 20) was in error in figuring a single specimen which reported under the name of *Porcellana nitida* Haswell from the Palau Islands, that is, in this specimen the hepatic margin is actually armed with a single spine and the left mid-branchial margin lacks a spine. The immovable finger of the specimen is bifurcate at its tip and some specimens from the Gulf of Tong King also show such a bifurcate tip. It seems that Miyake's *P. nitida* belongs to *Aliaporcellana quadrilobata* (Miers), but it needs to examine a number of material.

As pointed out by Dr. J. Haig (in her kind personal communication), the specimens illustrated by Sankarankutty (1963, p. 278, text-fig. 3) as *Pisidia spinulifrons* (Miers) from the Gulf of Mannar are not *Pisidia*, but they belongs to the new genus, and his specimens are very closely related to *A. quadrilobata* (Miers). However, there is much in need of the revision on the synonymy and difference among *Pisidia spinulifrons* (Miers), *Porcellana* (*Porcellana*) *streptochira* De Man and *Aliaporcellana*

quadrilobata (Miers), and it seems that if *P. (P.) streptochira*, which is very closely related to *A. quadrilobata*, is not identical with *A. quadrilobata*, belongs to the new genus.

As mentioned above, this species suggests a transition towards the genus *Porcellanella*, to which it is somewhat related in the shape of the dactylus of its walking leg, but *Aliaporcellana* should be definitely distinguished from *Porcellanella*.

Aliaporcellana kikuchii sp. nov.

(Text-fig. 4)

Diagnosis: Carapace nearly as broad as long. Dorsal surface with small transverse protuberances, from which are arising a few short and long setae. Front broad, a little deflexed, and produced beyond eyes; median lobe rather narrow, a little deflexed downward, concave above, and its tip minutely serrulated; inner orbital lobes narrow, acute; with several spinules on anterior margin between median and inner orbital lobes. Outer orbital angle produced into an acute spine and hepatic margin with an acute spine. Epibranchial spine present, acute. Lateral margin of carapace with three spines and a few spinules. Inner margin of arm of left cheliped produced into a lobe which is armed with three spines and a few spinules; wrist with four, rather narrow long spines on inner margin and outer margin with seven spines including distal one; palm with two spines on its inner distal part; proximal half of outer margin of chela unarmed and with a row of a few spines just to inside of its outer margin, and distal half minutely spinulated; movable finger with a row of spines on inner margin. First walking leg with two small spinules at anterodistal end of carpus, and second and third legs unarmed; propodus with four spinules on posterior margin including a pair of spinules at distal end; dactylus deeply cleft into two strong fixed claws and no movable spinules on posterior margin.

Description of holotype: The carapace is nearly as broad as long; the dorsal surface is covered with small transverse protuberances, from which are arising a few short and long setae. The front is broad, a little deflexed, and produced beyond eyes; a median lobe is rather narrow, a little deflexed downward, the surface is concave above, and its tip is minutely serrulated; the inner orbital lobes are narrow and acute, and has several spinules on the anterior margin between the median and the inner orbital lobes. The outer orbital angle is produced into an acute spine and the hepatic margin is armed with an acute spine. The epibranchial spine is present and acute. The lateral margin of the carapace is armed with three spines

and a few spinules. The side wall of the carapace is as figured.

The basal segment of the antennule is armed with three strong teeth on its anterior margin and covered with a few short plumose and non-plumose hairs; the ventral surface has a long transverse stria which is covered with short and long, plumose and non-plumose hairs. The first segment of the antenna is strongly produced forward and is broadly in contact with the anterior margin of the carapace; its outer margin is armed with three strong spines which can partially be seen in dorsal view and the inner concave part forms a suborbital margin; the second and the third segments are respectively armed with a spine at its anterodistal end and the fourth segment is cylindrical and smooth.

The meral lobe of the third maxilliped is produced into an acute tip inward and its merus is covered with a few longitudinal and transverse striae; the carpus has a longitudinal stria along its outer margin.

The cheliped is covered with short and long setae. The right cheliped is missing. The arm of the left cheliped is produced into a lobe on the inner margin which is armed with three spines and a few spinules; its arm is armed with two spinules on the distal margin and provided with a spinule on the dorsal surface near the outer margin. The wrist is armed with four, rather narrow long spines and a small spinule on its inner margin; the outer margin is armed with seven spines including the distal spine; the distal margin is provided with two spinules on the outer half and the dorsal surface has a spinule on the middle proximal one-third. The palm has two spines on its inner distal part. The proximal half of the outer margin of the chela is unarmed and armed with a row of a few spines just to the inside of its outer margin, and the other distal half is minutely spinulated; the movable finger is armed with a row of spines on its inner margin; both the fingers are crossed one another at their tips, no gap between them, and their cutting edges are minutely spinulated. The dorsal surface and the outer margin of the chela are covered with short and long setae.

The merus of the walking legs is unarmed on the anterior margin, which is provided with a few crests and covered with long setae; the carpus of the first leg is provided with two small spinules at its anterodistal end, but the second and the third legs are lacking their spinules; the propodus is armed with four spinules on the posterior margin including a pair of spinules at its distal end; the dactylus is deeply cleft into two strong fixed claws and is lacking movable spinules on the posterior margin.

The telson of the abdomen is seven-plated.

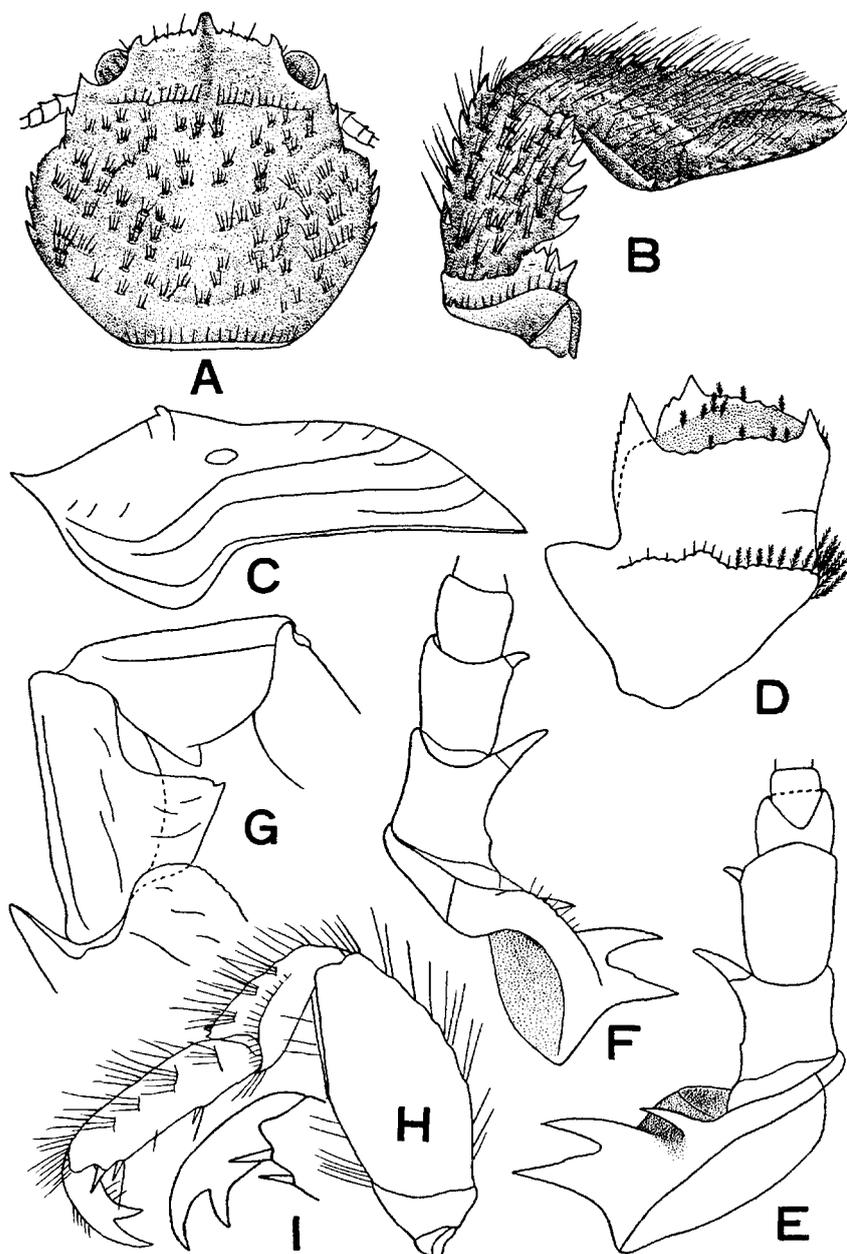


Fig. 4. *Aliaporcellana kikuchii* sp. nov. A, Carapace of female, $\times 14$. B, cheliped, $\times 14$. C, side wall of carapace, $\times 30$. D, basal segment of antennule, $\times 60$. E, antenna, ventral view, $\times 60$. F, antenna, dorsal view, $\times 60$. G, third maxilliped, $\times 40$. H, first walking leg, $\times 20$. I, dactylus of the same leg, $\times 30$.

Colour: In the specimen preserved in 70 per cent alcohol, the whole body of the animal is colourless.

Material examined:

Ushibuka, Amakusa, west Kyushu: 1 ♀ (holotype), cl. 3.0 mm, cb. 3.1 mm, ZLKU No. 15558, Sept. 28, 1967, T. Kikuchi leg. Taken from reef-building coral.

Remarks: This species is somewhat related to the species *Aliaporcellana pygmaea* (De Man), but it is easily distinguished from the latter by the following characters: (1) the shape of the front, (2) the presence of the spines on the outer margin of the wrist, (3) the absence of a movable spinule on the posterior margin of the dactylus of the walking leg.

Though the present specimen is missing the right cheliped, it is also distinguished from *A. pugilator* (Nobili) by the following characters: (1) the shape of the front, (2) in *pugilator* the hepatic margin is armed with three small spines, (3) in the minor cheliped of *pugilator* the wrist has three or four longitudinal rows of spinulated granules on the dorsal surface, (4) in the minor cheliped of *pugilator* the palm is armed with four or five spines on its inner margin and is provided with four or five rows of spines on the dorsal surface, (5) in *pugilator* the dactylus of the walking leg has a movable spinule on its posterior margin.

This specimen was taken from the reef-building coral dredged at Ushibuka, Amakusa, west Kyushu.

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