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New records of six combtooth blennies in the genera *Blenniella*, *Cirripectes*, *Istiblennius*, and *Salarias* (Perciformes: Blenniidae) from Taiping Island, South China Sea

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Abstract

The family Blenniidae comprises 59 genera and 413 valid species worldwide, of which 25 genera and 69 species are recorded from Taiwan. Previous work documented 11 species of blennies from Taiping Island, Nansha Islands, South China Sea but subsequent ichthyofaunal surveys conducted in May–June 2024–2025 using clove oil and hand nets in intertidal tidepools, shallow rocky reefs, and seagrass habitats yielded additional, previously unrecorded taxa. Here we report *Blenniella chrysospilos*, *B. periophthalmus*, *Cirripectes variolosus*, *Istiblennius dussumieri*, *I. lineatus*, and *Salarias fasciatus* from Taiping Island, based on detailed morphometric and meristic data supported by X-ray examinations. Diagnostic characters, live coloration, and habitat information are provided for each species, thereby refining the blenniid fauna of Taiping Island and expanding knowledge of blenny diversity in southern Taiwanese waters.

Key words: Blenniidae, new record, Taiwan, Taiping Island, South China Sea

Introduction

The family Blenniidae comprises approximately 59 genera and 413 valid species worldwide (Fricke *et al.*, 2024). In Taiwan, a total of 25 genera and 69 species have been recorded (Shao *et al.*, 2025). Members of this family inhabit a wide range of environments, from intertidal tidepools to subtidal rocky crevices.

Previously, Shao (2014) and Shao & Lin (2014) reported 11 species in 5 genera of blenniids from Taiping Island, Nansha Islands, including *Ecsenius bathi*, *E. bicolor*, *E. melarchus*, *E. stictus*, *E. yaeyamaensis*, *Istiblennius edentulus*, *Meiacanthus atrodorsalis*, *Omobranchus germaini*, *Plagiotremus laudandus*, *P. rhinorhynchos*, and *P. tapeinosoma*. These records represent some of the southernmost occurrences of blenniid fishes in Taiwanese waters.

During ichthyofaunal surveys conducted around Taiping Island from May to June 2024–2025, additional blenniid species not reported by Shao (2014) or Shao & Lin (2014) were collected from intertidal and subtidal zones. The morphological characteristics of these newly recorded specimens are described below.

Materials and Methods

During May-June 2024-2025, specimens were collected using clove oil combined with a hand net on Taiping Island. Captured fishes were temporarily stored in a mixture of ambient seawater and ice, and immediately

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transported to the laboratory for photographic documentation of fresh coloration. Specimens were then fixed in 8% formalin, and after five days, sequentially transferred to distilled water, 30% ethanol, 50% ethanol, and finally 75% ethanol for long-term preservation. All specimens were catalogued under the prefix NTOUP (National Taiwan Ocean University–Pisces) and are deposited in the Institute of Marine Biology, National Taiwan Ocean University (NTOU), Keelung, Taiwan.

X-rays of the specimens were taken at the Core Facility, Department of Bioscience and Biotechnology, National Taiwan Ocean University (NTOU). Fin-ray counts followed Smith-Vaniz & Springer (1971) and Williams (1988). Measurements mainly followed Kishimoto *et al.* (2017); lengths of pectoral and pelvic fins followed Hubbs & Lagler (2004); postorbital to mid-nuchal distance, supraorbital cirri length, dorsal nuchal separation, and lower nuchal to opercle distance followed Hoban & Williams (2020). All measurements were taken to the nearest 0.1 mm using calipers. All fish images of new recorded blenny species are shown in Figures 1–2.

Taxonomy

Blenniella chrysospilos (Bleeker, 1857)

(紅點真蛙鳚) (Fig. 1a & Fig. 2a)

Salarias chrysospilos Bleeker, 1857: 66 (Ambon Island, Molucca Islands, Indonesia).

Salarias aureopuncticeps Fowler, 1946: 179.

Salarias belemnites De Vis, 1884b: 695.

Salarias bryani Jordan & Seale, 1906: 430.

Salarias coronatus Günther, 1872: 424.

Alticus evermanni Jordan & Seale, 1906: 422.

Istiblennius chrysospilos insulinus Smith, 1959: 243.

Salarias unimaculatus Aoyagi, 1954: 215.

Blenniella chrysospilos Springer & Williams, 1994: 78; Nakabo 2000: 1102; Nakabo 2002: 1102.

Material examined. NTOUP-2025-0529-14, 45.9 mm SL, northeast side of Taiping Island, Cijin District, Kaohsiung City, Taiwan (10°22'50.4"N, 114°22'2.58"E), 0–0.5 m depth, 29 May 2025, clove oil combined with hand net, coll. by, Yan-Cheng Yang & Wei-Hong Xu.

Description. Dorsal-fin rays XIII, 19; anal-fin rays II, 19; pectoral-fin rays 14; pelvic-fin rays I, 4; segment caudal-fin rays 6 + 5 (branched 5 + 4); vertebrae 12 + 24; no nuchal cirri; supraorbital cirri 1 (both side distally divided into four branches); nasal cirri 3 (4 in left side); lateral line tubes 28 (both side).

Morphometrics are presented in Table 1. The body is elongate, slightly compressed posteriorly, and deepest at the base of the pectoral fin. The snout is slightly elevated, and the dorsal profile from the anterior margin of the eye to the snout is nearly vertical, then gently rising toward the nape before gradually descending to the caudal peduncle. The ventral profile is slightly convex from the lower jaw tip to the origin of the pelvic fin, then nearly straight and parallel to the body axis toward the anus, followed by a slight rise along the anal-fin base and becoming nearly straight again prior to the caudal peduncle. The anus is located slightly anterior to the mid-body.

The head is rounded and widest at the mid-cheek region. The eye is moderately sized and positioned anterodorsally. The nuchal cirri occur in two separated clusters, divided at the mid-nape. The cephalic sensory pore system is complex.

The posterior portion of the dorsal-fin rays is separated from the fin base, and the posteriormost fin membrane does not attach to the caudal peduncle. The anal-fin base extends from directly below the 13th dorsal-fin spine to a point directly below the posterior end of the dorsal-fin base; the posteriormost anal-fin ray is split from the base. The caudal fin is arcuate. The pectoral-fin origin is located below the first dorsal-fin spine, and the ventralmost pectoral-fin base aligns below the second dorsal-fin spine; the longest ray extends anterior to the anus, and the posterior margin is rounded. The pelvic-fin origin lies anterior to the vertical line passing through the nuchal cirri, and the fin length reaches to the base of the fourth dorsal-fin spine.

The body is overall pale yellow, with orange spots scattered across the anterior portion and near the second dorsal-fin base, and white spots predominating on the posterior half. The head bears three pairs of longitudinal orange and white bands, and the eye shows alternating orange and white striping. The first and second dorsal fins

(including membranes) are densely covered with orange spots, with their distal tips appearing white. The anal fin is semi-translucent white. The pectoral-fin base bears orange spots, with the remaining part semi-translucent white; the pelvic fin fades from white basally to semi-translucent distally. The caudal fin exhibits irregular semi-translucent orange-red and white coloration on both rays and membranes.

Habitat. The specimen was collected from a tidepool within a rocky intertidal zone at a depth of approximately 0.1–0.3 m.

Blenniella periophthalmus (Valenciennes, 1836)

(圍眼真蛙鳚) (Fig. 1b & Fig. 2b)

Salarias periophthalmus Valenciennes in Cuvier & Valenciennes, 1836: 311 (Tikopia Island, Solomon Islands).

Salarias biseriatus Valenciennes in Cuvier & Valenciennes, 1836: 316.

Salarias muscarus Snyder, 1908: 109.

Salarias paulus Bryan & Herre, 1903: 136.

Salarias schultzei Bleeker, 1859: 345.

Salarias visayanus Herre, 1934: 97.

Blenniella periophthalmus Springer & Williams, 1994: 65; Nakabo 2000: 1102; Nakabo 2002: 1102; Esmaeili et al. 2022: 10.

Material examined. NTOUP-2025-0611-07, 89.7 mm SL, northern side of Taiping Island, Cijin District, Kaohsiung City, Taiwan (10°22'45.92"N, 114°21'54.98"E), 0–0.5 m depth, 11 June 2025, clove oil combined with hand net, coll. by Yan-Cheng Yang & Wei-Hong Xu.

Description. Dorsal-fin rays XIII, 20; anal-fin rays II, 21; pectoral-fin rays 14; pelvic-fin rays I, 4; segment caudal-fin rays 6 + 5 (branched 5 + 4); vertebrae 10+27; no nuchal cirri; supraorbital cirri 1 (both side); nasal cirri 7 (both side); lateral line tubes 10 (both side).

Morphometric data are provided in Table 1. The body is elongate, slightly compressed posteriorly, and deepest at the pectoral-fin base. The dorsal profile from the anterior margin of the eye to the snout is nearly vertical, then gently rises toward the first dorsal-fin origin before gradually descending and slightly arching again posteriorly toward the caudal peduncle. The ventral profile is weakly convex from the tip of the lower jaw to the abdominal region, then nearly straight and parallel to the body axis toward the anus, slightly rising along the anal-fin base, and becoming nearly straight again anterior to the caudal peduncle. The anus is located slightly anterior to mid-body.

The head is bluntly rounded and widest at the mid-cheek region. The eye is moderately sized and situated anterodorsally. The nuchal cirri occur in two separated clusters at the middle of the nape. The cephalic sensory pore system is complex.

The posterior dorsal-fin rays are separated from the fin base, and the posteriormost fin membrane does not attach to the caudal peduncle. The anal-fin base extends from directly below the 12th dorsal-fin spine to a point below the posteriormost part of the dorsal-fin base, and the posteriormost anal-fin ray is split from its base. The caudal fin is arcuate. The pectoral-fin origin lies below the first dorsal-fin spine, and the ventralmost pectoral-fin base aligns below the second dorsal-fin spine; the longest ray reaches the abdominal region anterior to the anus, and the posterior margin is rounded. The pelvic-fin origin is positioned anterior to the vertical level of the nuchal cirri, and the fin reaches to a point below the third dorsal-fin spine base.

The body exhibits alternating dark-brown and light-brown coloration. Three elongated white spots are present near the dorsal-fin base, and five occur near the anal-fin base. The head, particularly around the eyes, has alternating orange and white stripes, while the ventral snout region bears orange spots; the eyes display alternating orange-red and white stripes. The first and second dorsal fins contain sparse orange spots, with red-tipped distal margins. The anal fin gradually transitions from white basally to semi-translucent distally. The pectoral-fin base bears orange spots, while the remaining portion is semi-translucent white. The pelvic fin is white. The caudal-fin rays are gray, with the lower portion of the fin membrane orange-yellow and the remaining area transparent.

Habitat. The specimen was collected from a tidepool within a rocky intertidal zone, at a depth of approximately 0.2–0.3 m.

Cirripectes variolosus (Valenciennes, 1836)

(暗褐頸鬚鳚)

(Fig. 1c & Fig. 2c)

Salarias variolosus Valenciennes in Cuvier & Valenciennes, 1836: 317 (Guam, Mariana Islands).

Salarias sebae Cuvier & Valenciennes, 1836: 323.

Ophioblennius clarki Reid, 1943: 380.

Salarias nigripes Seale, 1901: 127.

Cirripectes variolosus Masuda et al. 1984: 299; Williams 1988: 70; Suzuki et al. 1999: 4; Hoban & Williams 2020: 10.

Material examined. NTOUP-2025-0523-17, 42.9 mm SL, northern side of Taiping Island, Cijin District, Kaohsiung City, Taiwan (10°22'57.1"N, 114°22'4.7"E), 10–13m depth, 23 May 2025, clove oil combined with hand net, coll. by Yan-Cheng Yang & Wei-Hong Xu.

Description. Dorsal-fin rays XI, 14; anal-fin rays II, 14; pectoral-fin rays 16; pelvic-fin rays I, 4; segment caudal-fin rays 6 + 5 (branched 4 + 4); vertebrae 9+18; nuchal cirri 17 (both side); supraorbital cirri 5 (both side); nasal cirri 4 (5 in right side); lateral line tubes 16 (both side).

Morphometric data are presented in Table 1. The body is slightly elongate, moderately compressed posteriorly, and deepest at the base of the pectoral fin. The snout is slightly elevated, and except for a slight protrusion at the base of the nasal cirri, the dorsal profile from the anterior margin of the eye to the snout is nearly vertical. Posteriorly, the profile rises gently toward the nape, then gradually descends to the caudal peduncle. The ventral profile is slightly convex from the lower jaw tip to the pelvic-fin origin, becomes gently convex again at the abdominal region, and thereafter remains nearly straight and parallel to the body axis toward the anus, rising slightly along the anal-fin base and remaining nearly straight before reaching the caudal peduncle. The anus is located slightly anterior to mid-body.

The head is bluntly rounded and widest at the mid-cheek region. The eye is moderately sized and positioned anterodorsally on the head. The nuchal cirri are arranged in two separated clusters at the middle of the nape. A complex cephalic sensory pore system is present.

The posterior portion of the dorsal-fin rays is separated from the fin base, and the posteriormost membrane does not attach to the caudal peduncle. The anal-fin base extends from a point directly below the 10th dorsal-fin spine to the vertical below the posterior end of the dorsal-fin base, and the posteriormost anal-fin ray is split from its base. The caudal fin is arcuate. The pectoral-fin origin lies below the first to second dorsal-fin spines, with the ventralmost pectoral-fin base aligned below the second dorsal-fin spine; the longest ray reaches the level of the anus, and the posterior margin is rounded. The pelvic-fin origin is positioned anterior to the vertical line of the nuchal cirri and reaches to the base of the third dorsal-fin spine.

The general body coloration is dark brown, with irregular orange blotches near the head region. The head is light brown with several orange stripes, and the iris displays alternating orange-red and white stripes. The first dorsal fin (including the membrane) is orange at both the base and distal margin, with a single white longitudinal stripe medially. The second dorsal fin is light brown with a whitish semi-transparent membrane. The anal fin is grayish and semi-transparent. The pectoral fin (including the membrane) is grayish semi-transparent with a black distal tip. The pelvic fin is white, with the distal tip orange. The caudal fin is overall brown, becoming lighter distally, and the fin membrane is whitish and semi-transparent.

Habitat. The specimen was collected from a rocky intertidal tidepool at a depth of approximately 0.1–0.2 m.

Istiblennius dussumieri (Valenciennes, 1836)

(杜氏蛙鳚)

(Fig. 1d & Fig. 2d)

Salarias dussumieri Valenciennes in Cuvier & Valenciennes, 1836: 310 (Malabar region, India).

Salarias auridens Alleyne & Macleay, 1877: 338.

Salarias barbatus Gilchrist & Thompson, 1908: 108.

Salarias cheverti Macleay, 1881: 12.

Salarias cristiceps Alleyne & Macleay, 1877: 338.

Salarias doliatus Sauvage, 1880: 217.

Salarias forsteri Valenciennes in Cuvier & Valenciennes, 1836: 315.

Salarias geminatus Alleyne & Macleay, 1877: 336.

Salarias olivaceus Blyth, 1858: 271.

Salarias siamensis Smith, 1934: 320.

Salarias steindachneri Pfeffer, 1893: 143.

Scartichthys stigmatopterus Fowler, 1904: 553.

Salarias striatomaculatus Kner & Steindachner, 1867: 368.

Salarias truncatus Bleeker, 1860: 44.

Salarias zamboangae Evermann & Seale, 1906: 512.

Istiblennius dussumieri Springer 1986: 748; Shen et al. 1986: 40; Lee et al. 2000: 20.

Material examined. NTOUP-2025-0520-10, 83.4 mm SL, northern side of Taiping Island, Cijin District, Kaohsiung City, Taiwan (10°22'57.1"N, 114°22'4.7"E), 8–13m depth, 20 May 2025, clove oil combined with hand net, coll. by Yan-Cheng Yang & Wei-Hong Xu.

Description. Dorsal-fin rays XIII, 21; anal-fin rays II, 22; pectoral-fin rays 14; pelvic-fin rays I, 4; segment caudal-fin rays 6 + 5 (branched 5 + 4); vertebrae 11+25; no nuchal cirri; supraorbital cirri 1 (both side); no nasal cirri; lateral line tubes 19 (both side).

Morphometric data are presented in Table 1. The body is elongate, moderately compressed posteriorly, and deepest at the base of the pectoral fin. The dorsal profile from the anterior margin of the eye to the snout is gently rounded, then rises slightly toward the nape and the origin of the first dorsal fin, gradually descending toward the caudal peduncle, and slightly arching posteriorly. The ventral profile is slightly convex from the tip of the lower jaw to the pelvic-fin origin, and thereafter nearly straight and parallel to the body axis toward the anus, rising slightly along the anal-fin base and gently arching again before reaching the caudal peduncle. The anus is located slightly anterior to mid-body.

The head is bluntly rounded and widest across the mid-cheek region; the eye is moderately sized and positioned anterodorsally. The nuchal cirri are arranged in two separated clusters at the midpoint of the nape. A complex cephalic sensory pore system is present.

The posterior dorsal-fin rays are separated from the fin base, and the posteriormost membrane does not attach to the caudal peduncle. The anal-fin base extends from a point below the 12th dorsal-fin spine to a point below the posterior end of the dorsal-fin base, and the posteriormost anal-fin ray is split from its base. The caudal fin is arcuate. The pectoral-fin origin lies below the first dorsal-fin spine, and the ventralmost pectoral-fin base is positioned below the second dorsal-fin spine; the longest ray reaches the level of the second anal-fin spine, and the posterior fin margin is rounded. The pelvic-fin origin is anterior to the vertical level of the nuchal cirri, and the fin reaches to the level below the third dorsal-fin spine.

The general body coloration consists of alternating grayish white and light brown. The head bears several irregular black spots and streaks, and faint light brown stripes are present around the eyes, which appear whitish. The first and second dorsal fins display alternating grayish white and light brown bands. The anal fin is white with several black spots. The pectoral fin is semi-transparent white with several semi-transparent black spots. The pelvic fin is white. The caudal-fin rays are semi-transparent white, while the membrane is semi-transparent black with a single longitudinal white stripe medially.

Habitat. The specimen was collected from a rocky intertidal tidepool at a depth of approximately 0.2–0.3 m.

Istiblennius lineatus (Valenciennes, 1836)

(線紋蛙鳚)

(Fig 1e. & Fig. 2e)

Salarias lineatus Valenciennes in Cuvier & Valenciennes, 1836: 314 (Java, Indonesia).

Salarias hasseltii Bleeker, 1851: 257.

Salarias kingii Cuvier & Valenciennes, 1836: 334.

Salarias lividus Thiollière in Montrouzier, 1857: 463.

Salarias mccullochi Fowler & Bean, 1923: 25.

Salarias multilineatus Fowler, 1945: 68.

Istiblennius lineatus Dor, 1984: 231; Shen *et al.* 1986: 40; Nakabo 2000: 1101; Nakabo 2002: 1101; Mehraban & Esmaeili 2018: 198; Mehraban *et al.* 2021: 5.

Material examined. NTOUP-2025-0611-08, 89.5 mm SL, northern side of Taiping Island, Cijin District, Kaohsiung City, Taiwan (10°22'45.92"N, 114°21'54.98"E), 0–0.5 m depth, 11 June 2025, clove oil combined with hand net, coll. by Yan-Cheng Yang & Wei-Hong Xu.

Description. Dorsal-fin rays XII, 23; anal-fin rays II, 23; pectoral-fin rays 13; pelvic-fin rays I, 4; segment caudal-fin rays 6 + 5 (no branched); vertebrae 11+28; no nuchal cirri; supraorbital cirri 1 (single supraorbital cirrus present on each side, the right one extending into five branches); nasal cirri 5 (both side); lateral line tubes 14 (both side).

Morphometric data are presented in Table 1. The body is elongate, moderately compressed posteriorly, and deepest at the base of the pectoral fin. The dorsal profile from the anterior margin of the eye to the snout is slightly concave, then gently rising posteriorly toward the nape and the origin of the first dorsal fin, gradually descending toward the caudal peduncle, and slightly arching again near its posterior end. The ventral profile is slightly convex from the tip of the lower jaw to the origin of the pelvic fin, then slightly convex again at the abdominal region, and thereafter nearly straight and parallel to the body axis toward the anus, slightly rising along the anal-fin base, and nearly straight again before reaching the posterior part of the caudal peduncle. The anus is located slightly anterior to mid-body.

The head is bluntly rounded and widest at the mid-cheek region. The eye is moderately sized and positioned anterodorsally on the head. The nuchal cirri are arranged in two separated clusters at the midpoint of the nape. A complex cephalic sensory pore system is present.

The posterior dorsal-fin rays are separated from the fin base, and the posteriormost membrane is not attached to the caudal peduncle. The anal-fin base extends from a point directly below the 11th dorsal-fin spine to a point below the posterior end of the dorsal-fin base; the posteriormost anal-fin ray is split from its base. The caudal fin is arcuate. The pectoral-fin origin is located below the second dorsal-fin spine, and the ventralmost pectoral-fin base is positioned below the third dorsal-fin spine; the longest ray reaches a point anterior to the anus, and the posterior margin is rounded. The pelvic-fin origin is positioned anterior to the vertical level of the nuchal cirri, and the fin reaches to a level below the base of the third dorsal-fin spine.

The general body coloration is dark gray, with several black longitudinal streaks extending from the posterior margin of the pectoral fin to the caudal peduncle. The head is grayish black. The iris is bicolored, with the upper half brownish red and the lower half grayish white. The first dorsal fin (including membrane) is gray; the second dorsal fin (including membrane) is also gray, but with black longitudinal streaks distally. The pectoral fin is grayish and semi-transparent. The pelvic fin is grayish white. The caudal fin is grayish red, with several black spots at its base.

Habitat. The specimen was collected from a rocky intertidal tidepool at a depth of approximately 0.1–0.4 m.

Salarias fasciatus (Bloch, 1786)

(細紋唇齒鳚) (Fig. 1f & Fig. 2f)

Blennius fasciatus Bloch, 1786: 110 (Pacific).

Salarias brasiliensis Sauvage, 1880: 217.

Salarias fourmanoiri Whitley, 1970: 245.

Salarias furvus De Vis, 1884b: 696.

Salarias griseus De Vis, 1884a: 450.

Salarias lineolatus Alleyne & Macleay, 1877: 336.

Salarias nitidus Fourmanoir, 1955: 207.

Salarias ornatus Hemprich & Ehrenberg, 1899: 9.

Blennius pardalis Castelnau, 1875: 26.

Salarias pauper De Vis, 1884b: 695.

Salarias priamensis Bleeker, 1853: 268.

Salarias punctillatus Klunzinger, 1879: 258.

Salarias quadripennis Cuvier, 1816: 251.

Salarias semilineatus Kner, 1867: 722.

Salarias sublineatus De Vis, 1884b: 695.

Salarias fasciatus Dor 1984: 232; Springer 1986:754; Shen et al. 1986: 40; Nakabo 2000: 1101; Nakabo 2002: 1101.

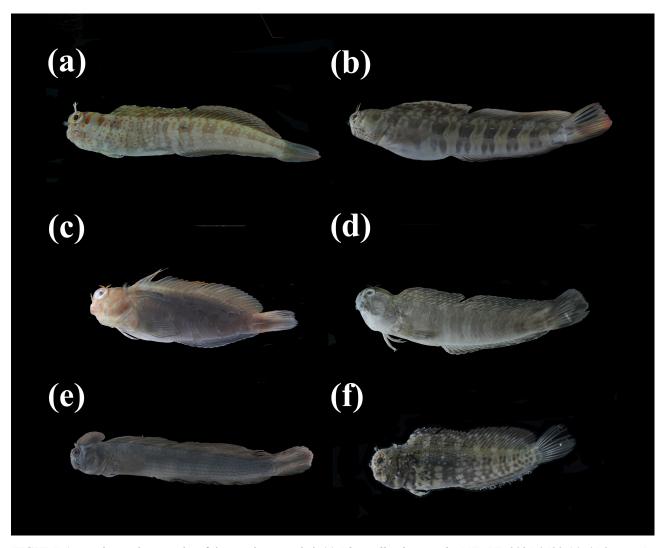


FIGURE 1. Specimen photographs of the species recorded, (a) *Blenniella chrysospilos* NTOUP-2025-0529-14, 45.9 mm SL, (b) *Blenniella periophthalmus* NTOUP-2025-0611-07, 89.9 mm SL, (c) *Cirripectes variolosus* NTOUP-2025-0523-17, 42.9 mm SL, (d) *Istiblennius dussumieri* NTOUP-2025-0520-10, 83.4 mm SL, (e) *Istiblennius lineatus* NTOUP-2025-0611-08, 89.5 mm SL, (f) *Salarias fasciatus* NTOUP-2025-0604-13, 28.9 mm SL.

Material examined. NTOUP-2025-0604-13, 28.9 mm SL, southeast side of Taiping Island, Cijin District, Kaohsiung City, Taiwan (10°22'36.17"N, 114°22'12.02"E), 0–0.5 m depth, 4 June 2025, clove oil combined with hand net, coll. by Yan-Cheng Yang & Wei-Hong Xu.

Description. Dorsal-fin rays XII, 20; anal-fin rays II, 20; pectoral-fin rays 14; pelvic-fin rays I, 4; segment caudal-fin rays 6 + 5 (no branched); vertebrae 13+22; no nuchal cirri; supraorbital cirri 3 (both side); nasal cirri 1 (both side); lateral line tubes 12 (both side).

Morphometric data are presented in Table 1. The body is slightly elongate, moderately compressed posteriorly, and deepest at the base of the pectoral fin. The dorsal profile from the anterior margin of the eye to the snout is gently rounded and nearly vertical in this region, then gradually slopes downward toward the caudal peduncle, with a slight posterior arch near the caudal peduncle. The ventral profile is slightly convex from the tip of the lower jaw to the origin of the pelvic fin, and thereafter remains nearly straight and parallel to the body axis toward the anus, slightly rising along the anal-fin base to the caudal peduncle. The anus is located slightly anterior to mid-body.

The head is bluntly rounded and widest across the mid-cheek region. The eye is moderately sized and positioned anterodorsally. The nuchal cirri are arranged in two separated clusters at the midpoint of the nape. A complex cephalic sensory pore system is present.

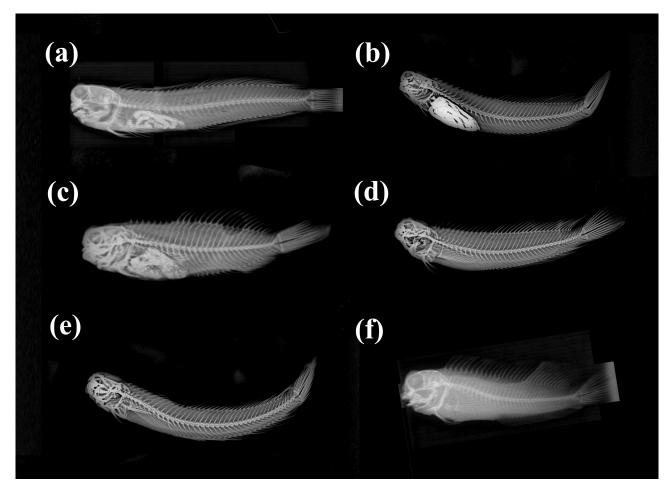


FIGURE 2. X-ray image of the specimens, (a) *Blenniella chrysospilos* NTOUP-2025-0529-14, (b) *Blenniella periophthalmus* NTOUP-2025-0611-07, (c) *Cirripectes variolosus* NTOUP-2025-0523-17, (d) *Istiblennius dussumieri* NTOUP-2025-0520-10, (e) *Istiblennius lineatus* NTOUP-2025-0611-08, (f) *Salarias fasciatus* NTOUP-2025-0604-13.

The posterior dorsal-fin rays are separated from the fin base, and the posteriormost fin membrane does not attach to the caudal peduncle. The anal-fin base extends from a point directly below the 12th dorsal-fin spine to a point below the posterior end of the dorsal-fin base, and the posteriormost anal-fin ray is split from its base. The caudal fin is arcuate. The pectoral-fin origin is located below a vertical line between the second and third dorsal-fin spines, and the ventralmost pectoral-fin base is positioned below the third dorsal-fin spine; the longest ray reaches to the level below the second dorsal-fin spine, and the posterior margin is rounded. The pelvic-fin origin is positioned anterior to the vertical level of the nuchal cirri, and the fin reaches to a level below the base of the fifth dorsal-fin spine.

The general body coloration consists of white and dark-brown spots of various sizes, with larger spots near the head and smaller ones toward the caudal peduncle. The head is covered with similarly variable white and dark-brown spots, and the anterior tip of the upper jaw is white. The iris displays alternating rings of reddish brown and white. The first and second dorsal fins (including membranes) possess dense white and dark-brown spots of various sizes. The anal fin (including membrane) is brown at the base and grayish-white distally. The pectoral-fin base has white and dark-brown spots, whereas the remainder of the fin rays and membrane are semi-transparent white. The pelvic fin is black and white. The caudal-fin rays are semi-transparent white, and the fin membrane is transparent.

Habitat. The specimen was collected from a sandy seagrass bed at a depth of approximately 0.1–0.3 m.

TABLE 1. Morphometrics of the six species of blennies from Taiping Island, South China Sea.

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	Blenniella chrysospilos NTOUP-2025-0529-14	Blenniella periophthalmus NTOUP-2025-0611-07	Cirripectes variolosus NTOUP-2025-0523-17	Istiblennius dussumieri NTOUP-2025-0520-10	Istiblennius lineatus NTOUP-2025-0611-08	Salarias fasciatus NTOUP-2025-0604-13
Standard length (SL)	45.9	7.68	42.9	83.4	89.5	28.9
Percent in standard length (%)						
Head length	21.6	19.5	27.5	23.9	20.7	27.0
Predorsal length	19.8	16.0	22.8	20.4	19.5	26.3
Snout to 2nd dorsal origin	51.9	48.7	53.9	47.1	39.6	52.6
Snout to anus	47.5	46.2	49.9	46.1	43.5	49.1
Snout to anal fin origin	48.8	48.3	55.5	50.3	45.9	50.9
Prepelvic length	24.2	20.3	30.8	26.4	23.1	28.4
Caudal peduncle length	10.7	10.3	6.1	9.1	10.9	4.8
Caudal peduncle depth	8.9	11.1	8.6	6.6	9.3	10.4
1st dorsal fin base	30.7	31.2	32.6	26.5	28.2	32.5
2nd dorsal fin base	41.2	42.2	34.7	43.3	47.6	42.9
Anal fin base	39.2	47.0	35.2	47.3	53.7	41.2
Caudal fin length	18.3	22.7	25.4	23.8	20.4	25.3
Pectoral fin length	18.7	18.9	27.0	20.1	14.5	27.0
Pelvic fin length	14.4	11.5	19.6	12.4	9.2	19.0
Body depth at pelvic fin base	17.9	17.6	28.0	20.1	16.4	26.0
Body depth at anal fin base	18.1	19.2	28.9	20.4	15.2	19.7
Body width at anal fin base	11.1	12.5	12.8	10.3	8.6	10.4
Percent in head length (%)						
Head width in maximum	65.7	75.3	75.4	76.0	70.3	61.5
Head width at upper gill opening	59.6	75.3	70.3	68.2	65.0	56.4
Eye diameter	34.3	37.8	40.7	31.2	31.9	41.0
Bony interorbital width	8.1	17.9	5.9	9.3	9.4	7.7
Fleshy interorbital width	48.5	45.7	50.0	44.0	41.2	47.4
Snout length	38.4	36.7	36.4	33.8	37.7	26.9
Lower jaw length	37.4	28.4	39.8	26.0	30.1	25.6
Cheek depth	53.5	40.5	53.4	48.7	52.8	50.0
Postorbital length	72.7	80.7	64.4	67.3	72.4	61.5

Discussion

The identification of the six blenniid species recorded in this study was based primarily on the diagnostic criteria provided by Springer (2001), Hubbs & Lagler (2004), and Habib *et al.* (2019). The diagnostic features used included the morphology of the supraorbital cirri, presence or absence of nuchal cirri, body coloration and patterning, as well as the coloration and morphology of the dorsal fin.

All six blenniid species recorded in the present study have been previously documented from the main island of Taiwan; however, this is the first record of their occurrence from Taiping Island. These six species are typically found in tropical and subtropical intertidal habitats. *Blenniella chrysospilos* is widely distributed from Japan southward to Australia and eastward throughout the Indo-Pacific region. *Blenniella periophthalmus* extends from Japan westward across the Indo-Pacific. *Cirripectes variolosus* has a relatively restricted distribution, occurring only within the Pacific Ocean. *Istiblennius dussumieri* is widely distributed from Taiwan southward to Australia and eastward to the eastern coast of Africa. *Istiblennius lineatus* is distributed throughout tropical Indo-Pacific waters, while *Salarias fasciatus* ranges from Japan southward to the Great Barrier Reef and westward to the Red Sea. According to Shao (2014) and Shao & Lin (2014), five genera and 11 species of blenniids were previously recorded from Taiping Island. In the present study, four genera and six species are documented, resulting in a total of nine genera and 17 species of blenniids now recorded from Taiping Island. This study provides the first baseline assessment of the blenniid fauna of Taiping Island, and continued surveys will be necessary to further update and refine the species inventory.

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