



A new species of the gobiid genus *Priolepis* (Teleostei:Gobiidae) from Taiwan

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Abstract

A gobiid genus *Priolepis* is described from coastal waters off Taiwan. The new species is belonging to Group III of *Priolepis* group that characterized by reduced pattern of transverse cheek papillae and the presence of predorsal scales. The new species *Priolepis formosa* sp. nov. is readily distinguished from congeners by the following unique combinations of characters: (1) fin counts D2 I/9, A I/7–8 (modally 8), P 17–19 (modally 18). (2) Squamation 25–27 (modally 26), TR 7–8 (modally 8), PreD 6–8 (modally 8); having no scales on cheek, opercle. (3) Head with reduced transverse papillae. (4) distinctive coloration: body light brown with scale pockets strongly outlined with melanophores, middle opercle with a vague reddish-pink pupil-sized blotch.

Key words: Taxonomy, *Priolepis*, new species, marine goby, Taiwan

Introduction

Fishes of the gobiid genus *Priolepis* Valenciennes in Cuvier and Valenciennes 1837, are small-sized marine gobies (less than 50 mm SL), widely distributed throughout Indo-Pacific and Atlantic Oceans (Greenfield, 1989; Winterbottom & BurrIDGE 1989, 1992, 1993a, b; Allen *et al.* 2018). Currently the genus contains 37 valid species with most of the species members found from shallow rocky to deep water which depth more than 100 meter (Winterbottom & BurrIDGE 1989, 1992, 1993a, b; Hoese & Larson 2011; Koeda *et al.* 2021). The fish genus is recognized by lacking cephalic sensory canals and associated pores, having a gill opening extending anteroventrally to below the vertical limb of the preopercle or just anterior to this, possessing, at least primitively, vertical bars with darkened borders on the head and body, and having denticles or odontoids on the medial surface of the outer gill rakers of the first gill arch (Winterbottom & BurrIDGE 1989, 1992, 1993a, b). Furthermore, the species members of the genus can be subdivided into three distinct groups based on their cheek papillae patterns and predorsal scale characteristics: Group I with well-developed transverse pattern of cheek papillae and predorsal scales, Group II with reduced pattern of transverse cheek papillae and no predorsal scales, and Group III with reduced pattern of transverse cheek papillae and has predorsal scales (Winterbottom & BurrIDGE 1989, 1992, 1993a, b).

During our underwater explorations of coastal fishes in Taiwan, we have discovered a newly discovered *Priolepis* species belonging to Group III of the genus, characterized by a reduced pattern of transverse cheek papillae and the presence of predorsal scales. This paper aims to provide a comprehensive morphological description of this newly identified species.

Materials & Methods

Fish specimens were collected by hand-net while SCUBA diving in coastal water off Taiwan. The fish were preserved in 10% formalin then transferred to 70% ethanol for long term storage. Fin tissue samples were taken from fresh

specimens for genetic analysis and preserved in 95% ethanol. Measurements were made to the nearest 0.01 mm using a digital calliper with the aid of a stereo microscope. Body length was recorded as standard length (SL). All morphological counts follow Miller (1988) and meristic counts follow Chen and Shao (1996). The terminology of the cephalic sensory canals and free neuromast organs (sensory papillae) follow Wongrat and Miller (1991) based on Sanzo (1911). The fish length is given as percentage of standard length (SL). Meristic abbreviations used in this paper are as follows: A, anal-fin; C, caudal-fin; D1, first dorsal-fin; D2, second dorsal-fin; P, pectoral-fin; LR, lateral scales; TR: transverse scales; PreD, predorsal scales; SDP, scale series from origin first dorsal fin to upper pectoral fin origin; VC, vertebral count. Type specimens have been deposited in the Pisces collections of National Taiwan Ocean University, Keelung (NTOUP).

Systematics

Priolepis formosa Chen, Chen & Harefa, new species

(Figs. 1–2)

Materials examined

Holotype: NTOUP-2008-04-220, male (19.3 mm SL), Huapingyan, Liociou Township, Pingtung County, Taiwan. 15 m depth. Coll. J.T. Chen *et al.*, 08 July 2007.

Paratypes

NTOUP-2008-04-222 (18.7 mm SL), NTOUP-2008-04-223 (18.2 mm SL), NTOUP-2008-04-224 (15.7 mm SL), all above 3 specimens collected same as holotype:

NTOUP-2008-04-225 (15.2 mm SL), NTOUP-2008-04-226 (17.2 mm SL), NTOUP-2008-04-227 (10.9 mm SL), all above 3 specimens collected from Houshih fringing reef, Liociou Township, Pingtung County, Taiwan, 5 m depth, coll. J.T. Chen *et al.*, July 9, 2007.

NTOUP-2008-04-228, 14.32 mm SL, Meirendong, Liociou Township, Pingtung County, 10 m, coll. J.T. Chen *et al.*

NTOUP-2008-04-229, 16.9 mm SL, Yufu Village, Liociou Township, Pingtung County, 25 m, coll. M-J Jiang *et al.*, November 9, 2007.

NTOUP-2008-04-230, 17.1 mm SL, Huapingyan, Liociou Township, Pingtung County, 15 m, coll. M.J. Jiang *et al.*, November 10, 2007.

NTOUP-2008-08-411, 16.5 mm SL, Shanhai, Hengchun Township, Pingtung County, 10 m, coll. J.T. Chen *et al.*, July 16, 2008.

NTOUP-2008-08-412, 14.0mm SL, Shanhai, Hengchun Township, Pingtung County, 10m, coll. J.T. Chen *et al.*, July 16, 2008.

NTOUP-2020-07-174, 16.4 mm SL, Dongji Island, WangAn Township, Penghu County, Taiwan, depth 8–10 m, coll. T. Harefa *et al.*, July 07, 2020.

NTOUP-2022-01-034, 15.8 mm SL, Shanhai, Hengchun Township, Pingtung County, Taiwan, depth 8–9 m, coll. T. Harefa *et al.*, January 23, 2022.

Diagnosis

The new species *Priolepis formosa* can be distinguished from its congeners by the following unique combination of characters: (1) fin counts D2 I/9, A I/7–8 (modally 8), P 17–19 (modally 18); (2) Squamation 25–27 (modally 26), TR 7–8 (modally 8), PreD 6–8 (modally 8); having no scales on cheek, opercle; (3) Head with reduced transverse papillae; and (4) distinctive coloration: body light brown with scale pockets strongly outlined with melanophores, middle opercle with a vague reddish-pink pupil-sized blotch.

Description

Body proportions were listed in Table 1. Body moderately elongated, slightly compressed posteriorly. Head slightly depressed. Mouth oblique, maxilla extending posteriorly to vertical drawn middle orbit. Lower jaw slightly protruding. Anterior nasal with a short tapering tube reaching anteriorly to above anterior margin of upper lip, posterior opening pore-like with low raised rim. Eyes large, dorsolateral. Interorbital with deep trenches extending posteriorly behind the eye. Cheek slightly fleshy. Gill opening on each side large, extending anteroventrally to vertical drawn through posterior edge of mid-pupil.

TABLE 1. Morphometric measurements of *Priolepis formosa* sp. nov from Taiwan.

| | Holotype male | Paratypes (Including holotype) | | | |
|----------------------------------|------------------|--------------------------------|------|-------------------------|------|
| | | male (5 specimens) | | female (6 specimens) | |
| | | Min | Max | Min | Max |
| Standard length | 19.3 | 14.4 | 19.7 | 15.4 | 18.7 |
| % in SL | | | | | |
| Head length | 30.6 | 30.6 | 33.8 | 29.8 | 34.6 |
| Snout to 1st dorsal origin | 36.7 | 36.2 | 38.1 | 35.7 | 39.7 |
| Snout to 2nd dorsal origin | 58.7 | 57.9 | 59.7 | 57.2 | 60.6 |
| Snout to anus | 57.5 | 55.2 | 57.5 | 55.1 | 58.6 |
| Snout to anal fin origin | 62.9 | 59.7 | 64.0 | 61.1 | 63.9 |
| Prepelvic length | 31.8 | 26.0 | 31.8 | 26.8 | 31.5 |
| Caudal peduncle length | 18.3 | 18.3 | 19.7 | 17.9 | 20.1 |
| Caudal peduncle depth | 11.0 | 9.3 | 11.9 | 9.7 | 12.1 |
| First dorsal fin base | 17.0 | 14.6 | 18.1 | 12.4 | 15.7 |
| Second dorsal fin base | 21.5 | 20.0 | 21.7 | 19.0 | 21.4 |
| Anal fin base | 18.4 | 13.2 | 18.4 | 12.2 | 17.3 |
| Caudal fin length | 26.7 | 25.7 | 29.3 | 23.1 | 31.9 |
| Pectoral fin length | 29.1 | 28.7 | 31.3 | 24.6 | 31.2 |
| Pelvic fin length | 30.6 | 27.1 | 31.6 | 30.0 | 33.1 |
| Body depth of pelvic fin origin | 21.7 | 20.9 | 24.4 | 19.8 | 23.0 |
| Body depth of anal fin origin | 19.5 | 18.4 | 20.1 | 16.8 | 18.7 |
| Body width of anal fin origin | 10.1 | 9.3 | 12.3 | 7.9 | 11.3 |
| Pelvic fin origin to anus | 23.7 | 23.5 | 27.7 | 23.2 | 27.4 |
| % in HL | | | | | |
| Snout length | 12.9 | 10.4 | 13.1 | 10.9 | 14.2 |
| Eye diameter | 30.7 | 30.5 | 32.1 | 29.1 | 31.5 |
| Postorbital length | 43.7 | 40.3 | 46.3 | 38.7 | 45.9 |
| Cheek depth | 31.9 | 21.8 | 31.9 | 21.2 | 25.5 |
| Head width in upper gill opening | 44.9 | 41.1 | 47.9 | 38.7 | 47.7 |
| Head width in maximum | 70.5 | 61.4 | 83.0 | 66.1 | 70.5 |
| Fleshy interorbital width | 20.3 | 19.5 | 20.8 | 17.0 | 19.6 |
| Bony interorbital width | 3.1 | 1.4 | 3.1 | 1.8 | 3.7 |
| Lower jaw length | 34.9 | 33.1 | 35.3 | 33.6 | 37.7 |

TABLE 2. Distribution frequency of meristic counts of *Priolepis formosa* sp. nov. with other congeners from Taiwan.

| | D2 V | | | | | | | | | | | | | | | | | | VC | | |
|--------------------------|-------|----|----|----|----|------|----|----|-----|-----|----|----|----|----|----|------|----|----|------|----|---|
| | A I / | | | | | | | | | P | | | | | | | | | 25 | 26 | X |
| | 8 | 9 | 10 | 11 | 12 | X | 7 | 8 | 9 | X | 15 | 16 | 17 | 18 | 19 | Av. | 25 | 26 | X | | |
| <i>P. formosa</i> n. sp. | - | 14 | 1 | - | - | 9.0 | 1 | 14 | - | 8.0 | - | - | 1 | 12 | 2 | 18.0 | - | 3 | 26.0 | | |
| <i>P. boreus</i> | - | 1 | - | - | - | 9.0 | 1 | - | 7.0 | - | - | - | - | 1 | - | 18.0 | - | - | N/A | | |
| <i>P. cinctus</i> | - | - | - | 24 | 1 | 11.0 | - | - | 25 | 9.0 | - | - | 3 | 16 | 6 | 18.2 | - | 4 | 26.0 | | |
| <i>P. fallacincta</i> | - | 5 | - | - | - | 9.0 | - | 5 | - | 8.0 | - | - | 2 | 3 | - | 17.6 | - | 3 | 26.0 | | |
| <i>P. inhaca</i> | - | - | 1 | - | - | 10.0 | - | 1 | - | 8.0 | - | 2 | - | - | - | 16.0 | - | - | N/A | | |
| <i>P. latifascima</i> | 1 | - | - | - | - | 8.0 | 1 | - | 7.0 | - | - | - | - | 1 | - | 18.0 | - | 1 | 26.0 | | |
| <i>P. nuchifasciata</i> | - | 19 | 3 | - | - | 9.1 | 12 | 10 | - | 7.5 | 1 | - | 2 | 13 | 6 | 18.1 | - | 3 | 26.0 | | |
| <i>P. pallidicincta</i> | - | - | - | 1 | - | 11.0 | - | 1 | - | 8.0 | - | - | - | - | 1 | 19.0 | 1 | - | 25.0 | | |
| <i>P. semidoliatus</i> | - | 15 | 1 | - | - | 9.1 | 15 | 1 | - | 7.1 | - | 1 | 12 | 6 | - | 17.3 | - | 3 | 26.0 | | |

| | LR | | | | | | | | | | | | TR | | | | | | | | | | | | SDP | | | | | | | | | | | |
|--------------------------|------|----|----|----|----|----|----|------|---|----|---|---|------|----|----|------|------|-----|---|---|---|---|---|---|------|-----|-----|--|--|--|--|--|--|--|--|--|
| | PreD | | | | | | | | | | | | PreD | | | | | | | | | | | | PreD | | | | | | | | | | | |
| | 24 | 25 | 26 | 27 | 28 | 29 | 30 | X | 7 | 8 | 9 | X | 10 | 11 | 12 | 13 | 14 | X | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | X | | | | | | | | | |
| <i>P. formosa</i> n. sp. | 13 | 2 | - | - | - | - | - | 24.1 | 3 | 12 | - | - | - | - | - | - | - | 8.0 | 2 | - | - | - | - | - | - | 4.0 | | | | | | | | | | |
| <i>P. boreus</i> | - | - | - | - | - | - | - | N/A | - | - | - | - | - | - | - | - | - | N/A | 2 | - | - | - | - | - | - | 0.0 | | | | | | | | | | |
| <i>P. cinctus</i> | - | - | - | 2 | 8 | 25 | 9 | 29.0 | - | - | - | - | - | 8 | 23 | 13 | 13.1 | - | 6 | - | - | - | - | 3 | 20 | 21 | 6.4 | | | | | | | | | |
| <i>P. fallacincta</i> | - | - | 4 | 5 | 1 | - | - | 26.7 | 1 | 7 | 2 | - | - | - | - | - | 8.0 | - | 2 | - | - | - | - | 3 | 5 | 5.6 | | | | | | | | | | |
| <i>P. inhaca</i> | - | - | - | 1 | 1 | - | - | 27.5 | - | - | - | - | 2 | - | - | 12.0 | - | - | - | - | - | - | 1 | - | - | 4.5 | | | | | | | | | | |
| <i>P. latifascima</i> | - | 1 | 1 | - | - | - | - | 25.5 | - | - | 2 | - | - | - | - | - | 9.0 | - | 2 | - | - | - | - | - | - | 0.0 | | | | | | | | | | |
| <i>P. nuchifasciata</i> | 3 | 14 | 15 | - | - | - | - | 25.5 | 9 | 19 | 2 | 2 | - | - | - | 7.9 | - | 44 | - | - | - | - | - | - | - | 0.0 | | | | | | | | | | |
| <i>P. pallidicincta</i> | - | - | 2 | - | - | - | - | 26.0 | - | - | 2 | - | - | - | - | 10.0 | - | - | - | - | - | - | - | 2 | - | 6.0 | | | | | | | | | | |
| <i>P. semidoliatus</i> | - | 4 | 3 | 4 | 13 | 3 | - | 27.3 | - | - | 1 | 7 | 10 | 8 | - | 11.0 | - | 15 | - | - | - | - | - | - | - | 0.0 | | | | | | | | | | |



FIGURE 1. (A) Preserved *Priolepis formosa* sp. nov., holotype, male, NTOUP-2008-04-220, male (19.3 mm SL), Huapingyan, Liociou Township, Pingtung County, Taiwan; (B) freshly collected of paratype, male, NTOUP-2020-07-174, 16.4 mm SL, Dongji Island, WangAn Township, Penghu County, Taiwan; (C) freshly collected of paratype, female, NTOUP-2022-01-034, 15.8 mm SL, Shanhai, Hengchun Township, Pingtung County, Taiwan.

Fins.—D1 VI, D2 I/9–10 (modally 9), A I/7–8 (modally 8), P 17–19 (modally 18), V I/5. Second to fourth spine of D1 equal in length reaching between origin to first ray of D2, when adpressed. D2 all rays branched and last ray always two rays with one branched. A origin located below first ray of D2, all rays branched and last ray always two rays with one branched. One or two uppermost and lowermost rays of P usually unbranched, longest fin ray reaching vertically fourth rays of D2. V no fraenum, full basal membrane; fifth ray branched, 70–95% length of fourth ray; first to fourth rays with two to five branch points and fifth rays branched one or two dichotomous branch points; fourth segmented ray longest reaching only anus. Caudal-fin rounded.

Scales.—LR 25–27 (modally 26), TR 7–8 (modally 8), PreD 6–8 (modally 8) absent in small specimens, SDP 3–5 (modally 4); no scales on cheek and opercle. pectoral-fin base scaled. cycloid scales on breast, pelvic-fin base and belly.

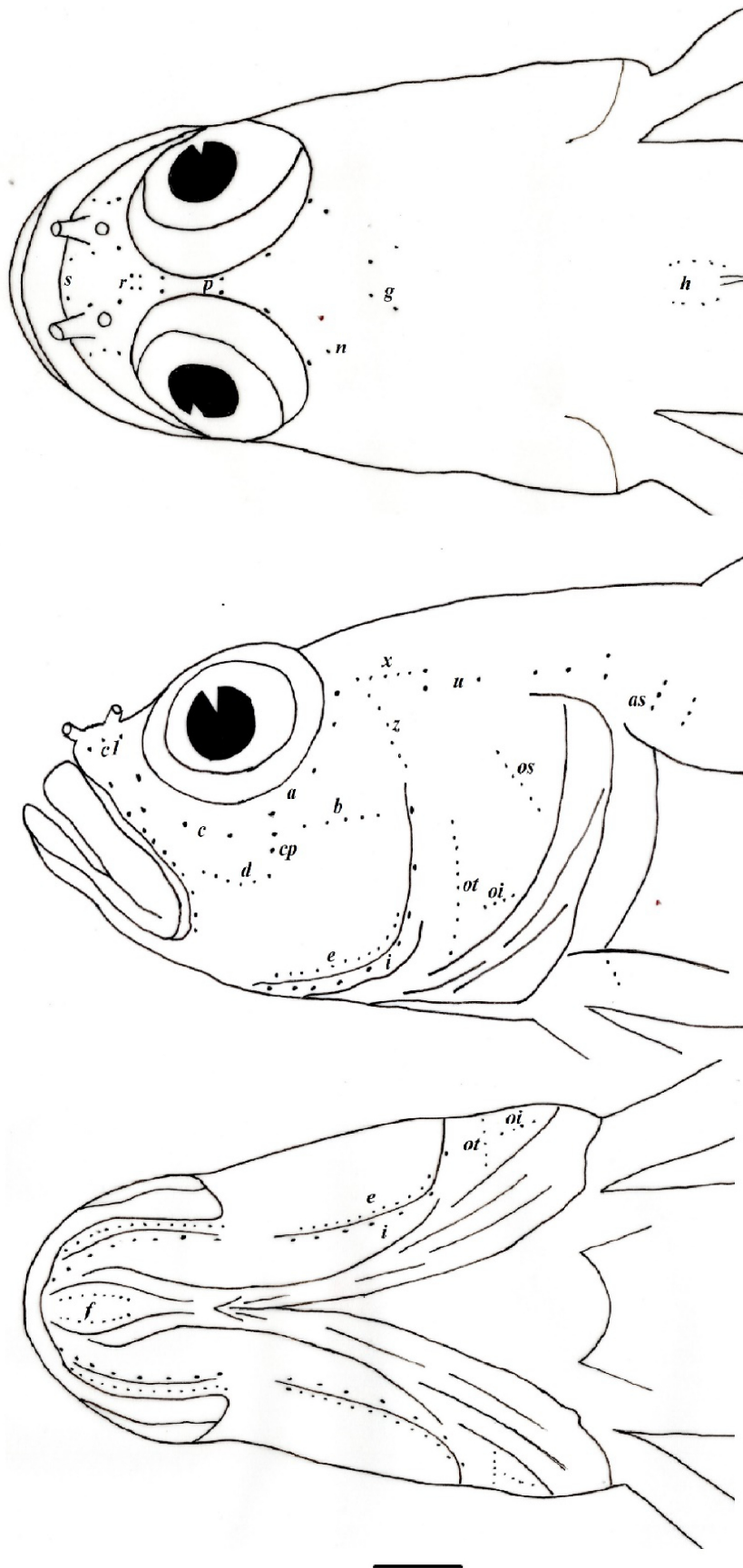


FIGURE 2. Head lateral-line system of *Priolepis formosa* sp. nov. NTOUP-2020-07-174, 16.4 mm SL. Bar = 1 mm. The arrow denotes the position of the gill opening.

Head lateral-line system.—(Fig. 2)

Canals: No canal and pore on head.

Sensory papillae: Sensory papillae or free neuromast distributed as follows, with counts and ranges shown in parentheses: Row *a* (5) long, extending from posterior to anterior of orbit; rows *b* and *d* (5–6 and 6–7 respectively); row *c* (5) present longitudinally below infraorbital; single *cp* papilla (1); rows *e* and *i* (25–26 and 16, respectively) on preoperculo-mandibular; row *f* (8 paired papillae) on rostral mandibular; rows *n* (2) anteriodorsal; rows *ot*, *oi* and *os* (10–11, 4 and 5–6, respectively) on opercular; *p* papillae (6, paired) longitudinally on interorbital; rows *r* and *s* (2 and 1, respectively, all paired) flanking midline in preorbital area; rows *u*, *x* and *z* (5, 6 and 5, respectively) on oculoscapular.

Colouration while fresh.—(Fig. 1)

Head and body with light brown background, scale pockets strongly outlined with brown melanophores. Head with alternating vague white (one third diameter to two third pupil-diameter sized) and reddish-orange or yellowish-orange bands, scattered with spots of brown melanophores: first vague white band extending from anteroventral margin of pupil to middle upper lip, followed by darker reddish-orange band, a pupil-diameter sized, extending from midventral margin of pupil to posterior end jaw; second vague white band extending from posteroventral margin of pupil to cheek, followed by large, two third eye-diameter sized, yellowish orange band extending from posterior margin of eye to cheek; third vague white band extending from posteriormost margin of eye to posteroventral of cheek, followed by yellowish-orange band, running along preopercular margin; fourth vague white band somewhat narrow, extending from upper mid-opercle to middle opercle, followed by yellowish-orange band, running along posterior margin of opercle. Middle opercle with a vague reddish-pink pupil-sized blotch. Nape with three vague white bands: first band connecting eyes just middle behind of eyes; second band curved, connected with third white band on cheek from posteriormost margin of eyes; the third band located in front of first dorsal-fin, running vertically straight, through pectoral fin-base. Snout reddish-orange, scattered with brown melanophores. Iris black. Pupil surrounded by reddish-white margin. Body with three narrow vague white bands: first band in anterior of first dorsal-fin; second band below between spine 5 and 6 of first dorsal-fin; third band in origin of second dorsal-fin.

Dorsal-fin spine and rays with 5–6 rows of reddish-orange spots; membrane with brown melanophores basally and whitish spots distally. Anal-fin brownish-yellow scattered with brown melanophores basally, outer margin whitish. Pectoral- and pelvic-fins semi-translucent pinkish. Caudal-fin with six to seven wavy rows of reddish-orange spots, grading posteriorly.

Distribution. Currently known from the coastal regions of northern to southeastern Taiwan, including southern islands of Penghu Archipelago.

Etymology. The specific name, *formosa* derived meaning the type locality of Tawan (classical name also called Formosa).

Remarks

The new species *Priolepis formosa* belong to Group III of *Priolepis* that shares similar characteristic by having reduced transverse papillae and has predorsal scales reviewed by Winterbottom & Burrige (1989, 1992, 1993a, b). This group including Indo-Pacific Ocean species, namely *P. agrena* Winterbottom & Burrige 1993b, *P. aureoviridis* (Gosline, 1959), *P. cinctus* (Regan, 1908), *P. eugenius* (Jordan & Evermann, 1903), *P. inhaca* (Smith, 1949), *P. limbatosquamis* (Gosline, 1959), *P. pallidicincta* Winterbottom & Burrige 1993b, *Priolepis psygmophilia* Winterbottom & Burrige 1993c, *P. squamogena* Winterbottom & Burrige, 1989, *P. triops* Winterbottom & Burrige 1993b and Caribbean and Atlantic species, namely *P. ascensionis* (Dawson & Edwards, 1987), *P. dawsoni* Greenfield, 1989, *P. hipolitii* Metzelaar, 1922 and *P. robinsi* Garzón-Ferreira & Acero, 1991. The new species *P. formosa* is characterized by strong outlined of scale pockets with brown melanophores, a distinctive feature that distinguishes it from *P. ascensionis*, *P. aureoviridis*, *P. cinctus*, *P. dawsoni*, *P. eugenius*, *P. hipoliti*, *P. pallidicincta*, *P. robinsi*, *P. triops*, and *P. squamogena*. Four other species of the *Priolepis* group, including *P. agrena*, *P. inhaca*, *P. limbatosquamis*, and *P. psygmophyllia*,

share this characteristic of well-defined pocket outlines. *P. formosa* can be distinguished from *P. agrena* and *P. psygmophylia* by having fewer rays of second dorsal-fin (9 vs 10). It differs further from *P. agrena* by having lower count of predorsal scale and transverse scale rows (modally 8 vs 12–15 and 7–8 vs 10–11, respectively).

P. formosa is most similar color patterns with *P. limbatosquamis* and *P. inhaca*. They also shares similar characters in having same count rays of second dorsal-fin and anal-fin. However, the new species immediately separable from these species by having no scales on opercle (vs possessing scales on opercle). Furthermore, *P. limbatosquamis* differs from current new species *P. formosa* by having six dark vertical vague bands on body (vs three narrow vague white bands). The new species also differs further from *P. inhaca* by having having more pectoral fin rays (17–19, modally 18 vs 15–17, modally 16); lower count transverse scale (7–8 vs 10–12 and), lower count predorsal scales (0–8, modally 8 vs 12–17, modally 15) and lower count longitudinal scales rows (25–27, modally 26 vs 26–28, modally 27).

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APPENDIX I

Other material examined of nominal species *Priolepis* from Taiwan

Priolepis boreus (Snyder, 1909)

NTOUP-2006-06-629, 12.6mm SL, Gongliao Township, Taipei County, 10m, coll. I-S Chen *et al.*, June 22, 2006.

Priolepis cinctus (Regan, 1908)

NTOUP-2006-06-616, 23.6mm SL, Chenggong Township, Taitung County, 5m, coll. I-S Chen *et al.*, June 12, 2006; NTOUP-2006-08-645, 27.3mm SL, Longdong, Gongliao Township, Taipei County, subtidal, 10m, coll. I-S Chen *et al.*, August 3, 2006; NTOUP-2006-08-646, 25.3mm SL, Longdong, Gongliao Township, Taipei County, 10m, coll. I-S Chen *et al.*, August 3, 2006; NTOUP-2006-08-706, 12.6mm SL, Jihuei, Chenggong Township, Taitung County, 5m, coll. I-S Chen *et al.*, August 18, 2006; NTOUP-2007-04-951, 20.0mm SL, Jihuei, Chenggong Township, Taitung County, 10m, coll. I-S Chen *et al.*, April 6, 2007; NTOUP-2007-04-952, 24.2mm SL, Jihuei, Chenggong Township, Taitung County, 10m, coll. I-S Chen *et al.*, April 6, 2007; NTOUP-2008-04-232, 14.3mm SL, Jihuei, Chenggong Township, Taitung County, 5m, coll. I-S Chen *et al.*, August 18, 2006; NTOUP-2008-04-233, 15.6mm SL, Wanlitong, Kending, Pingtung County, 10m, coll. J-T Chen *et al.*, September 15, 2006; NTOUP-2008-04-234, 17.9mm SL, Wanlitong, Kending, Pingtung County, 10m, coll. J-T Chen *et al.*, September 15, 2006; NTOUP-2008-04-235, 29.6mm SL, Meirendong, Liouciou Township, Pingtung County, 10m, coll. J-T Chen *et al.*, July 8, 2007; NTOUP-2008-04-236, 31.9mm SL, Meirendong, Liouciou Township, Pingtung County, 10m, coll. J-T Chen *et al.*, July 8, 2007; NTOUP-2008-04-237, 28.6mm SL, Houshih Fringing Reef, Liouciou Township, Pingtung County, 5m, coll. J-T Chen *et al.*, July 9, 2007; NTOUP-2008-04-238, 26.2mm SL, the dock at Nanren Rd., Manjhou Township, Pingtung County, 5m, coll. I-S Chen *et al.*, July 19, 2007; NTOUP-2008-04-239, 21.0mm SL, the north of Fongchueisha, Hengchun Township, Pingtung County, 5m, coll. J-T Chen *et al.*, July 20, 2007; NTOUP-2008-04-240, 13.1mm SL, the north of Fongchueisha, Hengchun Township, Pingtung County, 5m, coll. J-T Chen *et al.*, July 20, 2007; NTOUP-2008-04-241, 12.3mm SL, the north of Fongchueisha, Hengchun Township, Pingtung County, 5m, coll. J-T Chen *et al.*, July 20, 2007; NTOUP-2008-04-242, 10.9mm SL, Fongchueisha, Hengchun Township, Pingtung County, 5m, coll. J-T Chen *et al.*, July 20, 2007; NTOUP-2008-04-243, 22.6mm SL, Fongchueisha, Hengchun Township, Pingtung County, 5m, coll. J-T Chen *et al.*, July 21, 2007; NTOUP-2008-04-244, 25.4mm SL, Pinglang Bridge, Chaojing, Keelung City, 15m, coll. J-T Chen *et al.*, August 1, 2007; NTOUP-2008-04-245, 14.3mm SL, the south side of Maoao, Gongliao Township, Taipei County, 10m, coll. J-T Chen and W-J Chen, August 5, 2007; NTOUP-2008-04-246, 25.8mm SL, Yufu Village, Liouciou Township, Pingtung County, 25m, coll. M-J Jiang *et al.*, November 9, 2007; NTOUP-2008-04-247, 19.3mm SL, Yufu Village, Liouciou Township, Pingtung County, 25m, coll. M-J Jiang *et al.*, November 10, 2007; NTOUP-2008-04-248, 18.5mm SL, Yufu Village, Liouciou Township, Pingtung County, 25m, coll. M-J Jiang *et al.*, November 11, 2007; NTOUP-2008-04-249, 17.9mm SL, Yufu Village, Liouciou Township, Pingtung County, 25m, coll. M-J Jiang *et al.*, November 11, 2007; NTOUP-2008-04-250, 16.6mm SL, Yufu Village, Liouciou Township, Pingtung County, 25m, coll. M-J Jiang *et al.*, November 11, 2007.

Priolepis fallacincta Winterbottom and Burridge, 1992

NTOUP-2008-04-251, 24.7mm SL, Hongchaikeng, Kending, Pingtung County, 15m, coll. J-T Chen *et al.*, September 14, 2006; NTOUP-2008-04-252, 12.1mm SL, Hongchaikeng, Kending, Pingtung County, 15m, coll. J-T Chen *et al.*, September 14, 2006; NTOUP-2008-04-253, 20.0mm SL, Huapingyan, Liouciou Township, Pingtung County, 10m, coll. J-T Chen *et al.*, July 10, 2007; NTOUP-2008-04-254, 19.6mm SL, Yufu Village, Liouciou Township, Pingtung County, 25m, coll. M-J Jiang *et al.*, November 10, 2007. NTOUP-2008-08-415, 23.8mm SL, Shanhai, Hengchun Township, Pingtung County, 10m, coll. J-T Chen *et al.*, July 16, 2008.

Priolepis inhaca (Smith, 1949)

ASIZP 0060571, 14.4mm SL, Longdong, Gongliao Township, Taipei County, 10m, coll. J-P Chen, September 26, 1995.

***Priolepis latifascima* Winterbottom and Burridge, 1993**

NTOUP-2008-04-255, 12.3mm SL, Zhongao Sandy Beach, Liouciou Township, Pingtung County, 10m, coll. J-T Chen *et al.*, July 8, 2007.

***Priolepis nuchifasciata* (Günther, 1873)**

NTOUP-2006-08-654, 12.7mm SL, Longdong, Gongliao Township, Taipei County, 10m, coll. J-T Chen and S-H Su, August 3, 2006; NTOUP-2008-04-256, 15.1mm SL, Longdong, Gongliao Township, Taipei County, 10m, coll. J-T Chen and S-H Su, August 3, 2006; NTOUP-2008-04-257, 12.5mm SL, Longdong, Gongliao Township, Taipei County, 10m, coll. J-T Chen and S-H Su, August 3, 2006; NTOUP-2008-04-258, 14.6mm SL, Chaojing, Keelung City, 15m, coll. M-J Jiang *et al.*, August 25, 2006; NTOUP-2008-04-259, 14.3mm SL, Chaojing, Keelung City, 15m, coll. M-J Jiang *et al.*, August 25, 2006; NTOUP-2008-04-260, 12.7mm SL, Pinglang Bridge, Chaojing, Keelung City, intertidal region, coll. M-J Jiang *et al.*, August 30, 2006; NTOUP-2008-04-261, 12.2mm SL, Bianfudong, Rueifang Township, Taipei County, 15m, coll. M-J Jiang *et al.*, September 4, 2006; NTOUP-2008-04-262, 13.0mm SL, Bianfudong, Rueifang Township, Taipei County, 15m, coll. M-J Jiang *et al.*, September 4, 2006; NTOUP-2008-04-263, 11.3mm SL, Bianfudong, Rueifang Township, Taipei County, 15m, coll. M-J Jiang *et al.*, September 4, 2006; NTOUP-2008-04-264, 6.1mm SL, Pinglang Bridge, Chaojing, Keelung City, 15m, coll. M-J Jiang *et al.*, May 25, 2007; NTOUP-2008-04-265, 7.9mm SL, Chaojing, Keelung City, 20m, coll. J-T Chen *et al.*, July 31, 2007; NTOUP-2008-04-267, 12.6mm SL, Pinglang Bridge, Chaojing, Keelung City, 15m, coll. J-T Chen *et al.*, August 1, 2007; NTOUP-2008-04-268, 11.9mm SL, Pinglang Bridge, Chaojing, Keelung City, 15m, coll. J-T Chen *et al.*, August 1, 2007; NTOUP-2008-04-269, 9.0mm SL, Pinglang Bridge, Chaojing, Keelung City, 15m, coll. J-T Chen *et al.*, August 1, 2007; NTOUP-2008-04-270, 8.1mm SL, Pinglang Bridge, Chaojing, Keelung City, 15m, coll. J-T Chen *et al.*, August 1, 2007; NTOUP-2008-04-271, 8.1mm SL, Pinglang Bridge, Chaojing, Keelung City, 15m, coll. J-T Chen *et al.*, August 1, 2007; NTOUP-2008-04-272, 7.8mm SL, Pinglang Bridge, Chaojing, Keelung City, 15m, coll. J-T Chen *et al.*, August 1, 2007; NTOUP-2008-04-274, 16.3mm SL, the south side of Maoao, Gongliao Township, Taipei County, 10m, coll. J-T Chen and W-J Chen, August 5, 2007; NTOUP-2008-04-275, 15.8mm SL, the south side of Maoao, Gongliao Township, Taipei County, 10m, coll. J-T Chen and W-J Chen, August 5, 2007; NTOUP-2008-04-276, 14.3mm SL, the south side of Maoao, Gongliao Township, Taipei County, 10m, coll. J-T Chen and W-J Chen, August 5, 2007; NTOUP-2008-04-277, 10.8mm SL, the south side of Maoao, Gongliao Township, Taipei County, 10m, coll. J-T Chen and W-J Chen, August 5, 2007; NTOUP-2008-04-278, 10.1mm SL, the south side of Maoao, Gongliao Township, Taipei County, 10m, coll. J-T Chen and W-J Chen, August 5, 2007; NTOUP-2008-04-279, 9.7mm SL, the south side of Maoao, Gongliao Township, Taipei County, 10m, coll. J-T Chen and W-J Chen, August 5, 2007; NTOUP-2008-04-280, 8.3mm SL, the south side of Maoao, Gongliao Township, Taipei County, 10m, coll. J-T Chen and W-J Chen, August 5, 2007; NTOUP-2008-04-281, 7.7mm SL, Maoao, Gongliao Township, Taipei County, 10m, coll. J-T Chen and W-J Chen, August 5, 2007. NTOUP-2008-08-408, 17.6mm SL, the north of Aodi, Gongliao Township, Taipei County, 10m, coll. I-S Chen and J-T Chen, June 20, 2008.

***Priolepis pallidicincta* Winterbottom and Burridge, 1993**

NTOUP-2008-04-231, 19.6mm SL, Longsiidong, Liouciou Township, Pingtung County, 25m, coll., J-T Chen *et al.*, July 7, 2007.

***Priolepis semidoliata* (Valenciennes, 1837)**

NTOUP-2006-06-610, 15.2mm SL, Chenggong Township, Taitung County, intertidal region, coll. I-S Chen *et al.*, June 12, 2006; NTOUP-2006-08-707, 19.4mm SL, Jihuei, Chenggong Township, Taitung County, intertidal region, coll. I-S Chen *et al.*, August 19, 2006; NTOUP-2008-04-282, 20.5mm SL, Aodi, Gongliao Township, Taipei County, intertidal region, coll. M Zhang *et al.*, March 3, 2006; NTOUP-2008-04-283, 27.0mm SL, Aodi, Gongliao Township, Taipei County, intertidal region, coll. M Zhang and S-P Huang, June 11, 2006; NTOUP-2008-04-284, 25.5mm SL, Aodi, Gongliao Township, Taipei County, intertidal region, coll. M Zhang and S-P Huang, June 11, 2006; NTOUP-2008-04-285, 18.5mm SL, Pinglang Bridge, Chaojing, Keelung City, intertidal region, coll. J-T Chen and M Zhang, August 4, 2006; NTOUP-2008-04-286, 25.3mm SL, Aodi, Gongliao Township, Taipei County, intertidal region, coll. I-S Chen *et al.*, September 7, 2006; NTOUP-2008-04-287, 21.5mm SL, Aodi, Gongliao Township, Taipei County, intertidal region, coll. J-H Huang, April 21, 2007; NTOUP-2008-04-288, 25.7mm SL,

Aodi, Gongliao Township, Taipei County, intertidal region, coll. J-H Huang, April 21, 2007; NTOUP-2008-04-289, 21.6mm SL, Aodi, Gongliao Township, Taipei County, intertidal region, coll. J-H Huang, April 21, 2007; NTOUP-2008-04-290, 24.5mm SL, Aodi, Gongliao Township, Taipei County, intertidal region, coll. J-T Chen and J-H Huang, April 22, 2007; NTOUP-2008-04-291, 20.6mm SL, Aodi, Gongliao Township, Taipei County, intertidal region, coll. J-T Chen and J-H Huang, April 22, 2007.