

Description of a new species of damselfish (Pomacentridae: *Chromis*) from Rapa Island, French Polynesia

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Abstract

A new species of pomacentrid fish recently discovered at Rapa Island, Austral Archipelago (French Polynesia), is described. Specimens were collected during a collaborative marine biodiversity survey of Rapa from October to December 2002. *Chromis planesi* is described from six specimens, 93.6-101.8 mm SL, captured on the outer reef slope at depths of 50 to 54 m. The new species is distinguished from most described species of *Chromis* by the following combination of characters: dorsal rays XIV,12-13; anal rays II,12-13; pectoral rays 20; tubed lateral line scales 17; total gill rakers 27-30; axil of pectoral fin black; eye-sized bluish white spot (fades and darkens rapidly after death) on body at bases of posteriormost 6 to 8 segmented dorsal rays.

Only four species of *Chromis* (*C. fumea*, *C. notata*, *C. verater*, and *C. struhsakeri*) have overlapping counts, a black pectoral axil, and the white spot dorsoposteriorly on body as described above for *C. planesi*. *Chromis planesi* is easily distinguished from all four of these species by its distinctive colour pattern: yellowish body with nine stripes, each composed of a series of small blue dots, extending from the gill opening to the caudal fin base; pectoral and caudal fins yellow; and pelvic and anal fins dark brown to black. Among the *Chromis* species with 14 dorsal spines, the colour pattern of *C. planesi* is most similar to those of *C. meridiana* and *C. struhsakeri*. *Chromis meridiana* lacks the blue stripes on the body and has a more slender body (body depth (BD) 2.1-2.3 in standard length (SL) versus BD 1.9-2.1 in SL for *C. planesi*). *Chromis struhsakeri* differs in lacking blue stripes, lacking yellow fins, having the white spot extending anteriorly from the top of the caudal peduncle only to about the base of the last dorsal segmented ray, and having a deeper body (BD 1.8-1.9 in SL). This distinctive new species is known only from seven specimens (one sacrificed for genetic sampling) collected on the deep outer reef at Rapa Island.

Zusammenfassung

Beschrieben wird eine neue Art der Riffbarsche („Schwalbenschwänze“), die kürzlich bei der Insel Rapa im Austral-Archipel (Franz. Polynesien) entdeckt wurde. Die Belege wurden während eines gemeinschaftlichen Meeresforschungsprojekts zur Biodiversität von Oktober bis Dezember 2002 gesammelt. *Chromis planesi* wird nach sechs Exemplaren mit einer Länge von 93,6 bis 101,8 mm SL beschrieben, die am äußeren Riffhang in der Tiefe von 50 bis 54 m gefangen wurden. Die neue Art unterscheidet sich von den meisten bisher beschriebenen *Chromis*-Arten durch die Kombination folgender Merkmale: XIV, 12-13 Rückenflossenstrahlen; II, 12-13 Afterflossenstrahlen; 20 Brustflossenstrahlen; 17 Seitenlinienschuppen mit Röhrchen; 27-30 Kiemenblättchenreihen insgesamt; schwarzer Brustflossenansatz; augengroßer bläulich weißer Fleck (der nach dem Tod rasch dunkler und damit undeutlicher wird) auf dem Rumpf an der Basis der hinteren 6-8 Abschnitte der aufgeteilten Rückenflosse.

Nur vier *Chromis*-Arten (*C. fumea*, *C. notata*, *C. verater*, *C. struhsakeri*) überschneiden sich bei den genannten Zahlen und zeigen den schwarzen Fleck am Brustflossenansatz und den dorsoposterioren weißen Fleck auf dem Rumpf, wie es für *C. planesi* beschrieben wurde. Durch die Färbung aber ist *C. planesi* von den anderen vier Arten gut unterscheidbar: gelblicher Körper mit neun Streifen, die jeweils aus einer Reihe kleiner, blauer Flecken bestehen und sich von der Kiemenöffnung bis zur Schwanzflossenbasis erstrecken; gelbe Brust- und Schwanzflossen sowie dunkelbraune bis schwarze Bauch- und Afterflossen. Unter den Chromis-Arten mit 14 Rückenflossenstacheln ähnelt das Farbmuster von *C. planesi* am ehesten dem von *C. meridiana* und *C. struhsakeri*. Bei *C. meridiana* fehlen die blauen Streifen auf dem Rumpf, und die Tiere dieser Art haben einen schlankeren Körper (Körpertiefe = BD, body depth 2,1-2,3 SL im Vergleich zu 1,9-2,1 BD in SL bei *C. planesi*). *Chromis struhsakeri* unterscheidet sich durch fehlende blaue Streifen, fehlende gelbe Flossen und einen weißen Fleck, der sich nach vorne vom Schwanzstiel nur bis zur Basis der letzten Rückenflossen-Segmente erstreckt, sowie durch einen tieferen

Körper (BD 1,8-1,9 SL). Die neue, gut unterscheidbare Art kennt man bisher nur von sieben Exemplaren, die über dem tief gelegenen äußeren Riff der Rapa-Insel gesammelt worden waren, wobei ein Exemplar für die genetische Untersuchung zur Verfügung gestellt werden musste.

Résumé

On décrit ici une nouvelle espèce de Pomacentridé récemment découverte à l'île Rapa, Iles Australes (Polynésie française). Des spécimens ont été collectés lors d'un relevé en collaboration de la biodiversité marine de Rapa, d'octobre à décembre 2002. *Chromis planesi* est décrit sur base de six spécimens, de 93,6-101,8 mm LS, capturés sur le versant externe du récif, à des profondeurs de 50 à 54 m. L'espèce nouvelle se distingue de la plupart des espèces décrites de *Chromis* par la combinaison des caractéristiques suivantes: rayons de la dorsale XIV, 12-13; rayons de l'anale II, 12-13; rayons de la pectorale 20; écailles canaliculées de la ligne latérale 17; total des branchiospines 27-30; aisselle de la pectorale, noire; tache ocelliforme blanc bleu (s'estompe et fonce vite après la mort) sur le corps à la base des 6 à 8 derniers rayons segmentés de la dorsale.

Seules quatre espèces de *Chromis* (*C. fumea*, *C. notata*, *C. verater* et *C. struhsakeri*) ont des décomptes qui se recoupent, une aisselle noire à la pectorale et la tache blanche dorsopostérieure sur le corps comme précisé ci-dessus pour *C. planesi*. *Chromis planesi* se distingue sans peine de ces quatre espèces par son patron de coloration: corps jaunâtre avec neuf lignes, chacune composée d'une série de petites taches bleues, de la branchie à la base de la caudale; pectorales et caudale jaunes; pelviennes et anale brun foncé à noir. Parmi les espèces de *Chromis* qui ont 14 rayons durs à la dorsale, la coloration de *C. planesi* ressemble le plus à celles de *C. meridiana* et de *C. struhsakeri*. *Chromis meridiana* n'arbore pas de lignes bleues sur le corps et est de forme plus élancée (hauteur du corps 2,1-2,3 en longueur standard (LS) contre 1,9-2,1 en LS pour *C. planesi*). *Chromis struhsakeri* se distingue par l'absence de lignes bleues, de nageoires jaunes, par la tache blanche allant antérieurement du haut du pédoncule caudal jusque près de la base du dernier rayon dorsal segmenté, et par un corps plus haut (1,8-1,9 en LS). Cette nouvelle espèce caractéristique est connue sur base de 7 spécimens seulement (dont un sacrifié pour analyse génétique) collectés sur le versant profond du récif à l'île de Rapa.

Sommario

Si riporta la descrizione di una nuova specie di pomacentride recentemente scoperta all'Isola di Rapa, Arcipelago Austral (Polinesia Francese). Gli esemplari sono stati raccolti durante una spedizione congiunta per lo studio della biodiversità marina a Rapa, condotta nel periodo ottobre-dicembre 2002. *Chromis planesi* è

descritta sulla base di sei esemplari, 93,6-101,8 mm SL, catturati lungo la scarpata corallina esterna a profondità di 50-54 m. La nuova specie si distingue dalla maggior parte delle altre del genere *Chromis* per la seguente combinazione di caratteri: raggi dorsali XIV, 12-13; raggi anali II, 12-13; raggi pettorali 20; scaglie della linea laterale 17; numero complessivo di rastrelli branchiali 27-30; ascella della pinna pettorale nera; sul corpo e alla base dei 6-8 raggi dorsali più arretrati presenza di una macchia bianco-bluasta dal diametro circa uguale a quello dell'occhio (che si dissolve e si scurisce rapidamente dopo la morte).

Solo quattro specie di *Chromis* (*C. fumea*, *C. notata*, *C. verater* e *C. struhsakeri*) hanno conte sovrapponibili, una macchia nera all'ascella della pettorale e una macchia bianca sulla regione dorsale e posteriore del corpo come descritto per *C. planesi*. *Chromis planesi* si distingue, tuttavia, da tutte queste per la particolare colorazione: corpo giallastro con nove striature, ognuna composta da una serie di piccole macchie blu, che decorrono dall'apertura branchiale alla base della pinna caudale; pinna caudale e pettorali gialle; pinne pelviche ed anale dal bruno scuro al nero. Tra le specie di *Chromis* con 14 spine dorsali, la colorazione è più somigliante a quella di *C. meridiana* e *C. struhsakeri*. Tuttavia, *Chromis meridiana* non ha le striature blu sul corpo ed è più affusolata (altezza del corpo, BD, 2,1-2,3 in SL verso BD 1,9-2,1 in SL per *C. planesi*). *Chromis struhsakeri* si differenzia per l'assenza delle striature blu, l'assenza di pinne gialle, per avere la macchia bianca che si estende anteriormente dalla parte superiore del peduncolo caudale solamente fino quasi alla base dell'ultimo raggio dorsale segmentato, e infine per avere un corpo più alto (BD 1,8-1,9 in SL). Questa nuova specie è nota solo per i sette esemplari (di cui uno è stato sacrificato per determinazioni genetiche) raccolti sulla barriera corallina esterna dell'Isola di Rapa.

Introduction

The South Pacific island of Rapa (27°36'S, 144°21'W; Fig. 1) is the southernmost inhabited island of French Polynesia. It is considered as one of the Austral Islands, but it is sufficiently isolated (the next Austral Island lies 520 km north-west of Rapa) to be regarded as a separate geographic unit. Rapa (see back cover) is a roughly circular island (7.2 km in diameter) characterized by having only an interrupted fringing reef, numerous bays and somewhat turbid water as a result of runoff from rainfall averaging over 250 cm per year (see Randall et al., 1990). Despite its remote location, marine biodiversity (algae, corals, fishes and molluscs) at Rapa is relatively high (Mermet, 1986). From October to December 2002, an international (Fiji, France, Italy, United States) team of scientists conducted a collaborative marine biodiversity survey of Rapa.

Prior to 1971, there were a few scattered reports of fish species from Rapa: *Anguilla obscura* by Schmidt

Table I. Proportional measurements of specimens of *Chromis planesi* expressed as percentage of standard length.

	Holotype USNM 375192	Paratype MNHN 2003-2681	Paratype MNHN 2003-2681	Paratype USNM 375189	Paratype USNM 375189	Paratype USNM 375189
Standard length (mm)	97.6	100.2	98.1	98.9	101.8	93.6
Body depth	50.2	48.5	49.1	49.4	51.0	51.5
Body width	17.0	17.1	16.7	17.8	16.8	17.2
Head length	30.2	29.2	29.1	28.4	30.1	28.6
Snout length	7.1	7.4	7.2	7.4	7.5	7.2
Orbit diameter	10.0	10.0	10.3	10.4	11.2	10.5
Interorbital width	10.2	9.9	10.2	9.9	9.5	19.9
Upper jaw length	7.9	7.4	8.1	7.9	7.4	8.3
Caudal peduncle depth	14.1	14.1	13.8	13.7	13.7	14.4
Caudal peduncle length	11.7	11.1	11.3	11.7	12.2	10.0
Predorsal length	32.3	33.7	31.6	30.7	34.2	34.5
Preanal length	66.9	69.4	66.7	68.5	70.3	64.4
Prepelvic length	36.4	33.9	34.6	41.0	36.0	32.8
Length dorsal fin base	65.0	60.0	66.1	62.5	60.1	64.9
Length anal fin base	24.3	22.0	23.8	23.4	23.4	26.6
Length pectoral fin	33.9	32.4	32.7	33.8	33.0	33.2
Length pelvic fin	26.7	25.9	31.0	27.0	26.4	29.0
Length pelvic fin spine	17.6	16.5	18.0	18.0	16.8	18.2
Length first dorsal spine	9.3	8.3	9.4	9.7	9.0	8.8
Length seventh dorsal spine	17.3	14.8	17.0	16.2	14.5	17.1
Length last dorsal spine	12.6	11.2	12.2	12.7	12.2	13.2
Length longest dorsal ray	18.2	17.8	19.1	19.9	17.6	18.5
Length first anal spine	7.1	6.9	7.1	8.7	6.5	6.8
Length second anal spine	18.5	15.7	18.8	18.7	15.8	17.9
Length longest anal ray	20.9	16.1	18.0	17.6	18.4	17.8
Length upper caudal fin	37.8	36.3	40.5	34.8	35.3	40.0
Length lower caudal fin	30.5	29.1	34.8	29.9	32.0	33.4
Caudal concavity	18.0	19.5	21.3	18.9	19.3	19.2

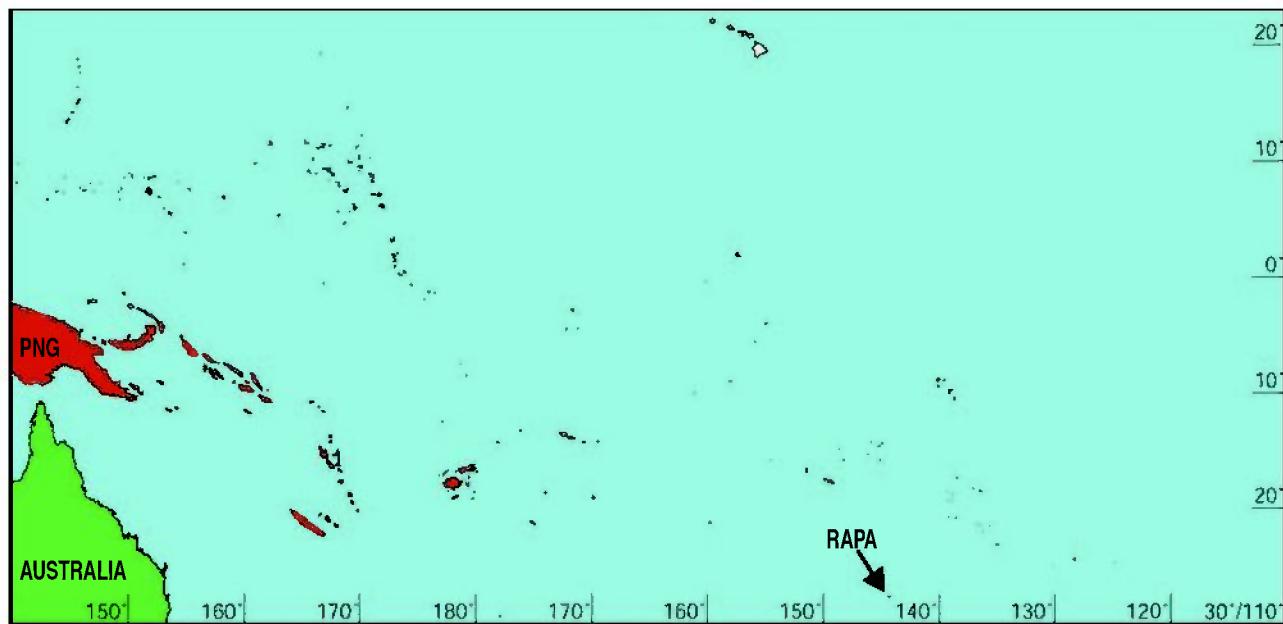


Fig. 1. Location of Rapa Island, Austral Archipelago, in the South Pacific.

(1925), *Epinephelus merra* by Schultz (1945), *Phaethonichthys tuberculatus* by Nichols (1923), and, in 1970, a limited collection made by C. L. Smith included 85 species that were listed in Randall (1978). In 1971, Randall spent about a month collecting fishes at Rapa and published the first list (Randall, 1978), which included 220 species. Plessis (Etude Ichthyologique de Rapa, pages 213-230 in Mermet, 1986) provided a list of fish species from Rapa based on the work of Randall (1978) and supplemented with information obtained from local fishermen and his own observations during trips to Rapa in 1968 and 1984. In 1990, Randall and C. L. Smith published a combined list including 274 fish species (Randall et al., 1990).

During the 2002 Rapa expedition, fish surveys were conducted to sample specimens from the rocky shores and bays to the outer slope and deep shelf around the island to a depth of 78 m. Specimens were recorded visually and/or collected at 66 collecting stations with the ichthycide rotenone and by spearing. Some specimens were taken by hook and line or obtained from local fishermen. Combining these fish records with the list of Randall et al. (1990) brings the number of marine and estuarine species known from Rapa to over 369 (Galzin et al., in preparation). As many as 10 or more undescribed species are represented among the specimens collected during the 2002 expedition, including a new species of the damselfish genus *Chromis* described herein.

Methods

Counts and measurements follow Allen & Wright (2003). Measurements were taken with calipers and recorded to the nearest 0.1 mm. Counts of vertebrae and associated elements and median fin rays were taken from radiographs. Counts and measurements were made on the left side when possible. Proportional measurements are expressed as a percentage of standard length and are provided in Table 1. Unless indicated otherwise, proportions appearing in parentheses apply to the range for the paratypes. Institutional abbreviations are USNM (National Museum of Natural History, Smithsonian Institution, and Washington, DC) and MNHN (Museum National d'Histoire Naturelle, Paris, France).

Chromis planesi n. sp.

(Figs. 3, 4, 5)

Holotype: USNM 375192, 97.6 mm SL, French Polynesia, Rapa Island, off north-east tip of island on outer edge of deep plateau, channels in a deep reef with good coral growth, soft corals and sponges abundant ($27^{\circ}32.974'S$, $144^{\circ}19.123'W$), at a depth of 50-54 m, field number JTW 2002-35, collected by S. Planes using a small spear, 14 November 2002.

Paratypes: USNM 375189, three specimens, 101.8, 98.9 and 93.6 mm SL, collected with holotype. MNHN

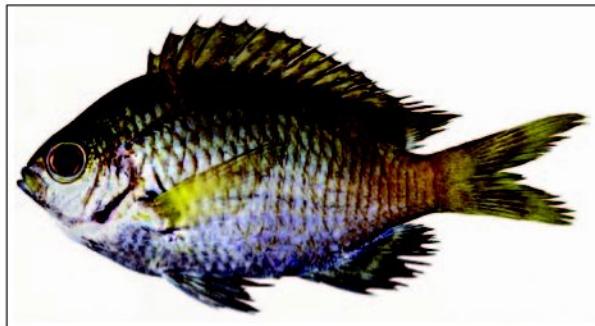


Fig. 3. *Chromis planesi*, holotype, 97.6 mm SL, Rapa Island. Colour when fresh. Photo by J. T. Williams.

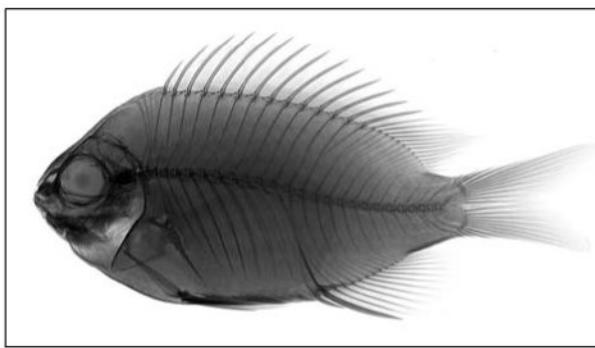


Fig. 4. Radiographic image of *Chromis planesi*, holotype, 97.6 mm SL, Rapa Island. Image by S. J. Raredon.



Fig. 5. *Chromis planesi*, 101.1 mm SL, Rapa Island, taken at 50 m near the type locality off north-eastern tip of Rapa. Colour when fresh (specimen sacrificed for genetic sampling). Photo by J. T. Williams.

2003-2681, two specimens, 98.1 and 100.2 mm SL, collected with holotype.

Diagnosis

Dorsal rays XIV,12-13 (usually 13); anal rays II,12-13 (usually 12); pectoral rays 20; tubed lateral line scales 17; gill rakers 6-8 + 20-24 (total 27-30); axil of pectoral fin black; eye-sized bluish white spot (fades and darkens rapidly after death) on body at bases of posteriormost 6 to 8 segmented dorsal rays; body

depth 1.94-2.06 in SL; in life, yellowish body with nine stripes, each composed of a series of small blue dots, extending from the gill opening to the caudal fin base; pectoral and caudal fins yellow; pelvic and anal fins dark brown to black. Largest specimen, 101.8 mm SL.

Description

Dorsal rays XIV,12-13 (only one paratype with 12); anal rays II,12-13 (only the holotype with 13); all dorsal and anal soft rays branched, last through base; segmented caudal rays 10+9, median 7+6 branched; 2 exposed spiniform dorsal procurrent rays; 2 exposed spiniform ventral procurrent rays; pectoral rays 20; pelvic rays 1,5; tubed lateral line scales 17; posterior midlateral scales with a pore or deep pit 6-8 (holotype with 6, paratypes with 6, 6, 7, 8, 8); longitudinal scale rows 25 (one paratype with 26); scales above lateral line to dorsal fin origin 1.5; scales below lateral line to anal fin origin 9.5; circumpeduncular scales 14; gill rakers 6-8 + 20-24 (holotype with 7+20, paratypes with 6+21, 6+24, 7+20, 8+21, 8+22); total gill rakers 27-30; pseudobranchial filaments 12-18 (holotype with 15, paratypes with 12, 15, 17, 18, 18); branchiostegal rays 6; supraneural (predorsal) bones 3; vertebrate 11+15; last rib on vertebral centrum 11; last epineural on centrum 15.

Body moderately deep, depth 1.99 (1.94-2.06) in SL, and compressed, width 2.95 (2.78-3.04) in body depth; head length 3.31 (3.33-3.52) in SL; snout shorter than orbit, its length 4.28 (3.85-4.03) in head length; eye moderately large, orbit diameter 3.01 (2.68-2.93) in head; interorbital space convex, least fleshy width 2.95 (2.63-3.15) in head; caudal peduncle depth 2.14 (1.99-2.20) in head; caudal peduncle length 2.59 (2.42-2.85) in head; mouth small, maxilla reaching to or slightly beyond a vertical at anterior edge of orbit, upper jaw length 3.99 (3.05-4.31) in head length; mouth terminal and oblique, gape forming an angle of about 20° to horizontal axis of head and body.

Teeth biserial, an outer row of enlarged conical teeth with irregular band of small villiform teeth behind. Gill rakers ossified, slender, longest at angle about three-fourths length of longest gill filaments and one-third orbit diameter. No papillae on lips or front of snout; nostril with a very low fleshy rim, slightly higher posteriorly; posterior nasal opening crescent-shaped.

Bony edge of opercle ending posteriorly in an inconspicuous flat spine at level of lower edge of orbit; margin of preopercle smooth; corner of preopercle rounded; depth of suborbital about seven in eye diameter, lower margin free to a point just posterior to middle of eye.

Scales imbricate, ctenoid; head scaled except lips, narrow band across preorbital containing nostrils, and narrow zone at tip of snout above upper lip; body and vertical fin bases covered with one scale wide basal scaly sheath of relatively large ctenoid scales, small scales extending as a progressively narrowing

column over about basal three-fourths of dorsal, anal and caudal fin membranes; 25-26 scales in longitudinal series from upper edge of operculum to base of caudal fin; edge of suborbital covered by scales, suborbital with a single row of scales; four rows of scales on preopercle, the uppermost and lowermost rows with scales smaller than those of the two middle rows; paired fins scaled basally.

Tubed part of lateral line ending beneath last dorsal spine; pored scales continue to base of caudal fin, but with a gap of one to four unpored scales between oblique portion of lateral line and midlateral row of pored or pitted scales on caudal peduncle.

Dorsal fin origin above third lateral line scale, predorsal length 3.10 (2.90-3.16) in SL; first dorsal spine 4.15 (2.932-3.53) in head length (fourth spine longest); seventh to fourteenth dorsal spines increasingly shorter, longest 1.75 (1.68-2.07) in head; fourth or fifth dorsal soft rays longest, 1.66 (1.43-1.71) in HL; origin of anal fin below base of last dorsal spine; preanal distance 1.49 (1.42-1.55) in SL; first anal spine 4.28 (2.93-4.64) in head; second anal spine 1.63 (1.52-1.90) in head; eighth or ninth anal soft ray longest, 1.45 (1.60-1.82) in head; caudal fin deeply forked, longest upper rays slightly longer than longest lower rays, length of upper rays 2.70 (2.66-2.88) in SL; caudal concavity (calculated from length of filamentous upper rays) 5.55 (4.69-5.29) in SL; pectoral fins pointed, third or fourth rays longest, 2.95 (2.96-3.08) in SL; origin of pelvic fins below base of pectoral fin; prepelvic length 2.75 (2.44 -3.05) in SL; pelvic spine 1.72 (1.58-1.79) in head; first pelvic soft ray filamentous, 3.74 (3.23-3.85) in SL.

Colour of fresh material (Figs. 3, 5): Head and body brown dorsally, gradually changing to yellow laterally and becoming pinkish white ventrally; brown area on top of head iridescent blue in life (rapidly fading to brown after death); bluish white spot (rapidly fading and darkening to pale brown after death) beneath posteriormost six dorsal soft rays; body with nine beaded blue stripes from head to caudal fin base; opercle yellowish with iridescent blue, becoming pinkish white over subopercle; broad yellow stripe extending from tip of snout to each eye and from lips across preopercle and posteriorly as a stripe across base of pectoral fin; pectoral fin yellow with black axil; dorsal fin dusky yellow; pelvic fin dusky; anal fin black; caudal fin yellow to yellowish brown with dusky tips.

Colour in alcohol: Head and body brown, with darker area along dorsal profile from snout to end of lateral line; lips and internasal area pale with some small brown spots; posterior margin of scales outlined with melanophores on dorsal half of body, each scale with a small brown spot centrally forming beaded brown stripes along the body; axil of pectoral fin with large black spot (readily observed when pectoral fin is rotated forward toward head); pectoral fins translucent with tips black; pectoral base dusky with pale

stripe centrally; dorsal fin with interspinous membranes dusky with narrow black margin distally; irregular pale stripe located centrally on dorsal fin; caudal fin dusky; anal fin black with pale central stripe; pelvic fins dark brown to black.

Etymology

This species is named in honour of Dr. Serge Planes, Université de Perpignan (France), who discovered and captured all of the known specimens of this species.

Comparisons

Chromis planesi differs from all but 19 of the recognized species (Allen, 1991) of *Chromis* in having 14 dorsal spines. The 19 *Chromis* species having at least some specimens with 14 spines are: *Chromis albo-maculata* Kamohara 1960, *C. axillaris* Bennett 1831, *C. cadenati* Whitley 1951, *C. chromis* Linnaeus 1758, *C. flavomaculata* Kamohara 1960, *C. fumea* Tanaka 1917, *C. limbata* Valenciennes 1833, *C. lubbocki* Edwards 1986, *C. megalopsis* Allen 1976, *C. meridiana* Greenfield and Woods 1980, *C. mirationis* Tanaka 1917, *C. notata* Temminck and Schlegel 1842, *C. okamurai* Yamakawa and Randall 1989, *C. ovalis* Steindachner 1900, *C. pelloura* Randall and Allen 1982, *C. sanctae-helenae* Edwards 1987, *C. struhsakeri* Randall and Swerdlow 1973, *C. verater* Jordan and Metz 1912, and *C. woodsi* Burner and Arnam 1979. Of these 19 species, *C. planesi* is distinguished from all but four species (*C. fumea*, *C. notata*, *C. verater*, and *C. struhsakeri*) by the following combination of characters: dorsal rays XIV,12-13; anal rays II,12-13; pectoral rays 20; tubed lateral line scales 17; total gill rakers 27-30; axil of pectoral fin black; eye-sized bluish white spot (fades and darkens rapidly after death) on body at bases of posteriormost 6 to 8 segmented dorsal rays.

From these four species of *Chromis* (*C. fumea*, *C. notata*, *C. verater*, and *C. struhsakeri*) *C. planesi* is easily distinguished by its distinctive colour pattern: yellowish body with nine blue stripes, each composed of a series of small blue dots, extending from the head to the caudal fin base; pectoral and caudal fins yellow; and pelvic and anal fins dark brown to black. Among the 14-spined species of *Chromis*, the colour pattern of *C. planesi* is most similar to the colour patterns of *C. meridiana* and *C. struhsakeri*. *Chromis meridiana* lacks the blue body stripes and has a more slender body (body depth (BD) 2.1-2.3 in standard length (SL) versus BD 1.9-2.1 in SL for *C. planesi*). *Chromis struhsakeri* differs in lacking blue stripes, lacking yellow fins, having the white spot extending anteriorly from the top of the caudal peduncle only to about the base of the last dorsal segmented ray, and having a deeper body (BD 1.8-1.9 in SL).

Distribution and habitat

The only known specimens were collected from off

the north-eastern tip of Rapa Island (French Polynesia) at depths of 50-54 m from channels on the outer edge of a deep reef plateau, where corals, soft corals and sponges were abundant.

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Errata

Figure 2 (below) was removed from the article and printed on the back cover of the journal, but the subsequent figures were not re-numbered.



Fig. 2. Rapa Island, Austral Archipelago. Photo by J.T. Williams.

On pages 99 and 100, the USNM Paratypes: USNM 375193, are actually cataloged as USNM 375189. The numbers have been corrected in this PDF file.