SCI. MAR., 62 (3): 203-209 SCIENTIA MARINA 1998

Plectranthias lamillai, a new Anthiine fish species (Perciformes, Serranidae) from the Juan Fernández Archipelago, Chile*

JOSÉ RODRIGO ROJAS M. and GERMÁN PEQUEÑO R.

Instituto de Zoología, "Ernst F. Kilian", Universidad Austral de Chile. Casilla 567 Valdivia, Chile.
email: rrojas@valdivia.uca.uach.cl and gpequeno@valdivia.uca.uach.cl.

SUMMARY: *Plectranthias lamillai* new species, is described and illustrated as a new anthiine serranid fish from Alejandro Selkirk Island, the westernmost island of the Juan Fernández Archipelago, about 700 km west of Chile at 33º45'S, 80º51'W. The following combination of characters distinguishes it from all other serranids: dorsal fin rays X,16; principal caudal-fin rays 17 (8+9); pectoral-fin rays 16; gillrakers 28 (8+20); tubed lateral-line scales 40-41; 10 rows of scales on cheek; maxilla narrow and rounded; posterior margin of bony opercle with three spinous processes, the middle one largest; subopercle 2-6 small serrae; pseudobranch with 24 filaments; circumpeduncular scales 16; pelvic fin inserted beneath base of pectoral fin, the tip reaching a vertical through base of tenth dorsal-fin spine, falling short of the anus; a broad red bar from sixth dorsal-fin spine to base of fifth ray, extending to anus and above anal fin as a narrow band that widens on the peduncle and then bifurcates over the upper and lower margins of the caudal fin; rest of the caudal fin yellowish. Pectoral fins orange; pelvic and anal fins whitish.

Key words: Serranidae, Anthiinae, *Plectranthias lamillai* sp. nov., Juan Fernández Archipelago, Southeastern Pacific, Chile

INTRODUCTION

The fishes of the genus *Plectranthias* (Serranidae: Anthiinae), are small benthic species that generally occur on rocky bottoms at depths greater than those normally penetrated by scuba divers. None are of commercial importance, and most are poorly represented in museum collections (Randall and Shimizu, 1994).

This subfamily include a plethora of brightly coloured species of small to medium size fishes, that inhabit tropical to temperate seas worldwide. Most species feed on zooplankton, ocurr in aggregations and are protogynous hermaphrodites (Anderson *et al*., 1990). We have not seen published data for *Plectranthias*.

Two groups may be tentatively recognized: a tropical group characterized by 13 branched caudal rays, two predorsal bones, dorsal and anal pterygiophores bisegmental, and scales with one marginal row of alternating large and small pointed cteni (e.g. *Anthias* Bloch, *Holanthias* Günther and *Pseudanthias* Bleeker); and a predominantly temperate group characterized by 15 branched caudal fin rays, three predorsal bones, posterior anal and sometimes also posterior dorsal-fin pterygiophores trisegmental, and scales with two rows of pointed cteni of approximately equal size (e.g. *Caesioperca* Castelnau, *Lepidoperca* Regan and *Plectranthias* Bleeker) (Roberts, 1989).

*Received September 7, 1997. Accepted March 20, 1998

Randall (1980) revised the anthiine fish genus *Plectranthias*. He placed *Sayonara, Isobuna, Xenanthias, Pteranthias, Zalanthias, Serranops, Pelontrus,* and *Zacallanthias* in the synonymy of *Plectranthias,* and added that this revision must be considered preliminary because of the lack of material of so many of the species and the knowledge that more new species remained to be described. Since Randall's 1980 revision, 14 nominal new species have been described including two species from the southeastern Pacific: *P. exsul* Heemstra and Anderson, 1983; and *P. parini* Anderson and Randall, 1991 (Randall, 1996)

Field work carried out through November and December 1996 by the Instituto de Zoología, Universidad Austral de Chile (IZUA) at Alejandro Selkirk Island, the westernmost island of the Juan Fernandez Archipelago (about 700 km west of Chile 33º45'S,80º51'W) (Fig. 1), resulted in the collection of one specimen of the genus *Plectranthias*. This specimen represents a new species, which is described here.

METHODOLOGY

Measurements and counts of body parts are a combination of the methods of Randall (1980), Roberts (1989) and Anderson *et al*., (1990) except as indicated below. The count of the scales above the lateral line to the origin of the dorsal fin was made in a straight vertical line above the third or fourth lateral-line scale to the base of the first dorsal spine. A small scale is present at the base of this spine; this was counted as one. Gillrakers and pseudobranchial filaments were counted on the left side. Measurements were made with needlepoint dial calipers to the nearest 0.1 mm. Most measurements are presented as percentages of the standard length

(SL), but some are given as quotients of head length (HL) or orbital diameter (OD). Osteological data are from radiographs. Formula for configuration of predorsal bones, anterior neural spines, and anterior dorsal pterygiophores follows Ahlstrom *et al*., (1976). The first vertebra with a haemal spine was considered the first caudal vertebra; the urostylar vertebra, the last. In remarks, data for the holotype of *P. parini* are followed in parentheses, by those for the paratype, when different. Data for the holotype of *P. exsul* are followed in parentheses by those for the other material examined, when different. Institutional abbreviations are as listed in Leviton *et al*., (1985) and Pequeño (1995).

The holotype is deposited in the Museo Nacional de Historia Natural de Chile, under ichthyological catalogue number 7055.

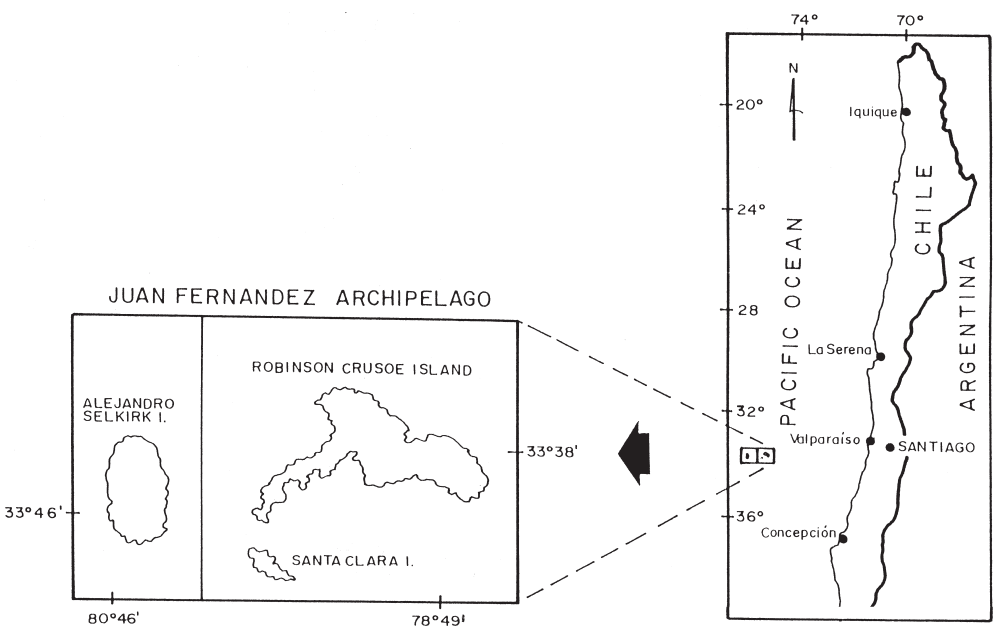

FIG. 1. – Juan Fernández Archipelago, Southeastern Pacific Ocean,Chile.

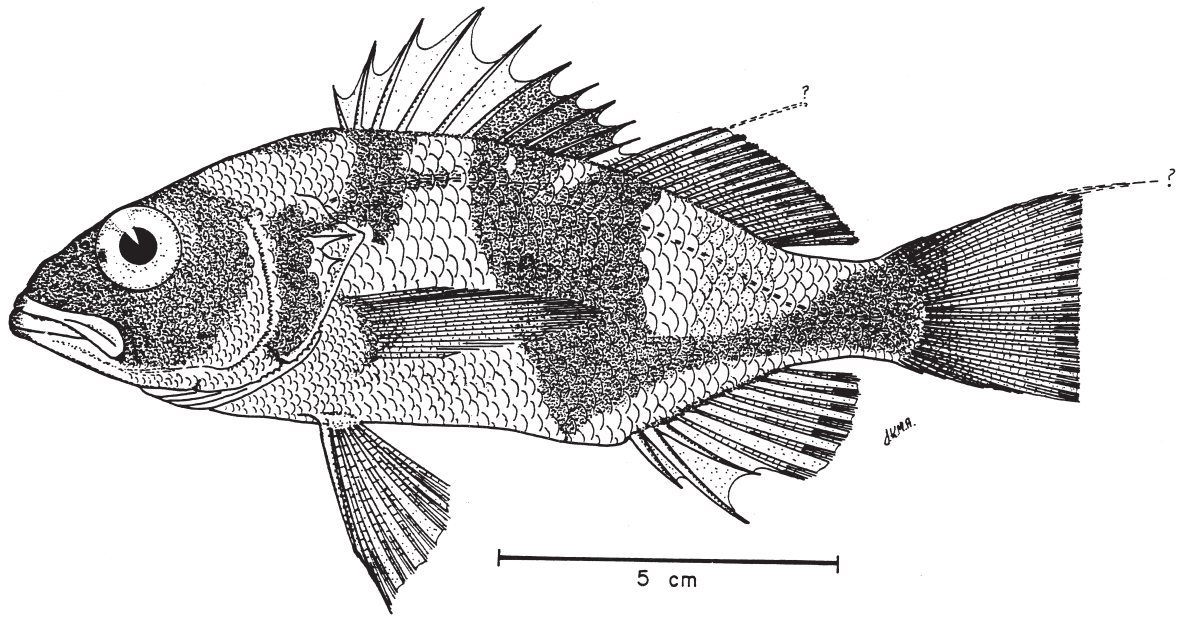

FIG. 2. – Holotype of *Plectranthias lamillai* sp. nov. MNHNC P. 7055, 139.6 mm SL, from Alejandro Selkirk Island 33º45'S, 80º51'W (Juan Fernández Archipelago), Chile.

RESULTS

Plectranthias lamillai sp. nov.
(Fig. 2; Table 1).

Holotype: MNHNC P.7055, 139.6 mm SL, 26 Nov 1996, Alejandro Selkirk Island 33º45'S, 80º51'W (Juan Fernández Archipelago), 180 to 200 m, hook and line.

Other Material Examined: *Plectranthias parini* BPBM 33460, 174.0 mm SL, 20 Feb. 1986, Easter Island (27ºS, 109.2º W), 230 m, hook and line.
Plectranthias exsul IZUA-PM 1134, 149.7-150.4 mm SL, 22 Sep. 1984, Robinson Crusoe Island (33º77'S, 78º53'W), hook and line. MNHNC.P 6766, 143.9 mm SL, Mar. 1989, Robinson Crusoe Island (33º77'S, 78º53'W), 8 m, hook and line. BPBM 29400, 37.6 mm SL, 4 Oct. 1980, Southeast Pacific (25º37'S, 85º26'W), 190 m trawl R/V "Ikhtiandr".

Diagnosis

Dorsal-fins rays X,16; fifth dorsal spine longest. Anal-fin rays III, 7 (branched) middle one longest. Pectoral rays 16 (dorsal and ventralmost rays unbranched). Pelvic fins inserted beneath base of pectoral fin, the tip reaching a vertical through base of tenth dorsal-fin spine, falling short of origin of the anus. Principal caudal-fin rays 17 (dorsalmost and ventralmost unbranched); posterior margin of caudal fin probably truncate (tips of rays broken). Gillrakers, on first gill arch 8+20 total 28 (both sides). Scales ctenoid, with rows of ctenial bases. Tubed lateral-line scales 40 left side (41 right). Circumpeduncular scales 16. Rows of cheek scales 10. No scales on lateral aspect of snout, maxilla, premaxilla, dentary, branchiostegal membranes or gular region. Maxilla shape very narrow and very rounded. Posterior margin of bony opercle with three spinous processes, middle one largest, uppermost spine blunt and nearly obtuse. Preopercle without antrorse spines, with 41 (left) and 44 (right) small serrae. Interopercle with 4 (both sides) serrae. Subopercle with 6 (left) and 2 (right) small serrae. Interorbital region flattened. Pseudobranch with 24 filaments. Canine teeth present on both jaws. Vomerine teeth in chevron-shaped patch. Vertebrae 26 (10 precaudal + 16 caudal). Formula for configuration of predorsal (supraneural) bones, anterior neural spines, and anterior dorsal pterygiophores 0/0+0/2/1+1/1/1/. A broad vertical red bar from sixth dorsal-fin above spine to base of fifth dorsal-fin ray; extending down to anus and posteriorly narrowing above anal-fin, broadering on peduncle and extending over the upper and lower rays of caudal-fin.

Description

Measurements and counts are shown in Table 1. Dorsal-fin rays X, 16, fifth dorsal spine longest, 2.4 times length of first spine. Anal-fin rays III, 7 (branched), second spine longest. Pectoral rays 16 (dorsal and ventralmost rays unbranched). Mouth nearly terminal; the lower jaw exceeding slightly upper jaw. Premaxillae protrusible. Maxilla reach-

TABLE 1. – Proportional measurements and counts of *Plectranthias lamillai* sp. nov., expressed as percentages of standard length. Data on holotypes of *P. exsul* and *P. parini* are from Heemstra and Anderson (1983) and Anderson and Randall (1991) respectively. The asterisk means broken.

	Holotype	Other Material Examined					
Measurement	*P. lamillai* MNHNC P 7055	*P. parini* USNM 312925	*P. parini* BPBM 33460	*P. exsul* ANSP 127843	*P. exsul* IZUA-PM 1134	*P. exsul* MNHNCP 6766	*P. exsul* BPBM 29400
Standard length (mm)	139.6	84.7	174.0	158.0	149.7-150.4	143.9	37.6
Head length	42.0	39.4	39.7	38.2	36.9-39.0	39.7	35.8
Snout length	10.3	8.1	8.3	10.3	9.9-10.1	10.0	5.1
Orbit diameter	9.4	11.9	11.8	9.5	8.6-8.8	9.3	13.8
Postorbital length of head	16.7	19.4	19.2	18.6	18.0-18.1	17.9	18.1
Upper jaw length	18.1	18.9	19.3	19.0	18.2-18.3	18.3	16.8
Maxilla width	4.9	5.0	5.5	5.7	5.3-6.0	6.1	4.7
Interorbital width	7.0	4.8	5.0	6.5	6.3-6.5	6.5	6.5
Body depth	31.0	35.8	34.3	35.2	35.2-35.4	35.8	32.0
Body width	13.4	17.8	16.8	-	14.6	18.3	14.1
Predorsal length	40.2	40.4	39.1	37.9	39.1-39.5	39.5	38.9
Preanal length	70.0	68.5	67.1	64.7	66.9-68.1	66.4	62.8
Prepelvic length	42.5	37.7	47.6	-	41.4-50.0	41.3	35.4
Dorsal-fin base length	48.9	56.1	48.8	-	53.0-53.3	53.2	49.2
Anal-fin base length	14.6	16.8	15.2	-	18.3-18.3	18.2	16.6
Anal fin length	26.1	33.8	34.3	ca. 30.8	29.8-30.8	30.2	27.6
Pelvic fin length	22.8	28.9	22.1	23.4	22.8-23.9	23.1	22.1
Pectoral fin length	28.1	36.7	28.6	33.2	30.4-31.1	31.2	30.1
Caudal peduncle depth	11.1	11.7	11.6	11.2	12.0-12.4	13.1	11.8
Caudal peduncle length	16.7	19.7	*	22.7	22.6-22.8	22.4	18.9
Upper caudal-fin lobe length	*	ca.35.5	*	ca.29.9	29.1-29.5	29.3	*
Lower caudal-fin lobe length	*	26.6	*	ca.24.0	25.5-25.9	24.8	*
First anal spine length	10.1	10.5	7.9	9.8	6.7-7.9	9.4	9.7
Second anal spine length	16.4	19.2	13.7	18.7	15.4-16.0	18.8	16.2
Third anal spine length	14.2	17.9	11.8	15.7	14.6	14.9	13.8
First dorsal spine length	7.4	5.8	5.5	-	6.6-6.9	6.6	6.6
Second dorsal spine length	10.2	-	8.1	-	9.9-10.8	10.6	10.5
Third dorsal spine length	14.9	13.7	11.3	16.8	14.0-14.7	14.0	14.3
Fourth dorsal spine length	17.1	17.9	13.1	18.8	17.0-18.3	17.5	18.1
Fifth dorsal spine length	17.7	18.3	13.0	19.9	17.0-17.6	17.8	18.3
Tenth dorsal spine length	7.9	12.0	11.9	-	7.4-7.5	7.4	6.9
Longest dorsal spine length	17.7 (5th)	18.3 (5th)	13.1 (4th)	19.9 (5th)	17.0-17.6(5th)	17.8 (5th)	18.3 (5th)
Longest dorsal soft ray length	*	ca. 34.5 (2nd)	ca.33.0 (2nd)	-	ca. 26.6 (2nd)	26.2 (2nd)	*
Longest anal soft ray length	*	25.4 (2nd)	ca.27.7 (2nd)	-	24.9-25.9 (2nd)	24.8 (2nd)	*
Pelvic spine length	15.1	17.8	12.9	-	15.7-16.4	15.9	*
Counts							
Lateral-line scales (left)-(right)	40-41	37-40	38-39	40-46	44-48	45	damaged
Gillrakers (upper)	7	8	8	8-10	8	8	9
Gillrakers (lower)	21	18	18	18-21	18	18	20
Pseudobranchs	24	25	38	23-31	25-27	27	damaged
Pectoral rays	16	16	15	16	15	15	16

ing vertical through first quarter of eye. Posteroventral corner of maxilla with little rounded projection. Anterior naris oblique in a tube short anteriorly and well developed laterally; posterior naris subcircular, larger than anterior naris. Orbital margin without fleshy papillae. Premaxilla with two rows of small conical teeth. Band broadest anterior end of jaws near symphysial diastema. Two robust canine teeth (left) and one canine (right) near posterior end of upper jaw. Dentary with two rows of small conical teeth extending from near posterior end of bone to about middle of jaws; at middle of each side of lower jaw three robust and incurved canines (two on right side). Vomerine teeth in a chevron-shaped band of about two rows; palatine teeth in two rows. Inner medial teeth on each side of symphysis of upper and lower jaws elongated. Tongue and pterygoids without teeth; tongue slender and short with rounded tip. Including rudiment, first gill arch with 8+20 gillrakers (both sides), longest gillraker slightly longer than longest gill filament. Branchiostegal rays 7. Opercle flap projecting slightly upward from region of middle opercular spine; upper spine blunt and nearly obtuse. Origin of dorsal fin above third or fourth lateral line scale. Dorsal fin single and continuous, not divided at base between spinous and soft rayed parts. Dorsal-fin base length 2 in SL.

Origin of anal fin beneath anterior soft portion of dorsal fin. Second spine of anal fin about 1.6 times length of first anal spine and 1.2 times length of third anal spine. Anal-fin base length 6.8 in SL. Pectoral fin pointed, the middle rays longest, reaching vertical through base of third dorsal soft ray and base of first anal spine. Pectoral fin length 3.5 in SL. Pelvic fin inserted beneath base of pectoral fin, the tip reaching a vertical through base of last dorsal spine, falling close to short of the anus. Pelvic fin length 4.4 in SL. Caudal rays mostly broken. Body depth 3.2 in SL, body width 7.4 in SL and 2.3 in depth. Snout length 4.0 in HL. Head length 2.4 in SL. Orbital diameter 4.4 in HL. Width of maxilla 1.9 in OD. Width of suborbital 4.1 in OD. Upper jaw length 5.5 in SL. Fifth dorsal spine, 2.4 in HL. Second anal spine 2.6 in HL. Length of caudal peduncle 2.5 in HL. Interorbital width 6.0 in HL. Lateral line complete, running parallel to dorsal body contour below dorsal fin, curving to near mid-lateral axis of body on caudal peduncle. The first three tubes in lateral line scales with 2-3 branches (both sides). Scales ctenoid; tubed lateral line scales 40 on left side (41 right side). Circumpeduncular scales 16. Rows of cheek scales 10 (both sides). No scales on lateral aspect of snout, maxilla, premaxilla, dentary, branchiostegal membranes, gular region or mid-dorsal area nearly to upper lip. Interorbital region, preopercle, opercle, subopercle and interopercle scaled. Three scales above lateral line to origin of dorsal fin. Two rows of large scales between the highest arched portion of lateral line and spinosus portion of dorsal fin. Fifteen scales from lateral line to origin of anal-fin origin (both sides). Proximal half on soft dorsal and anal fins scaly; pectoral, pelvic and caudal fins scaled basally.

Color of holotype in alcohol

Body and head whitish, fins mostly pale to straw-colored; no distinctive pigmentation remaining on fins.

Coloration of holotype when fresh

Body pale yellowish, with a broad red bar from sixth dorsal-fin spine to base of fifth ray of dorsal fin, extending to anus and above anal fin as a narrow band that widens on the peduncle and then bifurcates over the upper and lower margins of the caudal fin; rest of the caudal fin yellowish. An irregular red blotch on nape and below first three dorsal-fin spines, extending to opercle, subopercle, cheek, snout and front of upper jaw; maxilla yellow; lower jaw reddish. Rim of pupil yellow; iris dark with reddish spots. Pectoral fins orange; pelvic an anal fins whitish.

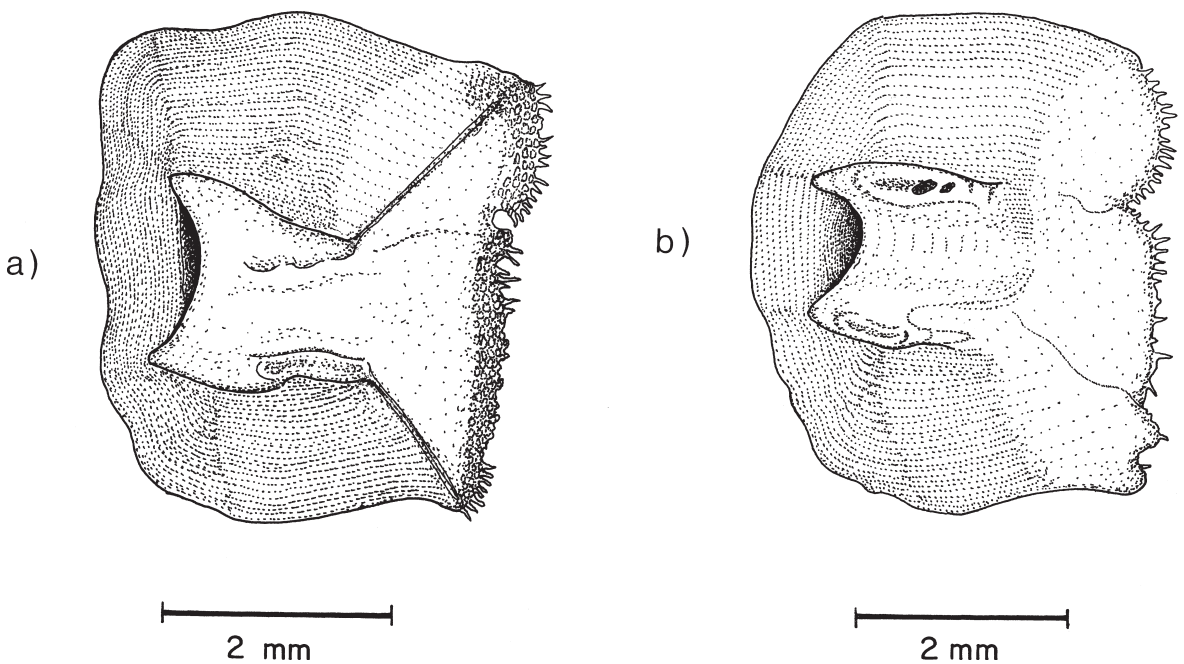

FIG. 3. – Anterior lateral-line scales. (a) *P. lamillai* MNHNC P. 7055, (b) *P. exsul* IZUA-PM 1134 (149.7 mm SL).

Etymology

We have pleasure in naming this new species in honor of Prof. Julio Lamilla (Instituto de Zoología "Ernst F. Kilian", Universidad Austral de Chile) in recognition of his contributions to Chilean ichthyology.

Distribution

Plectranthias lamillai is known only from the type locality in the Alejandro Selkirk Island in the eastern South Pacific, about 700 km west of the Valparaíso Bay, Chile at 33º45'S, 80º51'W.

Comments

Plectranthias lamillai has more lateral-line scales (40-41) and more gillrakers (8+20) than any other species in the genus except *P. exsul* (Heemstra and Anderson, 1983) from Juan Fernández Islands and Nazca Submarine Ridge and *P. parini* (Anderson and Randall, 1991) from the Salas y Gómez Submarine ridge and Easter Island. *P. lamillai* is separated easily from *P. parini* because it has more tubed lateral-line scales (40-41 vs 37-40), more gillrakers (total on first arch 28 vs 26), fewer pseudobranch filaments 24 vs 25 (38), more rows of cheek scales (10 vs 9), and fewer serrae on subopercule 2-6 vs 8-19. The pectoral fin in *P. lamillai* reaches vertical at the base of the first anal-fin spine, while in *P. parini* this fin reaches a vertical through the base of the third anal-fin ray (Anderson and Randall, 1991). In *P. lamillai* the maxilla reaches a vertical through the first quarter of eye, while in *P. parini* it reaches a vertical through posterior border of eye. In *P. lamillai* the dorsal and ventral-most procurrent caudal-fin rays are covered by scales (not shown in Figure 2), but naked in *P. parini* (Anderson and Randall, 1991).

P. lamillai differs from *P. exsul* in having the maxilla shape more narrow and rounded. Circumpeduncular scales in *P. lamillai* are 16 vs 18-22 in *P. exsul*. *P. lamillai* has the tubes of the anterior lateral-line scales branched while in *P. exsul* the tubes are simple (Fig. 3). Number of scales in a vertical line from dorsal-fin origin to lateral line 3 (*P. lamillai*) vs 4 or 5 (5) (*P. exsul*). In *P. exsul* the maxilla reaches or almost reaches a vertical through posterior border of orbit while in *P. lamillai* the maxilla only reaches vertical through first quarter of eye. In *P. lamillai* the dorsal and ventral-most procurrent caudal-fin rays are covered by scales, naked in *P. exsul* (Heemstra and Anderson, 1983). The other material examined for *P. exsul* has more serrae on preopercle 52-57 vs 41-44; more serrae on interopercle 6-7 vs 4 and subopercle 11-13 vs 2-6 and more tubed lateral-line scales (45-48 vs 40-41).

Other *Plectranthias* species with similar counts of lateral-line scales are *P. kelloggi* (Jordan and Evermann, 1903) (32-38), *P. taylori* (Randall, 1980) (40-41) and *P. randalli* (Fourmanoir and Rivaton, 1980) (39). *P. lamillai,* with a total of 28 gillrakers on the first gill arch, can be distinguished from the three above species by counts of the total number of gillrakers on the first gill arch: *P. taylori* and *P. randalli* (each with 20 or fewer) and *P. kelloggi* with 20-24.

P. lamillai differs from *P. exsul* and *P. parini* in colour pattern. Alive *P. parini* has two broad red bars on body, one below posterior half of spinous portion of dorsal fin and one below posterior half of soft portion of dorsal fin and adjacent to caudal peduncle (Randall 1996). *P. exsul* has a broad oblique red band below posterior half of soft portion of dorsal fin, narrowing towards posterior end at ventral edge of caudal peduncle (Randall 1996) and *P. lamillai* has vertical broad red bar from sixth dorsal-fin spine to base of fifth ray, extending to anus and above anal fin as a narrow band that widens on the peduncle and then bifurcates over the upper and lower margins of the caudal fin; rest of the caudal fin yellowish. A red blotch on nape and below first three dorsal-fin spines, extending to opercle, subopercle, cheek, snout and front of upper jaw; maxilla yellow; lower jaw reddish.

ACKNOWLEDGEMENTS

We are grateful to fishermen from Alejandro Selkirk Island for providing the new *Plectranthias* fish. Dr. Roberto Meléndez and Mr. Augusto Cornejo Curators of fishes at the Museo Nacional de Historia Natural of Chile allowed the examination of specimens of *P. exsul* under their care and gave facilities for the use of the laboratory. Dr. John Randall (Bernice P. Bishop Museum, Hawaii, USA) provided useful opinions about new species and helped with bibliography. Dr. Arnold Y. Suzumoto (Bernice P. Bishop Museum, Hawaii, USA) sent on loan paratype of *P. parini* and Dr. Guillermo Herrera (LACM, USA) provided bibliography. We also are grateful for helpful comments from Dr. P. H. Heemstra (Grahamstown, South Africa). This research

was partially supported by Deutscher Akademischer Austauschdienst (DAAD), which provided a scholarship for graduate studies of the first author, the Universidad Austral de Chile (Project S-96-04) and National Geographic Society (Grant 5257-96).

REFERENCES

Ahlstrom, E. H., J. L. Butler and B. Y. Sumida. – 1976. Pelagic stromateoid fishes (Pisces, Perciformes) of the eastern Pacific: kinds, distributions, and early life histories and observations on five of these from the northwest Atlantic. *Bull. Mar. Sci.*, 26: 285-402.

Anderson, W. D. Jr., N. V. Parin and J. E. Randall. – 1990. A new genus and species of anthiine fish (Pisces: Serranidae) from the eastern south Pacific with comments on anthiine relationships. *Proc. Biol. Soc. Wash.,* 103 (4): 922-930.

Anderson, W. D. Jr. and J. E. Randall. – 1991. A new species of the anthiine genus *Plectranthias* (Pisces: Serranidae) from the Sala y Gomez ridge in the eastern South Pacific, with comments on *P. exsul*. *Proc. Biol. Soc. Wash.,* 104: 335-343.

Fourmanoir, P. and J. Rivaton. – 1980. *Plectranthias randalli* n. sp., un nouveau serranidé (anthiiné) du sud-ouest Pacifique. *Revue fr. Aquariol.*, 7: 27-28.

Heemstra, P. C. and W. D. Anderson, Jr. – 1983. A new species of the serranid fish genus *Plectranthias* (Pisces: Perciformes) from the southeastern Pacific Ocean, with comments on the genus *Ellerkeldia*. *Proc. Biol. Soc. Wash.,* 96: 632-637.

Jordan, D. S. and B. W. Evermann. – 1903. Descriptions of new genera and species of fishes from the Hawaiian Islands. *Bull. U. S. Fish Comm.,* 22: 161-208.

Leviton, A. E., R. H. Gibbs, Jr., E. Heal and C. E. Dawson. – 1985. Standards in Herpetology and Ichthyology: part I. Standard symbolic codes for institutional resource collections in herpetology and ichthyology. *Copeia,* 1985: 802-832.

Pequeño, G. – 1995. Peces. In: J. A. Simonetti, M.T.K. Arroyo, A. E. Spottorno and E. Lozada (eds.), *Diversidad Biológica en Chile*, pp. 302-313 Comité Nacional de Diversidad Biológica, Comisión Nacional de Investigación Científica y Tecnológica (CONICYT). Santiago, Chile.

Randall, J. E. – 1980. Revision of the fish genus *Plectranthias* (Serranidae: Anthiinae) with descriptions of 13 new species. *Micronesica,* 16: 101-187.

Randall, J. E. – 1996. Two new anthiine fishes of the genus *Plectranthias* (Perciformes: Serranidae), with a key to the species. *Micronesica,* 29: 113-131.

Randall, J. E. and T. Shimizu. – 1994. *Plectranthias pelicieri,* a new anthiine fish (Perciformes: Serranidae) from Mauritius, with notes on *P. gardineri*. *Japan. J. Ichthyol.*, 41: 109-115.

Roberts, C. D. – 1989. A revision of New Zealand and Australian orange perches (Teleostei: Serranidae) previously referred to *Lepidoperca pulchella* (Waite) with description of a new species of *Lepidoperca* from New Zealand. *J. Nat. Hist.*, 23: 557-589.

Scient. ed.: E. Macpherson.