

## **CURRICULUM VITAE**

Rubén Escribano Veloso

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### **EXPERIENCIA ACADEMICA Y PROFESIONAL**

- 2002–presente: Profesor Asociado, Departamento de Oceanografía, Universidad de Concepción.
- 2007-presente: Profesor Adjunto, Programa de Doctorado en Ciencias Marinas Aplicadas, Universidad de Antofagasta, Chile.
- 2002-present: Director, Estación de Biología Marina en Dichato, Departamento de Oceanografía, Universidad de Concepción
- 1992–2002: Profesor Asociado, Facultad de Recursos del Mar, Universidad de Antofagasta, Chile.
- 1997–1999: Director, Instituto de Investigaciones Oceanológicas, Universidad de Antofagasta, Chile.
- 1990–1992: Posición Post-doctoral, Department of Biology, Dalhousie University, Canada.

### **SERVICIOS PROFESIONALES**

- 2003–2009: Miembro del Scientific Steering Committee of GLOBEC (Global Ocean Ecosystem Dynamics).
- 2009-presente: International Advisor, MALASPINA Expedition.
- 2010-presente: International Advisor, TARA Expedition.
- 2004–2009: Member of the Scientific Steering Committee, Census of Marine Zooplankton (CmarZ), Census of Marine Life Program (CoML).
- 2003–2007: Member of the Earth Sciences Study Group, FONDECYT/CONICYT, Chile.

2002–2006: President of the South American Committee for Census of Marine Life Program.

2010-present: Member Editorial Board OCEANIDES (CICIMAR)

2006-present: Member Editorial Board Journal of Plankton Research

## **POST-DOCTORADOS**

Dr. Christian Vargas (2003–2005). Ph.D. from the University of Concepción, Chile. Presently Assistant Professor at EULA Center, University of Concepción, Chile.

## **ESTUDIANTES DE POSTGRADO**

Alan Giraldo (Ph.D., U. of Concepcion, 2000). Presently Associate Professor at University Univalle, Cali, Colombia.

Pamela Hidalgo (Ph.D., U. of Concepcion, 2005). Presently Research Associate, COPAS Center, University of Concepción, Chile.

Liliana Herrera (Ph.D., U. of Concepcion, 2007). Presently Assistant Professor, University Arturo Prat, Chile.

Winston Palma (Ph.D., University of Concepcion, 2008) Presently Associate Professor, University Arturo Prat, Chile.

Victor Aguilera (Ph.D., University of Concepcion, 2010).

Karen Manríquez (MSc, University of Concepcion, 2009).

Sandra Cahuin, (Ph.D., U. of Concepcion, in progress).

Ramiro Riquelme (Ph.D, University of Concepción, in progress).

Paula Mendoza (MSc. University of Concepcion, in progress)

Katty Donoso (MSc. University of Concepcion, in progress)

## **CURSOS DE POSTGRADO**

2007-present: Lecturer (Collaborator) Fundamental Course in Biological Oceanography. Ph.D. Program in Oceanography, University of Concepción, Chile.

2008-II Semester: Profesor Curso TOPAS (Tópicos Avanzados de Oceanografía en el Pacífico Sur Oriental). Universidad Austral de Chile, Valdivia, Chile.

2007-Semestre II: Profesor Adjunto Programa de Doctorado en Ciencias Aplicadas. Mención Sistemas Marinos Costeros. Universidad de Antofagasta

2006-Semestre II: Profesor Adjunto Programa de Doctorado en Ciencias Aplicadas. Mención Sistemas Marinos Costeros. Universidad de Antofagasta.

2005-II Semester: Profesor Curso TOPAS (Tópicos Avanzados de Oceanografía en el Pacífico Sur Oriental). Universidad del Mar, Viña del Mar, Chile.

2004-II Semester: Profesor Curso TOPAS (Tópicos Avanzados de Oceanografía en el Pacífico Sur Oriental). Universidad Austral de Chile, Valdivia, septiembre 2004.

2003-Semestre II: Profesor Curso TOPAS (Tópicos Avanzados de Oceanografía en el Pacífico Sur Oriental). Universidad del Mar, Viña del Mar, septiembre 2004.

2002-Semestre II. Profesor Curso: Tópicos Avanzados en Oceanografía del Pacífico Sur Oriental (TOPAS). Universidad Austral del Chile, Valdivia, agosto 2002.

## **ESTUDIANTES DE PREGRADO**

2010- Supervisor, Marine Biology Thesis, Universidad de Concepción: Claudia Beltrán

2010- Supervisor, Marine Biology Thesis, Universidad de Concepción: Nicolás Bralic

2009- Supervisor, Marine Biology Thesis, Universidad de Concepción: Pamela Pino Pinuer

2009- Supervisor, Marine Biology Thesis, Universidad de Concepción: Sonia Yañez

2009- Supervisor, Marine Biology Thesis, Universidad de Concepción:Manuela Pérez Aragón.

2007- Supervisor, Marine Biology Thesis, Universidad de Concepción: Erika Jorquera

2006- Supervisor, Marine Biology Thesis, Universidad Austral de Chile: Carola Aparicio

2006- Supervisor, Marine Biology Thesis, Universidad de Concepción: Rita Riquelme

2006- Supervisor, Marine Biology Thesis, Universidad de Concepción: Claudia Perez

2006- Supervisor, Marine Biology Thesis, Universidad de Concepción: Katty Donoso

2006- Supervisor, Marine Biology Thesis, Universidad Católica Ssa. Concepción: Paula Mendoza

2005- Supervisor, Marine Biology Thesis, Universidad de Concepción: Marcelo Fuentes

2003- Supervisor, Marine Biology Thesis, Universidad de Concepción: Alvaro Araneda

2002- Supervisor, Marine Biology Thesis, Universidad de Concepción: Rodrigo Fuentes

2002- Supervisor, Marine Biology Thesis, Universidad de Antofagasta: Mauricio Sánchez

2000- Supervisor, Marine Biology Thesis, Universidad de Concepción: Cecilia Torres González.

1999- Supervisor, Marine Biology Thesis, Universidad de Antofagasta: Diego Fernández Apablaza.

1999- Supervisor, Marine Biology Thesis, Universidad de Antofagasta: Jorge Rodríguez Pinilla

1997- Supervisor, Marine Biology Thesis, Universidad de Antofagasta: Pamela Hidalgo Díaz.

1996- Supervisor, Marine Biology Thesis, Universidad Arturo Prat: Roberto Venegas

1995- Supervisor, Marine Biology Thesis, Universidad de Antofagasta: Mauricio Bringas.

1994- Supervisor, Marine Biology Thesis, Universidad de Antofagasta: Claudia Iribarren Yeza

1992 - Supervisor, Marine Biology Thesis, Universidad de Antofagasta: Pamela Araya

1992- Supervisor, Marine Biology Thesis, Universidad de Antofagasta: Alejandra Malinarich

### **CURSOS DE PREGRADO**

2003-Present: I Semesters: Pelagic Systems, Marine Biology, University of Concepción

2007-Present: II Semesters: Aquatic Ecology, Biotechnology and Engineering in Aquaculture, University of Concepción.

2008- Present: II Semesters: Ecology and Taxonomy of Copepoda, Marine Biology, University of Concepción.

2004-Present: II Semesters: Workshop on Pelagic Systems (collaborator teacher), Marine Biology, University of Concepción

2003-2004 Semesters II: Marine Ecology, Marine Biology, University of Concepción.

### **PROYECTOS DE INVESTIGACION (ULTIMOS 5 AÑOS)**

2005-2010 Project Pacific Sub-node OBIS (Ocean Biogeographic Information System (<http://ron.udec.cl>)). Funding Rutgers University, USA. IP Chile.

2004-2008 Climate variability and The El Niño Southern Oscillation (CENSOR Project). Funded by The European Union Commission, FP6 INCO-DEV-1. IP Workpackage 2.

2003-2007 Census of Marine Life South America (COMSABIODIV). Alfred P. Sloan Foundation. IP

2003-2004 International Collaboration Project CONICYT-CONICET (Argentina). CI

2007-2012 FONDAP-CONICYT COPAS Centre Phase II (COPAS). Research Program 3. IP

2008-2011 Variability in Zooplankton Biomass and Community Structure in the 4-D Oceanographic environment: Implications for estimates of C fluxes in the upwelling system. IP, FONDECYT1080037.

2009-2011 Bio-oceanographic Monitoring of Regiones VIII and X, FIP 2009-36. Fishery Research Fund of Chile. CI

2007-2009 Zooplankton Biomass and Fisheries sustainability of Central/southern Chile. CI, FIP 2007-45.

2007-2008 The impact of the oxygen minimum zone on biological resources in northern Chile. CI, FIP 2007-33.

2007-2008 Bio-oceanographic Monitoring of Regiones VIII and X, FIP 2009-36. Fishery Research Fund of Chile. CI.

2002-2007 FONDAP-CONICYT COPAS Centre Phase I (COPAS). IP, Research Program 3.

2006-2007 Bio-oceanographic Monitoring of Regiones VIII and X, FIP 2009-36. Fishery Research Fund of Chile. CI

2005-2006 Bio-oceanographic Monitoring of Regiones VIII and X, FIP 2009-36. Fishery Research Fund of Chile. CI

## **PUBLICACIONES**

1. Vergara, O., Calliari, D., Tiselius, P., Escribano, R., González, M.L., Soto, S. 2010. Functional response of *Sagitta setosa* and *Mnemiopsis leidyi* under variable food concentration in the Gullmar fjord, Sweden". *Rvta Biología Marina y Oceanografía*, 45(1), 00,00.
2. Escribano, R., Poulet, S. 2010. Hard times for marine sciences in Chile. *Marine Biology* (in press).
3. Isla, E., Homs, P., Sañé, E., Escribano, R., Claramunt, G., Teixidó, E. 2010. Biochemical composition of seston in two upwelling sites within the Humboldt Current System (21°S to 23°S): Summer conditions. *Journal of Marine Systems* 82: 61–71.
4. Aguilera, V. M., Donoso, K., Escribano, R. 2010. Reproductive performance of small-sized dominant copepods upon highly variable food resource in the coastal upwelling system off the Chilean Humboldt Current. *Marine Biology Research* (in press).
5. Eissler, Y., Letelier, J., Cuevas, L.A., Morales, C.E., Escribano, R. 2010. The microbial community in the coastal upwelling system off Concepción, Chile, 36°S, 2002-2003 period. *Revista de Biología Marina y Oceanografía* 45(1): 1-18.

6. Escribano, R., Pérez, C., 2009. Variability in fatty acids of two marine copepods and their prey field in the coastal upwelling zone off Chile. *Journal of the Marine Biology Association, UK*. doi:10.1017/S002531540999083.
7. Cahuin, S.M., Cubillos, L., Ñiquén, M., Escribano, R. 2009. Climatic regimes and the recruitment rate of anchoveta, *Engraulis ringens*, off Peru, *Estuarine Coastal and Shelf Sciences*. doi:10.1016/j.ecss.2009.07.027
8. Vargas, C., Martínez, R., Escribano, R., Lagos, N. 2009. The relative influence of food quantity, quality, and feeding behavior on zooplankton growth regulation in coastal food webs. *Journal of the Marine Biology Association, UK*. doi:10.1017/S0025315409990804.
9. Escribano, R., Hidalgo, P., Krautz, C. 2009. Zooplankton associated with the oxygen minimum zone system in the northern upwelling region of Chile during March 2000. *Deep Sea Research, Part II, The Oceanography of the eastern South Pacific*. 56: 1049-1060. doi: 10.1016/j.dsr2.2008.09.015
10. Manríquez, K., Escribano, R., Hidalgo, P. 2009. The influence of coastal upwelling on the mesozooplankton community structure in the coastal zone off Central/Southern Chile as assessed by Zoolmage analysis. *Journal of Plankton Research* 31, 1075-1088.
11. Aguilera, V., Escribano, R., Herrera, L. 2009. High frequency responses of nanoplankton and microplankton to wind-driven upwelling off northern Chile. *Journal of Marine Systems* 78: 124-135.
12. Giraldo, A., Escribano, R., Marín, V., Hidalgo, P. 2009. Coastal upwelling circulation and its influence on the population dynamics of *Calanus chilensis* (Brodski, 1959) off northern Chile (23° S). *Marine Biology Research*, 5: 244-256. DOI: 10.1080/17451000802425635
13. Huggett, J., Verheye, H., Escribano, R., Fairweather, T. 2009. Copepod biomass, size composition and production in the Southern Benguela: Spatio-temporal patterns of variation, and comparison with other eastern boundary upwelling systems. *Progress in Oceanography*, 83:197–207.
14. Escribano, R., Sabatini, M., Hidalgo, P. 2009. Crecimiento, desarrollo, fecundidad y producción del mesozooplancton. En.: Alder, V. & C.E. Morales (Eds.). *Manual de métodos para el estudio de los sistemas planctónicos marinos*. Editorial Eudeba, Bs. Aires.

15. Sabatini, M., Escribano, R., Hidalgo, P. 2009. Mesozooplankton. En.: Alder, V. & C.E. Morales (Eds.). Manual de métodos para el estudio de los sistemas planctónicos marinos. Editorial Eudeba, Bs. Aires.
16. Hidalgo, P. and Escribano, R. 2008. Comparative life cycles of two coexisting copepods, *Calanus chilensis* and *Centropages brachiatus*, in the upwelling zone off northern Chile (23° S). *Marine Biology*. 155, 429–442  
DOI 10.1007/s00227-008-1041-9
17. Escribano, R., Schneider, W. 2007. The Structure and Functioning of the Coastal Upwelling System off Central/south of Chile. *Progress in Oceanography*, 75: 343-346.
18. Escribano, R., Hidalgo, P., González, H.E., Giesecke, R., Riquelme-Bugueño, R. and K. Manríquez. 2007. Interannual and seasonal variability of metazooplankton in the Central/south upwelling region off Chile. *Progress in Oceanography*, Special Issue “The Structure and Functioning of the Coastal Upwelling System off Central/south of Chile”. Escribano, R & W. Schneider (Eds.). 75: 470-485
19. Anabalón, V., C.E. Morales, R. Escribano, M. Angélica Varas. The response of nano- and micro-planktonic assemblages in the upper layer (0-30 m) to varying oceanographic conditions in the upwelling area off Concepción, central Chile. 2007. *Progress in Oceanography* on “The structure and functioning of the coastal upwelling ecosystem off Concepción (central/south Chile)”. 75: 396-414.
20. Hidalgo, P. and R. Escribano. The coupling of life cycles of the copepods *Calanus chilensis* and *Centropages brachiatus* to upwelling variability in the Central-South upwelling region off Chile. 2007. *Progress in Oceanography*, Special Issue “The Structure and Functioning of the Coastal Upwelling System off Central/south of Chile”. Escribano, R & W. Schneider (Eds.) 75: 501-517.
21. Poulet, S., Escribano, R., Hidalgo, P., Cueff, A., , Wichard, T., Aguilera, V., Vargas, C.A, & G. Ponhert. 2007. Collapse of *Calanus chilensis* reproduction in a marine environment with high diatom abundance. *Journal of Experimental Marine Biology and Ecology* 353:187-199.
22. Vargas C., R. Martínez, L. Cuevas, M. Pavez, C. Cartes, H. E. González, R. Escribano & G. Daneri. 2007. Interplay among microbial, omnivorous, and gelatinous metazoan food webs in a highly productive coastal upwelling area. *Limnology & Oceanography* 52, 1495-1510.
23. Thiel, M., Macaya, E., Acuña, E., Arntz, W., Bastias, H., Brokordt, K., Camus, P., Castilla, J.C. Castro, Cortés, M, Dumont, C.P., Escribano, R.,



Fernández, M., Lancellotti, D.A., Fajardo, J.A., Gaymer, C.F., Gomez, I., González, A.E., Gonzalez, H.E., Haye, P.A., Illanes, J-E., Iriarte, J.L, Luna-Jorquera, G., Luxoro, C. Manriquez, P.H., Marín, V., Muñoz, P., Navarrete, S.A., Perez, E., Poulin, E., Sellanes, J., Sepúlveda, A., Stotz, W., Tala, F., Thomas, A., Vargas, C.A., Vasquez, J.A. Vega, A. 2007. The Humboldt Current System of northern-central Chile oceanographic processes, ecological interactions and socio-economic feedback. *Marine Biology & Oceanography*, Annual Review 45: 195-344.

24. Vargas, C., Escribano, R and S. Poulet. 2006. Phytoplankton diversity determines time-windows for successful zooplankton reproductive pulses. *Ecology* 87, 2992-2999.
25. Giraldo, A., Escribano, R., Marín, V. 2006. A field test of temperature effects on ecophysiological responses of copepodids *Calanus chilensis* during coastal upwelling in northern Chile. *Continental Shelf Research* 26, 1307-1315.
26. Thamdrup, B., Dalsgaard, T., Jensen, M. M., Ulloa, O., Farías, L. and R. Escribano. 2006. Anaerobic ammonium oxidation in the oxygen-deficient waters off northern Chile. *Limnology and Oceanography* 51, 2145-2156.
27. Hidalgo, P. and R. Escribano. 2006. Naupliar stages of *Eucalanus inermis* (Giesbrecht) (Copepoda: calanoidea) from the Humboldt Current System (northern Chile). *Crustaceana* 79 (5), 513-523.
28. Herrera, L. and R. Escribano. 2006. Factors structuring the phytoplankton community in the upwelling site off El Loa River in northern Chile. *Journal of Marine Systems* 61: 13-38.
29. Palma, W., Escribano, R. and S. Rosales. 2006. Modeling study of seasonal and inter-annual variability of circulation in the coastal upwelling site of the El Loa River off northern Chile.. *Estuarine Coastal and Shelf Science* 67: 93-107
30. Escribano, R. (2006). Zooplankton interactions with the oxygen minimum zone in the eastern South Pacific. *Extended Abstract Gayana* 70:19-21
31. Hidalgo, P., Escribano, R. And C.E. Morales (2005). Ontogenetic vertical distribution and diel migration of the copepod *Eucalanus inermis* in the oxygen minimum zone off northern Chile. *Journal of Plankton Research* 27: 519-529
32. Hidalgo, P., Escribano, R. and C.E. Morales. (2005). Annual life cycle of the copepod *Eucalanus inermis* at a coastal upwelling site off Mejillones (23°S)

northern Chile. *Marine Biology* 146: 995-1003 DOI 10.1007/s00227-004-1487-3 .

33. Molina, V., Farías, F., Eissler, Y., Cuevas, L.A., Morales, C.E. & R. Escribano. (2005). Ammonium cycling under the strong oxygen gradient associated with the oxygen minimum zone off northern Chile (~23°S). *Marine Ecology Progress Series* 288:35-43 (
34. Escribano, R., Daneri, D., Farías, L., Gallardo, V.A., González, H.E., Gutierrez, D., Lange, C., Morales, C.E., Pizarro, O., Ulloa, O. and M. Braun. (2004). Biological and chemical consequences of the 1997-98 el niño in the Chilean coastal upwelling system: a synthesis. *Deep-Sea Research Part II. Vol 51/20-21: 2389-2411*
35. Rendell, L., Whitehead, H. & R. Escribano. (2004). Sperm whale habitat use and foraging success off northern Chile: evidence of ecological links between coastal and pelagic systems. *Marine Ecology Progress Series* 275: 289-295 (ISI)
36. González, H.E., Giesecke, R., Vargas, C., Pavez, M., Iriarte, J., Santibáñez, P., Castro, L., Escribano, R. and F. Pagès. (2004). Carbon cycling through the pelagic food web in the northern Humboldt Current off Chile (23°S). *ICES Journal of Marine Sciences*. 61: 572-684.
37. Takesue, R.K., van Geen, A., Carriquiry, J.D., Ortíz, E., Godínez-Orta, L., Granados, I., Saldizar, M., Ortlieb, L., Escribano, R., Guzmán, N., Castilla, J.C., Varas, M., Salamanca, M., Figueroa, C. 2004. Influence of coastal upwelling and the El Niño-southern oscillation on nearshore water along Baja California and Chile: shore-based monitoring during 1997-2000. *Journal of Geophysical Research* 109(C0300), doi:10.1029/2003JC001856.
38. Escribano, R., Rosales, S. & J.L. Blanco (2004). Understanding upwelling circulation of Bahía Antofagasta (northern Chile): A numerical modeling approach. *Continental Shelf Research* 24: 37-53
39. Escribano, R. and C.E. Morales. (2004). Sistemas de surgencias costeras. In. Werlinger, C. (Ed.) *Biología Marina*, Editorial UDEC, Chile. pp.678-712.
40. Escribano, R. and L. Castro. (2004). Plancton y productividad. In. Werlinger, C. (Ed.) *Biología Marina*, Editorial UDEC, Chile. pp.289-314.
41. Torres, C., Escribano, R. 2003. Growth and development of *Calanus chilensis* nauplii reared under laboratory conditions: testing the effects of temperature and food resources. *Journal of Experimental Marine Biology and Ecology* 294: 81-99

42. Escribano, R., Fernández, M. & A. Aranís. (2003). Physical-chemical processes and patterns of diversity of the Chilean eastern boundary pelagic and benthic marine ecosystem: an overview. *Gayana* 67:190-205
43. Rojas, P., Escribano, R. & V. Marin. (2002) The influence of coastal upwelling on fish larvae distribution off Mejillones Peninsula, northern Chile. *Fisheries Oceanography*. 11. 233-244.
44. Giraldo, A., Escribano, R & V. Marin (2002) Spatial distribution of *Calanus chilensis* off Mejillones Peninsula (northern Chile): ecological consequences upon coastal upwelling. *Marine Ecology Progress Series* 230: 225-234.
45. Escribano, R., Marin, V., Hidalgo, P. & G. Olivares. (2002). Physical-biological interactions in the nearshore zone of the northern Humboldt Current ecosystem. In: *The Oceanography and Ecology of the Nearshore and Bays in Chile*. Castilla, J. C. & J.L. Largier (Eds). Ediciones Universidad Católica de Chile. pp. 145-175.
46. Escribano, R., Hidalgo, P. & D. Fernández. 2002. Response of zooplankton to the 1997-98 El Niño in the coastal upwelling zone off northern Chile: Is the El Niño that bad?. *Extended Abstract El Niño Symposium, Viña del Mar, Chile*. *Investigaciones Marinas* 30: 109-111.
47. Fernandez, D., Escribano, R. & P. Hidalgo. (2002). Distribución de eufáusidos en el sistema de surgencia de la Península de Mejillones (23° S) asociada a condiciones previas y durante El Niño 1997/98. *Investigaciones Marinas* 31: 56-72.
48. Marín, V., Delgado, L., Escribano, R. (2003). Upwelling shadows at Bahía Mejillones: an ecosystem analysis. *Revista de Investigaciones Marinas* 31: 47-55
49. Escribano, R., Marin, V, & P. Hidalgo. (2001). The influence of coastal upwelling on the distribution of *Calanus chilensis* in the Mejillones Peninsula (northern Chile). implications for its population dynamics. *Hydrobiologia* 453/454: 143-151.
50. Hidalgo, P. & R. Escribano. (2001). Succession of pelagic-copepod species during the period 1996/1998 in northern Chile: the unfluence of the 1997-98 El Niño. *Hydrobiologia* 453/454: 153-160
51. Marín, V.H., Escribano, R., Delgado, L.E., Olivares, G. & P. Hidalgo. (2001). Nearshore circulation in a coastal upwelling site off the northern Humboldt Current System. *Continental Shelf Research*. 21: 1317-1329 .

52. Avendaño, R.E., Riquelme, R.E., Escribano, R. & N. Reyes. (2001) Postlarval survival and growth of *Argopecten purpuratus* (Lamarck, 1819) in Bahía Inglesa, Chile: effects of origin, distribution in the bay and larval bacterioflora. *Revista Chilena de Historia Natural*. 74: 69-679 .
53. Ulloa, O., Escribano, R., Hormazabal, S., Quinonez, R. & R. Gonzalez. (2001). Evolution and biological effects of the 1997-98 El Niño in northern Chile. *Geophysical Research Letters*. 28: 1591-1594
54. Escribano, R. & P. Hidalgo. (2001) Circulación inducida por el viento en Bahía de Antofagasta, norte de Chile. *Revista de Biología Marina y Oceanografía*, 36:43-60.
55. Delgado, L., Marín, V. & R. Escribano. 2001. Bahía de Mejillones: un ecosistema para conservar. *Chile Acuicola* 2001.
56. Escribano, R. & P. Hidalgo. 2000. Influence of El Niño and La Niña on the population dynamics of *Calanus chilensis* in northern Chile. *ICES Journal of Marine Sciences* 57: 1867-1874.
57. Ortlieb, L., Escribano, R., Follegati, R., Zúñiga, O., Kong, I., Rodríguez, L., Valdéz, J., Guzmán, N. and P. Irachet. 2000. Recording of ocean-climate changes during the last 2,000 years in a hypoxic marine environment off northern Chile (23° S). *Revista Chilena de Historia Natural*, 73: 221-242.
58. Escribano, R. & P. Hidalgo 2000. Spatial distribution of copepods during coastal upwelling in a northern area of the Eastern Boundary Humboldt Current. *Journal of the Marine Biological Association U.K.* 80 (2): 283 - 290.
59. Escribano, R., Marín, V. & C. Iribarren. 2000. Distribution of *Euphausia mucronata* at the upwelling area of Peninsula Mejillones: the influence of the oxygen minimum layer. *Scientia Marina*. 64: 69-77.
60. Riquelme, C. Araya, R. & R. Escribano. 2000. Selective incorporation of bacteria by *Argopecten purpuratus* larvae: implications for using probiotics in culturing systems of the Chilean Scallop. *Aquaculture* 181: 25-36.
61. Escribano, R. & I.A. McLaren (1999). Production of *Calanus chilensis* from the upwelling area of Antofagasta, northern Chile. *Marine Ecology Progress Series* 177:147-156
62. Escribano, R. (1998). Population dynamics of *Calanus chilensis* from northern Chile. *Fisheries Oceanography* 7: 245-251.
63. Escribano, R., Iribarren, C. & L. Rodríguez (1998). Temperature-dependent development and growth of *Calanus chilensis* from northern Chile. *Journal of Experimental Marine Biology and Ecology* 229:19-34.

64. Escribano, R., Irribarren, C. & L. Rodriguez (1997). Influence of food quantity and temperature on development and growth of *Calanus chilensis* from northern Chile. *Marine Biology* 128:281-289.
65. Ban, S., Burns, C., Castel, J., Christou, E., Escribano, R., Umani, S.F., Gasparini, S., Guerrero, F., Hoffmeyer, M., Ianora, A., Kang, H-K., Laabir, M., Lacoste, A., Miralto, A., Poulet, S., Ning, X., Rodriguez, V., Runge, J., Shi, J., Starr, M., Uye, S. & Y. Wang (1997) The paradox of the classic marine food web. *Marine Ecology Progress Series* 157: 287-293.
66. Escribano, R., Irribarren, C. & L. Rodriguez (1996). Temperature and female size effects on egg production of *Calanus chilensis*: laboratory observations. *Revista Chilena de Historia Natural* 69: 365-377
67. Escribano, R. 1996. Growth of *Calanus australis* during the spring season in the Magellan Strait from an onboard experiment. *Reports on Polar Research*. 190: 32-32.
68. Escribano, R., Venegas, R., Pizarro, J. & G. Claramunt. 1996. Temperature-dependent developmental rate of the southern anchovy *Engraulis ringens* Jenyns. *Estudios Oceanológicos* 15: 39-46.
69. Rodriguez, L. & R. Escribano (1996). Bahía Antofagasta y Bahía de Mejillones del Sur: Observaciones de la temperatura, penetración de la luz, biomasa y composición fitoplanctónica. *Estudios Oceanológicos*. 15: 75-85.
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