

CURRICULUM VITAE

Name: Fe Dolores P. Estepa

Address: Lot 23 Block 22 Phase IV Gran Plains Subdivision, Jaro, Iloilo City, Philippines

Birthdate: 23 December 1955

Birthplace: Liloan, Leyte

Civil Status: Married

Spouse: Dante C. Estepa Sr.

Children:

Nichromano Estepa

Myelin Fe Estepa

Chateau Fe Estepa

Dante Estepa Jr.

Educational Background

<u>Degree</u>	<u>Institution</u>	<u>Year</u>
Ph.D. (Biology and Aquaculture)	Hokkaido University Hakodate, Japan	1999
Masters in Management Major in Business Management	University of the Philippines in the Visayas, Iloilo City	1996
M.S.Fisheries Major in Aquaculture	University of the Philippines in the Visayas, Iloilo City	1982
B.S.Biology (Magna Cum Laude)	Mindanao State University Lanao Sur	1977

Work Experience:

<u>Year</u>	<u>Position</u>	<u>Job Description</u>
2017 Aug- Dec2017	Head, Breeding and Seed Production Section	
2015- August 2017	Head, Technology Verification and Demonstration Division	
1999-present	Scientist I	involved in preparation of proposals, conduct of studies and publication of results in local and international journals (prawn physiology studies and studies aimed towards development of larval rearing and nursery techniques for mud

crab, and studies on domestication and selective breeding of mud crabs and penaeid shrimps); give lectures and practicals in hatchery and nursery training courses (mud crab and shrimps); involved in review and evaluation of manuscripts for publication in local and international journals

1993 - 1999	Associate Scientist	involved in conducting and publishing studies (shrimp and fish physio) and actual rearing of penaeid larvae; involved in lectures and practicals in prawn hatchery training courses
1981-1993	Research Associate	involved in conducting and publishing studies and actual rearing of penaeid larvae; involved in lectures and practicals in prawn hatchery training courses
1977-1979	Research Aide	assisted in crustacean (Artemia and shrimp) culture studies

Other Qualifications:

- Resource person / lecturer on the following topics for short term training courses at SEAFDEC/AQD or as invited speaker in on site trainings or seminars/ conferences:
- Shrimp hatchery operations (site selection, biological considerations in design and construction of a hatchery, biology of penaeids, larval and postlarval rearing, economics of shrimp hatchery operations, etc.)
- Mud/ mangrove crab nursery operations (site selection, nursery rearing, economics of nursery operations)
- Mud/ mangrove crab culture (Biology, larval rearing, soft shell crab production)

Publications (as Author):

- Parado-Estepa FD**, Alava V, Garibay E, Bejemino C, Sumile J, Silvestre J, Quinitio ET. 2017. Recent developments and enhancing transfer of the nursery technology for the mud crab *Scylla serrata*. In: Quinitio ET, Parado-Estepa FD, Coloso R (eds.). Philippines: In the Forefront of Mud Crab Industry Development. Proceedings of the 1st National Mud Crab Congress. 16-18 November 2016; Iloilo City, Philippines: Aquaculture Department Southeast Asian Fisheries Development Center; pp.13-21.
- Parado-Estepa FD**, Quinitio ET, Rodriguez EM. 2015. Mud crab nursery rearing practices. In: Quinitio ET, Parado-Estepa FD, Thampi Samraj YC, Mandal Anup (eds.) 2015. Proceedings of the International Seminar Workshop on Mud Crab Aquaculture and Fisheries Management: 10-12 April 2013; Rajiv Ghandi Centre for Aquaculture (MPEDA)Tamil Nadu, India; pp. 89-92.
- Parado-Estepa FD**, Quinitio ET. 2011. Influence of salinity on survival and molting in early stages of three species of Scyllacrabs. The Israeli Journal of Aquaculture – Bamidgeh IIC:63.2011.631, 6 pages.
- Parado-Estepa FD**, Quinitio, E.T., Borlongan, E.D. 1996. Prawn Hatchery Operations. Rev. ed. SEAFDEC AQD Extension Manual No. 19. 45 pp.
- Parado-Estepa FD**, Ferraris, RP, .Ladja, JM, de Jesus, EG. 1987. Responses of intermolt *Penaeus indicus* to large fluctuations in environmental salinity. Aquaculture 64: 175-184.
- Parado-Estepa, F.D.** 1988. Selection, transport and acclimation of prawn fry. In Chiu, Y.N., L.M. Santos and R.O. Juliano (eds.). Technical Considerations for the Management and Operations of Intensive Prawn Farms. U.P. Aqua. Soc., Iloilo City, Phil. p.81-85.
- Parado-Estepa, FD**, Honculada-Primavera, J. 1988. Prawn hatchery. pp. 149-168. In: Juario, JV, Benitez, LV (eds). Perspectives in Aquaculture Development in Southeast Asia and Japan: Proceedings of the Seminar on Aquaculture Development in Southeast Asia. SEAFDEC Aquaculture Department. Iloilo City, Philippines.
- Parado-Estepa, FD**, Ladja, JM, de Jesus, EG, Ferraris, RP. 1989. Effect of salinity on hemolymph calcium concentration during the molt cycle of the prawn *Penaeus monodon*. Mar. Biol. 102 : 189-193.
- Parado-Estepa, FD**, Llobrera, JA, Villaluz, AC, Salde, R. 1993. Survival and metamorphosis of *Penaeus monodon* larvae at different salinity levels. Israeli J. Aquaculture - Bamidgeh 45 (1):3-7.
- Parado-Estepa, FD**, Quinitio, ET, Borlongan, E. 1991. Prawn hatchery operations. SEAFDEC AQD Extension Manual No. 19. Tigbauan, Iloilo, Philippines.
- Parado-Estepa, FD**, Quinitio, ET, Rodriguez, EM. 2002. Seed production of the crucifix crab *Charybdis feriatus*. Aquaculture Asia Vol 7(3): 37.

Parado-Estepa, FD, Quinitio, ET, Rodriguez, EM. 2007. Seed production of Charybdis ferriatus. Aquac. Res 38: 1452-1458.

Parado-Estepa, FD, Quinitio, ET. 1999. Larval survival and megalopa production of *Scylla* sp. at different salinities. pp. 174-177. In: Keenan, CP, Blackshaw A. (eds). Mud Crab Aquaculture and Biology: Proceedings of an International Scientific Forum. ACIAR Proceedings No. 78. Darwin, Australia.

Parado-Estepa, FD. 1991. Shrimps. pp. 32-39. In: Lacanilao F, Coloso, RM, Quinitio, GF (eds). Proceedings of the Seminar Workshop on Aquaculture Development in Southeast Asia and Prospects for Seafarming and Seearching. SEAFDEC Aquaculture Department. Iloilo, Philippines.

Parado-Estepa, FD. 1995. Research on crustaceans. pp. 187-198. In: Bagarinao, TU, Flores, EEC. (eds). Towards Sustainable Aquaculture in Southeast Asia and Japan. SEAFDEC Aquaculture Department. Iloilo, Philippines.

Parado-Estepa, FD. 1998. Survival of *Penaeus monodon* postlarvae and juveniles at different salinity and temperature levels. The Israeli J of Aquaculture- Bamidgeh 50: 174-183.

Parado-Estepa, FD. 1991. Survival of newly-hatched *Epinephelus malabaricus* at different salinity levels. pp. In: Lavens, P, Sorgeloos, P, Jaspers, E, Ollevier, F. (eds). Larvi '91- Fish and Crustacean Larviculture Symposium. European Aquaculture Society Special Publication No. 15: Gent, Belgium.

Parado-Estepa, FD. 1993. Shrimp seed production at SEAFDEC/ AQD. pp 113-119. In: Villegas, CT, Castaños, MT, Laciera, RB. (eds). Proceedings of the Aquaculture Workshop for SEAFDEC AQD Training Alumni. SEAFDEC AQD, Tigbauan, Philippines.

Publications (as co-author):

Agbayani, RF, Samonte, GPB, **Parado-Estepa, FD**, Tumaliuan, RT, Ortega, RS, Espada, LT. 1994. Economic assessment of shrimp (*P. monodon*) hatchery industry in Panay Island. AFSSRN-SEAFDEC/AQD. 80 pp.

Alava VR, Sumile J, **Parado-Estepa FD**. 2017. Nursery culture of mud crab *Scylla serrata* using different ratios of natural food to formulated feed. In: Quinitio ET, Parado-Estepa FD, Coloso R (eds.). 2017. Philippines: In the Forefront of Mud Crab Industry Development. Proceedings of the 1st National Mud Crab Congress. 16-18 November 2016; Iloilo City, Philippines: Aquaculture Department Southeast Asian Fisheries Development Center; pp. 52-58.

Alava, VR, Sumile JD, **Parado-Estepa FD**. 2017. Nursery culture of mud crab *Scylla serrata*

using different feeding rates. In: Quinitio ET, Parado-Estepa FD, Coloso R (eds.). 2017. Philippines: In the Forefront of Mud Crab Industry Development. Proceedings of the 1st National Mud Crab Congress. 16-18 November 2016; Iloilo City, Philippines: Aquaculture Department Southeast Asian Fisheries Development Center; pp. 46-51.

Bautista, MN, **Parado-Estepa, FD**, Millamena, OM, Borlongan, EL. 1992. Large scale hatchery production of *Penaeus monodon* using natural food and artificial diets. The Israeli J. Aquaculture - Bamidgeh 43: 137-144.

De Pedro J, Quinitio ET, **Parado-Estepa FD**. 2007. Formalin as an alternative to trifluralin as prophylaxis against fungal infection in mud crab *Scylla serrata*. Aqua Res 38: 1554-1564.

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Ferraris, RP, **Parado-Estepa, FD**, de Jesus, EG, Ladja, JM. 1986. Osmoregulation in *Penaeus monodon*: Effect of molting and external salinity. pp. 637-640. In: Maclean, JL., Dizon, JB, Hosillos, LV. (eds). The First Asian Fisheries Forum. Manila, Philippines. Asian Fisheries Society, Manila, Philippines.

Ferraris, RP, **Parado-Estepa, FD**,.Ladja, JM, de Jesus, EG. 1986. Effect of salinity on the osmotic, chloride, total protein and calcium concentrations in the hemolymph of the prawn *Penaeus monodon* (Fabricius). Comp. Biochem. Physiol. 83A : 701-708.

Le Vay, L., J.H. Lebata J.H., M. Walton, J.H. Primavera, E.T. Quinitio, C. Lavilla-Pitogo, F. **Parado-Estepa**., E. Rodriguez, V.N. Ut , T.T. Nghia, P. Sorgeloos and M. Wille. 2008. Approaches to stock enhancement in mangrove-associated crab fisheries. Rev. Fish. Sci. 16(1-3):72-80.

Noor-Hamid, S, Fortes, RD, **Parado-Estepa, FD**. 1994. Effect of pH and ammonia on survival and growth of the early larval stages of *Penaeus monodon* Fabricius. Aquaculture 125: 67-72.

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Primavera, JH, **Parado-Estepa, FD**, Lebata, JL. 1998. Morphometric relationship of length and weight of giant tiger prawn *Penaeus monodon* according to life, stage, sex and source. Aquaculture 164: 67-75.

Quinitio ET, **Estepa FDP**. 2011. Survival and growth of mud crab, *Scylla serrata*, juveniles subjected to removal or trimming of chelipeds. Aquaculture 318:229-234.

Quinitio ET, Libunao GX, **Parado-Estepa FD**. 2017. Development of protocol for the

production of hatchery-reared mud crab *Scylla serrata* juveniles for soft-shell crab farming. In : Quinitio ET, Parado-Estepa FD, Coloso R (eds.). Philippines: In the Forefront of Mud Crab Industry Development. Proceedings of the 1st National Mud Crab Congress. 16-18 November 2016; Iloilo City, Philippines: Aquaculture Department Southeast Asian Fisheries Development Center; pp. 22-27.

Quinitio, E.T., de la Cruz, J.J., Eguia, M.R., **Parado-Estepa, F.D.**, Pates, G., Lavilla-Pitogo, C.R. 2011. Domestication of the mud crab *Scylla serrata*. *Aquaculture International* 19:237-250.

Quinitio, E.T., **Estepa, F.P.**, Biona, H., Millamena O.M. 1996. Reproductive performance of captive *Penaeus monodon* fed various sources of carotenoids. Santiago C.B., Coloso R.M., Millamena O.M. and Borlongan I., eds. Proceedings of the National Seminar-Workshop on Fish Nutrition and Feeds, 1-2 June 1994, SEAFDEC/AQD, Iloilo, Philippines. pp 74-82.

Quinitio, E.T., **Parado-Estepa FD**, Rodriguez EM. 2002. Seed production of mud crab *Scylla* spp. *Aquaculture Asia* Vol 7(3):29-31.

Quinitio, E.T., **Parado-Estepa, F.D.** 2001. Simulated transport of *Scylla serrata* zoeae at various loading densities. In: Proceedings of the International Forum on the Culture of Portunid Crabs. Millamena O.M, Quinitio E.T and Blackshaw A. eds. 1-4 December 1998. *Asian Fisheries Science* 14(2):225-230.

Quinitio, ET, De Pedro, J, **Parado-Estepa, FD**. 2007. Ovarian maturation stages of the mud crab *Scylla serrata*. *Aqua Res.* 38: 1434-1441.

Quinitio ET, **Parado-Estepa, FD**, Alava, VR. 1999. Development of hatchery techniques for the mud crab *Scylla serrata*: I. Comparison of feeding schemes. pp. 125-130. In: Keenan, CP, Blackshaw A. (eds). *Mud Crab Aquaculture and Biology: Proceedings of an International Scientific Forum*. ACIAR Proceedings No. 78. Darwin, Australia.

Quinitio EJ, Libunao GXS, **Parado-Estepa FD**, Calpe A. 2015. Soft-shell crab production using hatchery-reared mud crab. Tigbauan, Iloilo, Philippines: SEAFDEC Aquaculture Department. Los Baños, Laguna, Philippines: Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development, Department of Science and Technology. 25p. AEM#61

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Quinitio, ET, **Parado-Estepa FD**, Millamena OM, Rodriguez EM, Borlongan EL. 2001. Seed production of mud crab *Scylla serrata*. *Asian Fisheries Science* 14: 217-224.

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Quintillo E.T, Rodríguez E.M, **Parado-Estepa F.D.** 2009. Nursery and grow-out of mud crab.

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Rodriguez EM, **Parado-Estepa FD**, Quinitio ET. 2007. Extension of nursery culture of *Scylla serrata* (Forskal) juveniles in cages and ponds. Aquac. Res. 38:1588-1592

Rodriguez EM, Quinitio ET, Parado-Estepa FD, Millamena OM. 2001. Culture of *Scylla serrata* megalopae in brackishwater ponds. Asian Fisheries Science 14 : 185-190.

Santander-Avanceña S, **Parado-Estepa FD**, Catedral DM, Faisan J, de la Peña LD. 2017. Abdominal segment deformity syndrome (asds) and fused body segment deformity (fbsd) in cultured *Penaeus indicus*. Aquaculture 466:20-25.

Seneriches-Abiera ML, **Parado-Estepa F.**, Gonzales GA. 2007. Acute toxicity of nitrite to mud crab *Scylla serrata*. Aquac. Res. 38: 1495-1499.

Editorship:

Quinitio ET, **Parado-Estepa FD**, Coloso R (eds.). 2017. Philippines: In the Forefront of Mud Crab Industry Development. Proceedings of the 1st National Mud Crab Congress. 16-18 November 2016; Iloilo City, Philippines: Aquaculture Department Southeast Asian Fisheries Development Center; 186 pp.

Quinitio ET, **Parado-Estepa FD**, Thampi Samraj YC, Mandal Anup (eds.) 2015. Proceedings of the International Seminar Workshop on Mud Crab Aquaculture and Fisheries Management: 10-12 April 2013; Rajiv Gandhi Centre for Aquaculture (MPEDA)Tamil Nadu, India; 128 pp.

Romana-Eguia MRE, **Parado-Estepa FD**, Lebata-Ramos MJH (eds.). 2015. Resource Enhancement and Sustainable Aquaculture Practices in Southeast Asia: Challenges in Responsible Production of Aquatic Species. Proceedings of the International Workshop on Resource Enhancement and Sustainable Aquaculture Practices in

Southeast Asia 2014 (RESA); Iloilo City, Philippines;: Aquaculture Department
Southeast Asian Fisheries Development Center; 371 pp.

Awards and Scholarships Received:

- 2011 Elvira Tan Memorial Award for the paper Domesticatio of *Scylla serrata* by Quinitio ET, de la Cruz JJ, Eguia MR, Parado-Estepa FD, Lavilla-Pitogo C.
- National R&D Paper Award , 17th National Research Symposium (FY 2005) for research entitled Seed Production of *Charybdis feriatus* (Linnaeus). Authors: Parado-Estepa FD, Quinitio ET, Rodriguez E.
- Best published research paper award given by Bureau of Agricultural Research, for research entitled Seed Production of Mud Crab *Scylla serrata* by Quinitio, ET, Parado-Estepa FD, Rodriguez EM.
- RONPAKU Fellowship Grant for PhD (under the DOST- JSPS-Joint Scientific Program)

