



BIBLIOGRAPHY

1. Ajmalkhan, S., Raffi, S. M. and Lyla, P. S., 2005. Brachyuran crab diversity in natural (Pitchavaram) and artificially developed mangroves (Vellar estuary). Current Science, 88: 1316-1324.
2. Anila Kumary, K. S., 2001: Sediment characteristics of Poonthura estuary (southwest coast of India) in relation to pollution. Indian journal of marine Sciences, 30: 75-80.
3. Apte, D., 1998: Book of Indian shells, Bombay Natural History Society, Mumbai.
4. Attrill, M. J. and Rundle, S. D. 2002: Ecotone or Ecocline: Ecological boundaries in estuaries. Estuarine, Coastal and Shelf Science, 55, 929–936.
5. Balachandran, K. K., Lalurai, C. M., Nair, M., Joseph, T., Sheeba, P. and Venugopal. P., 2005: Heavy metal accumulation in a flow restricted tropical estuary. Estuarine coastal and shelf Science, 65: 361-370.
6. Barrett. M. J., 1972: Predicting the Effect of Pollution in Estuaries. Proceedings of the Royal Society of London. Series B, Biological Sciences, Vol. 180, No. 1061, A Discussion on Freshwater and Estuarine Studies of the Effects of Industry (Mar. 21, 1972), pp. 511-520.
7. Bertness, M. D. and Miller, T., 1984. The distribution and dynamics of *Uca pugnax* (Smith) burrows in a New England salt marsh. Journal of Experimental Marine Biology and Ecology, 83: 211-237.
8. Bezerra, L. E., Dias, C. B., Santana. G. X. and Cascon, H. M., 2006: Spatial distribution of fiddler crabs (genus *Uca*) in a tropical mangrove of northeast Brazil. Scientia Marina, 70: 759-766.
9. Blake, G.R., and K.H. Hartge, 1986, Bulk Density, in A. Klute, ed., Methods of Soil Analysis, Part I. Physical and Mineralogical Methods: Agronomy Monograph no. 9 (2nd ed.), pp. 363-375.
10. Bolam, S.G., 2003. Spatial patterns of estuarine macrobenthic assemblages: relationship with hydrodynamic regime. Estuarine Process Research Project, CEFAS, March 2003 Report.

Bibliography

11. Botto, F. and Iribane, O., 1999: Effect of the burrowing crab *Chasmagnathus granulata* Dana, on the benthic community of a SW Atlantic coastal lagoon. Journal of Experimental Marine Biology and Ecology, 241: 263–284.
12. Bradshaw, C. and Scoffin, T. P., 1999: Factors limiting distribution and activity patterns of the soldier crab *Dotilla myctioides* in Phuket, South Thailand. Marine Biology, 135: 83-87.
13. Buchanan, J. B., Shearer, M. & Kingston, P. F., 1978: Sources of variability in the benthic macrofauna off the south Northumberland coast, 1971–1976. Jour. of Mar. Bio. Ass. UK., 58: 191–209.
14. Burford, R. L., McGregor, P. K. and Oliveira, R. F., 2000: The sequence of mudball placement by male fiddler crabs, *Uca tangeri*. Etología, 8:53-55.
15. Butler, S. and Bird, F. L., 2007: Estimating density of intertidal ghost shrimps using counts of burrow openings. Is the method reliable? Hydrobiol., 589: 303-314
16. Chakrabarti, A., 2005: Sedimentary structures of tidal flats: A journey from coast to inner estuarine region of eastern India. J. Earth Syst. Sci. 114:353–368.
17. Chakrabarti, A., Chakrabarti, R. and Hertweck, G., 2006: Surface traces and bioturbate textures from bubbler crabs: an indicator of subtropical to tropical tidal flat environments. Senckenbergiana maritime, 36:19-27.
18. Chakraborty, R., Zaman, S., Mukhopadhyay, N., Banerjee, K. and Mitra, A., 2009: Seasonal variation of Zn, Cu and Pb in the estuarine stretch of West Bengal. Indian Journal of Marine Sciences, 38:110-115.
19. Chappgar, B. F., 1957: On the marine crabs (Decapods:Brachyura) of Bombay state Part-I. Jour. Bom. Nat. His. Soc., 54: 399-439, 1-11.
20. Christy, J. H., 1982: Burrow structure and use in the sand fiddler crab, *Uca pugilator* (Bosc). Anim. Behav., 30: 687-694.
21. Christy, J. H., 1987: Female choice and the breeding behaviour of the fiddle crab *Uca beebei*. J of Crustacean Biology, 7: 624-635.

22. Christy, J., H., 1988: Pillar function in the fiddler crab *Uca beebei* (I): effects on male spacing and aggression. Ethology 78: 53-71.
23. Christy, J. H., Baum, J. K. and Backwell, P. R. Y., 2003: Attractiveness of sand mounds built by courting male fiddler crabs, *Uca musica*: test of a sensory trap hypothesis. Anim. Behav. 66: 89-94.
24. Crane J., 1975. Fiddler crabs of the world (Ocypodidae: genus *Uca*). Princeton, NJ: Princeton Univ. Press.
25. Desai, B. G., 2002. Animal Sediment Relationship of the Two Benthic Communities (Crustaceans and Polychetes) in the Inter Tidal Zone Around Mandavi, Gulf of Kachchh, Gujarat. Ph. D. Thesis submitted to The M. S. University of Baroda, Vadodara.
26. Desai, B. G., Patel, S. J. and Chappgar, B. F., 2004: On two interesting marine crabs (Decapoda:Brachyura) from Mandvi Kutch. J. Bom. Nat. His. Soc. 101: 184-186.
27. Dineshkumar P. K., Josanto, V. and Sankaranarayanan, V. N. 1995: Computation of dilution discharge and mean concentration of effluents in Beypore estuary, west coast of India, J. Ecotoxicol Environ Monitor, 5: 103-106.
28. Dynesius, M. And Nilsson, C., 1994: Fragmentation and flow regulation of river systems in the northern third of the world, Science, 266: 753-762.
29. Edgar, G. J. and Barrett, N. S., 2000: Effects of catchment activities on macrofaunal assemblages in Tasmanian estuaries. Estuar Coast Shelf Sci 50: 639-54.
30. Fang, T. H. and Lin, C. L. 2002: Dissolved and Particulate Trace Metals and Their Partitioning Hypoxic Estuary: The Tanshui Estuary in Northern Taiwan. Estuaries Vol. 25, No. 4A, p. 598-607.
31. Ferrer, L., Contardi, E., Andrade, S. J., Asteasuain, R., Pucci, A. E. and Macravecchio, J. E., 2000: Environmental cadmium and lead concentrations in the Bahia Blanca Estuary (Argentina). Potential toxic effects of Cd and Pb on crab larvae. Oceanologia, 42: 493–504.

32. Flores, A. V. and Paula, J. 2001: Intertidal distribution and species composition of brachyuran crabs at two rocky shores in Central Portugal. *Hydrobiologia*. 449: 171–177.
33. Frusher, S. T., Giddins, R. L. and Smith, T. J., 1994: Distribution and abundance of grapsid crabs (Grapsidae) in a mangrove estuary; effects of sediment characteristics, salinity tolerance and osmoregulatory ability, *Estuaries*, 17:647-654.
34. George, R. W., and Jones, D. S., 1982: A revision of the fiddler crabs of Australia (Ocypodinae: *Uca*). *Rec. West. Aust. Mus. Supplement* 14: 5-99.
35. Glémarec, M., 1973: The benthic communities of the European North Atlantic continental shelf. *Oceanography and Marine Biology: an Annual Review*, 11: 263–289.
36. Griffis, R.B., Suchanek, T. H. 1991: A model of burrow architecture and trophic modes in thalassinidean shrimp (Decapoda: Thalassinidea). *Marine Ecology Progress Series*, 39: 171-183.
37. Hande, H. S. and Madhyastha, M. N., 2003: Hydrography and sediment profile of malpe and gangolli estuary-linked coastal waters. *Indian Hydrobiology*, 6:1-7.
38. Harkantra, S. N. and Parulekar, A. H., 1985: Community structure of sand-dwelling macrofauna of an estuarine beach in Goa, India. *Marine Ecology Progress Series*, 30: 291-294.
39. Holloway' M. G. and Keough, M. J., 2002: An introduced polychaete affects recruitment and larval abundance of sessile invertebrates, *Ecological Applications*, 12: 1803-1823.
40. Ishimatsu A., Hishida Y., Takita T., Kanda T., Oikawa S., Takeda T. and Huat K. K., 1998: Mudskipper store air in their burrows. *Nature*, 391: 237-238.
41. Johannesson, L. T., Stevens, R. L. and Alexanderson J. H., 2000: Sediment character in a micro-tidal, harbor-estuary environment, Goteborg, Sweden, *Estuaries*, 23: 400-410.

Bibliography

42. Johannesson, L. T., Stevens, R. L. and Alexanderson J. H., 2000: Sediment Character in a Micro-Tidal, Harbor-Estuary Environment, Goteborg, Sweden, *Estuaries*, 23: 400-410.
43. Jyothi, D., Murty, T. V. R. and Sarma, V. V., 2000: Computation of diffusion coefficients for waters of Guathami estuary using one-dimensional advection-diffusion model. *Ind J. Marine Sci*, 29:1850-87.
44. Kruitwagen, G., Hecht, T., Pratap, H. B. and Bonga, S. E. 2005: Changes in morphology and growth of the mudskipper (*Periophthalmus argentilineatus*) associated with coastal pollution. *Marine biology*, 149: 201-211
45. Kumar B. H., Katti, R. J., Venkatesha, K. S. and D'Souza, K., 2001: Levels of certain heavy metals in the sediments off Mangalore, west coast of India receiving industrial effluent. *Indian Journal of Environment Sciences*, 5: 165-168.
46. Kumar, S. P. and Patterson, J. K., 2009: Assessment of metal concentration in the sediment cores of Manakudy estuary, south west coast of India. *India Journal of Marine Sciences*, 38(2):235-248.
47. Kumary, K. S., Azis, P. K. and Natarajan, P., 2007: Water quality of the Adimalathura Estuary, southwest coast of India, *J. Mar. Biol. Ass. India*, 49: 1-6.
48. Leme, M. H. A., 2002: A comparative analysis of the population biology of the mangrove crabs *Aratus pisonii* and *Sesarma rectum* (Brachyura, Grapsidae) from North Coast of São Paulo State, Brazil. *Journal of Crustacean Biology* 22:553–557. CrossRef, CSA
49. Lessa, G. C., 2000: Morphodynamic Controls on Tides and Tidal Currents in Two Macrotidal Shallow Estuaries, NE Australia. *Journal of Coastal Research*, 16: 976-989.
50. Levin, L. A., Boesch, D. F., Covich, A., Dahm, C. and Erseus, C., 2001: The Function of Marine Critical Transition Zones and the Importance of Sediment Biodiversity. *Ecosystems*, 4: 430-451.
51. Livingston, R.J., 1987: Field sampling in estuaries: The relationship of scale to variability. *Estuaries*, 10:194-207.

52. Livingston, R.J., 1991: Research and management in the Apalachicola River estuary. *Ecological Applications*, 1:361-382.
53. MacFarlane, G. R. and Booth, D. J., 2001: Estuarine macrobenthic community structure in the Hawkesbury River, Australia; relationship with sediment physicochemical and anthropogenic parameters. *Environ. Monit. Assess.* 72: 51-78.
54. Manokaran, Ajmal Khan, S., Lyla, P. S. and Murugan, S., 2008: First record of brachyuran crab Jonas choprai Serene 1971 (Crustacea Decapoda) in the Indian waters at Parangipettai, south-east coast of India. *Ind J Marine Biol.* 50: 117-118.
55. Maurya, D. M., Malik, J. N., Rachna Raj and Chamyal, L. S., 1997: Soft-sediment Deformation in the Quaternary Sediments of the Lower Mahi River Basin, Western India. *Current Science*, 72: 519-522.
56. Maurya, D.M., Malik, J.N., Rachna, R. and Chamyal, L.S., 1997: The Holocene valleys fill terraces in the lower Mahi valley, Gujarat. *Current Science*, 73: 539-542.
57. McCann C. 1938: Notes on the common land crab *Paratelphusa (Barytelphusa) guerini* (M.-Eds.) of Salsette Island. *J. Bombay Nat. Hist. Soc.* 39: 531-542.
58. Middelburg, J. J. and Heip, H. R., 2001: Benthic community structure and sediment processes on an intertidal flat: results from the ECOFLAT project. *Cont. Shel. Res.* 21: 2055-2071.
59. Morrisey, D. J., Turner, S. J. & Macdiarmid, A. B., 1998: Subtidal assemblages of soft substrata. In Kingsford, M. & C. Battershill (eds.), *Studying Temperate Marine Environments: A Handbook for Ecologists*. Canterbury University Press, New Zealand: 194-226.
60. Murugesan, P., AjmalKhan, S. and Ajitkumar, T. T., 2007: Temporal changes in the benthic community structure of the marine zone of Vellar estuary, southeast coast of India. *J. Mar. Biol. Ass. India*, 49 : 154 – 158.

Bibliography

61. Nagvenkar, G. S. and Ramaiah, N., 2009: Abundance of sewage-pollution indicator and human pathogenic bacteria in a tropical estuarine complex. *Environ Monit Assess* (2009) 155:245–256.
62. Nanda, A. and Vachhrajani, K. D., 2002: Diversity of insect fauna in Mahi River, near Vadodara. In: Modern Trends in Entomological Research in India. Gupta US (Ed), Pratibha Prakashan, New Delhi.
63. Ng, P. L. K., Guinot, D. and Davie P. J. F., 2008: Systema brachyuraorum: Part I. An annotated checklist fo extant brahcyurna crabs of the world. *The Raffles Bulletin of Zoology*, 17: 1- 286.
64. Olayan, A. H. and Thomas, B. V., 2008: Trace Metals Toxicity and Bioaccumulation in Mudskipper *Periophthalmus waltoni* Koumans 1941 (Gobiidae: Perciformes). *Turkish Journal of Fisheries and Aquatic Sciences* 8: 215-218.
65. Pandya, A. P., 2000: Toxicological evaluations of industrial effluent water: studies of reproductive system in laboratory model. Ph. D Thesis submitted to The M. S. University of Baroda, Vadodara.
66. Pritchard, D. W., 1967: What is an estuary: physical viewpoint? p. 3–5 *in:* G. H. Lauf (ed.) *Estuaries*, A.A.A.S. Publ. No. 83, Washington, D.C.
67. Pylee, A., Varma, P. U. and Revichandran, C., 1990: Some aspects of circulation and mixing in lower reaches of Periyar estuary, west coast of India. *Indian Journal of Marine Sciences*, 19:32-35.
68. Quinn J. F., 1982: Competitive hierarchies in marine benthic communities. *Oecologia* 54:129-135.
69. Ram, A., Rokade, M. A. and Zingde, M. D. 2009: Mercury enrichment in sediments of Amba estuary. *Indian Journal of Marine Sciences*, 38(1): 89-96.
70. Ribeiro, P. D., Iribarne, O. O. and Daleo, P. 2005: The relative importance of substratum characteristics and recruitment in determining the spatial distribution of the fiddler crab *Uca uruguayensis* Nobili. *Journ. exp. mar. Biol. Ecol.*, 314: 99-111.
71. Rosenberg, O. R. and Olundh, E. 1973: Benthic Fauna and Zooplankton in Some Polluted Swedish Estuaries. *Ambio*, 2:158-163.

72. Sakai, T., 1937: Studies on the crabs of Japan, III. Brachygnatha , Oxyrhyncha. Sc. Rep. Tokyo Bunrika Daigaku, Sect. B. vol. 3, Suppl. No. 2.
73. Salmon M, and Zucker, N. 1988: Interpreting differences in the reproductive behaviour of fiddler crabs (genus *Uca*). In G Chelazzi, M Vannini, eds. Behavioral adaptation to intertidal life. New York: Plenum Press, pp. 387-407.
74. Sanders, H. L., 1958: Benthic studies in Buzzards Bay. I. Animal sediment relationships. Limnology and Oceanography, 3: 245–258.
75. Sanford, L. P., Suttles, S. E. and Halka, J. P., 2001: Reconsidering the Physics of the Chesapeake Bay Estuarine Turbidity Maximum. Estuaries, 24:655-669.
76. Sharma, A. H., 1995: Environmental impact assessment along the effluent channel from Baroda to Jambusar and its confluence with Mahi estuary at the Gulf of cambay with reference to heavy metals. Ph.D. Thesis submitted to to The M. S. University of Baroda., Vadodara.
77. Shih, H. T, Mok, H. K. and Chang, H. W., 2005: Chimney Building by Male *Uca formosensis* Rathbun, 1921 (Crustacea:Decapoda: Ocypodidae) after Pairing: A New Hypothesis for Chimney Function. *Zoological Studies* 44: 242-251.
78. Shin, H. C. And Choi, J. Y., 2000: Distribution of macrobenthic community on Saemankeum tidal flat, west coast of Korea. Dynamics, Ecology and Evolution of Tidal flats: Abstracts 140-143, Seoul Korea.
79. Shridhar, A., 2009: Evidence of a late-medieval mega flood event in the upper reaches of the Mahi River basin, Gujarat. Current Science, 96:1517-1520.
80. Silas, E, G., and Sankarankutty. C., 1960: On the castle building habit of the crab *Cardisoma carnifex* (Herbst) (family Geocarcinidae), of the Andaman Islands. J. Mar. Biol. Assoc. India. 2: 237-240.

Bibliography

81. Singh, T. and Nayak, G. N., 2009: Sedimentary and Geochemical Signatures of Depositional Environment of Sediments in Mudflats from a Microtidal Kalinadi Estuary, Central West Coast of India. *Journal of Coastal Research*, 25:641-650.
82. Sousa, R., Dias, S. C., Guilhermino, L. and Antunes, C. 2008: Minho river tidal freshwater wetlands: threats to faunal biodiversity. *Aquatic Biology*, 3:237-250.
83. Steffen, M., Pipenburg, D. and Schmid, M. K., 2006: Distribution and structure of macrobenthic fauna in the eastern Laptev Sea in relation to environmental factors. *Polar Biol.* 29: 837-848.
84. Subbarao, N. V., 1989: Handbook of freshwater molluscs of India. Zoological Survey of India, Calcutta.
85. Sumich, J. L., 1996: An introduction to the biology of marine life. Wm. C. Brown Publishers, Dubuque, IA, 6th edition, 461 pp .
86. Talley, T. S., Dayton, P. K. and Obando, S. E. 2000: Tidal Flat Macrofaunal Communities and Their Associated Environments in Estuaries of Southern California and Northern Baja California, Mexico. *Estuaries*, 23, 97-114.
87. Timmermans, M. C. J., 2002: Hazira Harbor Siltation Study. Delta Marine Consultants, The Neatherlands.
88. Travis, J., 1996: The significance of geographical variation in species interaction. *The American Naturalist*, 148:Suppliment.
89. U.S. Environmental Protection Agency (USEPA) 1993: Volunteer Estuary Monitoring: A Methods Manual. EPA 842-B-93-004. Washington, DC: USEPA Office of Water. 176 pp.
90. Underwood, A. J. and Chapman, M. G., 1996: Scales of spatial patterns of distribution of intertidal invertebrates. *Oecologia*, 107: 212-224.
91. Wada K, and Murata, I., 2000: Chimney building in the fiddler crab *Uca arcuata*. *J. Crustacean Biol.* 20: 507-511.

Bibliography

92. Walkley, A. and Black, I. A., 1934: An examination of the Degtjareff method for determining soil organic matter, and proposed modification of the chromic acid titration method. *Soil Sci.*, 37: 29–34.
93. Weissburg, M. J., 1992: Functional analysis of fiddler crab foraging: sex-specific mechanics and constraints in *Uca pugnax* (Smith).— *Journal of Experimental Marine Biology and Ecology*, 156: 105–124.
94. Wolanski, E., 2007: *Estuarine Ecohydrology*. Amsterdam, The Netherlands: Elsevier.
95. www.nio.org
96. Zajac, R. N, Lewis R. S., Poppe, L. J., Twichell, D. C., Vozarik, J. and Cohen, M. L. 2000: Relationships among Sea-Floor Structure and Benthic Communities in Long Island Sound at Regional and Benthoscape Scales, *Journal of Coastal Research*, 16(3): 627-640.
97. Zingde, M. D., Ram, A., Sharma, P. and Abidi, S. A. H., 1995: Seawater intrusion and behavior of dissolved boron, fluoride, calcium, magnesium and nutrients in Vashisti estuary. Complex carbohydrates and advances in bioscineces. Ed. By Agrawal, V. P., Sharma. C. B., Abidi, S.A.H.; Zingde, M.D. 563-580p.