

Abida, B., Harikrishna, S. and Irfanulla, K., 2009. Analysis of heavy metals in water, sediments and fish samples of Madivala lakes of Bangalore, Karnataka. *International Journal of ChemTech Research* 1(2), 245-249.

Aksoy, A., Demirezen, D. and Duman, F., 2005. Bioaccumulation, detection and analyses of heavy metal pollution in Sultan Marsh and its environment. *Water, air, and soil pollution* 164(1), 241-255.

Alcock, A., 1900. Materials for a Carcinological Fauna of India. No. 6. The Brachyura Catametopa, or Grapsoidea. *Journal of the Asiatic Society of Bengal* 69(2) 279-456.

Altevogt, R., 1959. ökologische und ethologische studien an europas einziger winkerkrabbe *Uca tangeri* eydoux. *Zeitschrift für Morphologie und Ökologie der Tiere* 48(2), 123-146.

Athens, J. S., Tuggle, H. D., Welch, D. J. and Ward, J. V., 2002. 'Avifaunal extinctions, vegetation change, and Polynesian impacts in prehistoric Hawaii'. *Archaeology in Oceania* 37(2): 57

Barbosa, F. A. R. and Callisto, M., 2000. Rapid assessment of water quality and diversity of benthic macroinvertebrates in the upper and middle Paraguay river using the Aqua-RAP approach. *Internationale Vereinigung für theoretische und angewandte Limnologie: Verhandlungen* 27(5), 2688-2692.

Barbour, M. T., Norton, S. B., Thornton, K. W. and Preston (eds), H. R., 2004. *Ecological Assessment of Aquatic Resources: Linking Science to Decision-Making*. SETAC Press, Pensacola, FL.

Bellard, C., Cassey, P. and Blackburn, T. M., 2016. 'Alien species as a driver of recent extinctions'. *Biology Letters* 12(2): 20150623.

Beltrame, M. O., De Marco, S. G. and Marcovecchio, J. E., 2010. Influences of sex, habitat, and seasonality on heavy-metal concentrations in the burrowing crab (*Neohelice granulata*) from a coastal lagoon in Argentina. *Archives of environmental contamination and toxicology* 58(3), 746-756.

Bentum, J. K., Anang, M., Boadu, K. O., Koranteng-Addo, E. J. and Antwi, E. O., 2011. Assessment of heavy metals pollution of sediments from Fosu lagoon in Ghana. *Bulletin of the Chemical Society of Ethiopia* 25(2).

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(3), 211-237.

Bertness, M. D., 1985. Fiddler crab regulation of *Spartina alterniflora* production on a New England salt marsh. *Ecology* 66(3), 1042-1055.

Bliss, D. E., Van Montfrans, J., Van Montfrans, M. and Boyer, J. R., 1978. 'Behaviour and growth of the land crab *Gecarcinus lateralis* (Fremerville) in southern Florida'. *Bulletin of the American Museum of Natural History* 160(11): 111-152.

Boamponsem, L. K., Adam, J. I., Dampare, S. B., Owusu-Ansah, E. and Addae, G., 2010. Heavy metals level in streams of Tarkwa gold mining area of Ghana. *J Chem Pharm Res* 2(3), 504-527.

Bonada, N., Prat, N., Resh, V. H. and Statzner, B., 2006. Developments in aquatic insect biomonitoring: a comparative analysis of recent approaches. *Annu. Rev. Entomol.* 51, 495-523.

Brazeiro, A., 2005. Geomorphology induces life history changes in invertebrates of sandy beaches: the case of the mole crab *Emerita brasiliensis* in Chile. *Journal of Marine Biological Association UK* 85: 113-120.

Brook, S., Grant, A. and Bell, D., 2009. 'Can land crabs be used as a rapid ecosystem evaluation tool? A test using distribution and abundance of several genera from the Seychelles'. *Acta Oecologica* 35(5): 711-719.

Brown, A. C. and Lachlan, M., 1990. *A Ecology of sandy shores* Elsevier Science Publishes BV Amsterdam.

Carpenter, K. E., 1925. On the biological factors involved in the destruction of river-fisheries by pollution due to lead-mining. *Annals of Applied Biology*, 12(1), 1-13.

Celentano, E. and Defo, O., 2006. Habitat harshness and morphodynamics: life history traits of the mole crab *Emerita brasiliensis* in Uruguayan sandy beaches. *Marine Biology* 149: 1453-1461.

Chan, B. K. K., Chan, K. K. Y. and Leung, P. C. M., 2006. Burrow architecture of the ghost crab *Ocypode ceratophthalma* on a sandy shore in Hong Kong. *Hydrobiologia* 560(1), 43-49.

Christy, J. H., 1982. Adaptive significance of semilunar cycles of larval release in fiddler crabs (Genus *Uca*): test of an hypothesis. *The Biological Bulletin*, 163(2), 251-263.

Crane, J. 1975. *Fiddler Crabs of the World (Ocypodidae: Genus Uca)*. Princeton University Press, Princeton, New Jersey.

Dahl, E., 1952. Some aspects of the ecology and zonation of the fauna on sandy beaches. *Oikos* 4: 1-27.

de Almeida Rodrigues, P., Ferrari, R. G., Kato, L. S., Hauser-Davis, R. A. and Conte-Junior, C. A., 2021. A Systematic Review on Metal Dynamics and Marine Toxicity Risk Assessment Using Crustaceans as Bioindicators. *Biological Trace Element Research*, 1-23.

De Man, J. G., 1908. The fauna of brackish ponds at port Canning, Lower Bengal. Part 10: Decapod crustacea, with an account of a small collection from brackish water near Calcutta and in the Dacca District, Eastern Bengal. *Records of the Indian Museum* 2, 211-231.

Defeo, O., Jaramillo, E. and Lyonnet, A., 1992. Community structure and intertidal zonation of the macroinfauna in the Atlantic coast of Uruguay. *Journal of Coastal Research* 8: 830-839.

Delgado, E. and Defeo, O., 2006. A complex sexual cycle in sandy beaches: the reproductive strategy of *Emerita brasiliensis* (Decapoda: Anomura). *Journal of Marine Biological Association UK* 86: 361-368.

Delgado, E. and Defeo, O., 2007. Tisular and population level responses to habitat harshness in sandy beaches: the reproductive strategy of *Donax hanleyanus*. *Marine Biology* 152: 919-927.

Demirbas, A., 2008. Heavy metal adsorption onto agro-based waste materials: a review. *Journal of hazardous materials* 157(2-3), 220-229.

Dudgeon, D., 2003. The contribution of scientific information to the conservation and management of freshwater biodiversity in tropical Asia. *Aquatic Biodiversity* 295-314.

Friberg, N., Bonada, N., Bradley, D. C., Dunbar, M. J., Edwards, F. K., Grey, J. and Woodward, G. U. Y., 2011. Biomonitoring of human impacts in freshwater ecosystems: the good, the bad and the ugly. *Advances in ecological research* 44, 1-68.

Genoni, G. P., 1991. Increased burrowing by fiddler crabs *Uca rapax* (Smith)(Decapoda: Ocypodidae) in response to low food supply. *Journal of Experimental Marine Biology and Ecology* 147(2), 267-285.

Gerhardt, A., 2000. Biomonitoring of Polluted Water: Reviews on Actual Topics. *Environmental Science Forum* 96. Trans Tech Publications Limited, Switzerland.

Gherardi, F., Russo, S. and Lazzara L., 2002. The function of wandering in the sand-bubbler crab, *Dotilla fenestrata*. *J Crust Bio.* 22: 521-531.

Gillikin, D. P., S. De Grave. and J. F. Tack., 2001. The occurrence of the semi-terrestrial shrimp *Mergulaoligadon* (De Man, 1888) in *Neosarmatiumsmithi* H. Milne Edwards, 1853 burrows in Kenya mangroves. *Crustaceana* 74: 505-508.

Green, P. T., 1997. 'Red crabs in rain forest on Christmas Island, Indian Ocean: Activity patterns, density and biomass'. *Journal of Tropical Ecology* 13(1): 17–38.

Griffis, R. B. and Chavez, F. L., 1988. Effects of sediment type on burrows of *Callinassa californiensis* Dana and *C. gigas* Dana. *Journal of Experimental Marine Biology and Ecology* 117(3), 239-253.

Griffis, R. B. and Suchanek, T. H., 1991. A model of burrow architecture and trophic modes in thalassinidean shrimp (Decapoda: Thalassinidea). *Marine Ecology Progress Series* 171-183.

Gupta, S. Banerjee, U. S., 2012. Geochemistry of the river Damodar-the influence of the geology and weathering environment on the dissolved load. *International journal of Geomatics and Geosciences*, 2(3), 853-867.

Hanson, R., Dodoo, D. K., Essumang, D. K., Blay, J. and Yankson, K., 2007. The effect of some selected pesticides on the growth and reproduction of fresh water *Oreochromis niloticus*, *Chrysichthys nigrodigitatus* and *Clarias gariepinus*. *Bulletin of environmental contamination and toxicology*, 79(5), 544-547.

Hartnoll, R. G., S. Cannicci., W. D. Emmerson., S. A. Fratini. and Y. D. Macia., 2002. Geographic trends in Mangrove crab abundance in East Africa. *Wetland Ecology and Management*. 10:203-213.

Hilton, G. M. and Cuthbert, R. J., 2010. 'The catastrophic impact of invasive mammalian predators on birds of the UK Overseas Territories: A review and synthesis'. *Ibis* 152(3): 443–458.

Hseu, Z. Y., Chen, Z. S., Tsai, C. C., Tsui, C. C., Cheng, S. F., Liu, C. L. and Lin, H. T., 2002. Digestion methods for total heavy metals in sediments and soils. *Water, air, and soil pollution* 141(1), 189-205.

Iwasaki, Y., Kagaya, T., Miyamoto, K. I. and Matsuda, H., 2009. Effects of heavy metals on riverine benthic macroinvertebrate assemblages with reference to potential food availability for drift-feeding fishes. *Environmental Toxicology and Chemistry: An International Journal* 28(2), 354-363.

Jaramillo, E., Duarte, C. and Contreras, H., 2000. Sandy beach macroinfauna from the coast of Ancud, Isla de Chiloe, Chile. *Revista Chilena de Historia* 73: 771-786.

Katz, L. C., 1980. Effects of burrowing by the fiddler crab, *Uca pugnax* (Smith). *Estuarine and Coastal Marine Science* 11: 233-237.

Keddy, P. A., 1992. Assembly and response rules: two goals for predictive community ecology. *Journal of Vegetation Science* 3:157-164.

Kelly, M., 1988. Toxicity and Tolerance to Heavy Metals. I. Plants. In *Mining and the Freshwater Environment* (pp. 64-83). Springer, Dordrecht.

Kemp. S., 1919. Notes on Crustacea Decapoda in the Indian Museum. 12. Scopimera. *Record of the Indian Museum*.

Korte, T., Baki, A. B. M., Ofenböck, T., Moog, O., Sharma, S. and Hering, D. 2010. Assessing river ecological quality using benthic macroinvertebrates in the Hindu Kush-Himalayan region. *Hydrobiologia* 651(1), 59-76.

Labunska, I., Stephenson, A., Brigden, K., Stringer, R., Santillo, D. and Johnston, P. A., 1999. The Bhopal Legacy: Toxic contaminants at the former Union Carbide factory site, Bhopal, India: 15 years after the Bhopal accident. Greenpeace Research Laboratories, Department of Biological Sciences, University of Exeter, Exeter UK.

Lee, M. D., Ahlgren, N. A., Kling, J. D., Walworth, N. G., Rocap, G., Saito, M. A. and Webb, E. A., 2019. Marine *Synechococcus* isolates representing globally abundant genomic lineages demonstrate a unique evolutionary path of genome reduction without a decrease in GC content. *Environmental microbiology*, 21(5), 1677-1686.

Lee, S. Y., 1997. Ecology and behaviour of *Uca formosensis* in Taiwan Institute of Marine Biology: National Sun Yat-Sen University.

Lewis, J. R., 1964. The ecology of rocky shores. London: English University Press.

Litulo, C., 2005a. Population biology of the fiddler crab *Uca annulipes* (Brachyura: Ocypodidae) in a tropical East African mangrove (Mozambique). *Estuarine, Coastal and Shelf Science* 62:283-290.

Litulo, C., 2005b. Population structure and reproductive biology of the fiddler crab *Uca inversa* (Hoffman, 1874) (Brachyura: Ocypodidae). *Acta Oecologica* 27(3): 135-141.

Lucrezi, S., Schlacher, T. A. and Walker, S., 2009. Monitoring human impacts on sandy shore ecosystems: a test of ghost crabs (*Ocypode* spp.) as biological indicators on an urban beach. *Environmental monitoring and assessment* 152(1), 413-424.

McLachlan, A. and Brown A., 2006. *The ecology of sandy shores* (2nd edition). Academic Press, Elsevier.

McLachlan, A. and Dorvlo, A., 2005. Global patterns in sandy beach macrobenthic communities. *J Coast Res* 21: 674-687.

McLachlan, A. and Jaramillo, E., 1995. Zonation on sandy beaches. *Oceanogr Marine Biological Annual Rev* 33: 305-335.

McLachlan, A., 1990. Dissipative beaches and macrofauna communities on exposed intertidal sands. *Journal of Coastal Research* 6: 57-71.

McLachlan, A., Jaramillo, E., Donn, T. E. and Wessels, F., 1993. Sand beach macrofauna communities: a geographical comparison. *Journal of Coastal Research* 15: 27-38.

Menezes, S., Baird, D. J. and Soares, A. M., 2010. Beyond taxonomy: a review of macroinvertebrate trait-based community descriptors as tools for freshwater biomonitoring. *Journal of Applied Ecology* 47(4), 711-719.

Menge, B. A. and Sutherland, J. P., 1976. Species diversity gradients: synthesis of the roles of predation, competition and temporal heterogeneity. *Am Nat* 110: 351-69.

Miller, D. C., 1961. The feeding mechanism of fiddler crabs, with ecological considerations of feeding adaptations. *Zoologica* 46: 89-100.

Montague, C. L., 1980. A natural history of temperate western Atlantic fiddler crabs (genus *Uca*) with reference to their impact on the salt marsh. *Contributions in Marine Science* 23: 25-25.

Montague, C. L., 1980. A natural history of temperate western Atlantic fiddler crabs (genus *Uca*) with reference

Mortensen, T., 1921. Biologisk Studier over Sandstrandfaunen, saerlig ved de danske Kyster. *Videnskabelige Meddelelser Dansk Naturhistorisk Forening* 74: 23-56.

Nayak, S. R. and Baldev, S., 1983. Coastal geomorphology of the Gulf of Khambhat. *Proc. Of the All-India Sympo. Dept. of Geol, MS Uni, Baroda*, 97-108.

Nayak, S. R. and Sahai, B., 1985. Coastal morphology: a case study of the Gulf of Khambhat (Cambay). *International Journal of Remote Sensing*, 6(3-4), 559-567.

Nel, P., McLachlan, A. and Winter, D., 1999. The effect of sand particle size on the burrowing ability of the beach mysid *Gastrosaccus psammodytes* Tattersall. *Estuarine Coast Shelf Science* 48: 599-604.

Nel, P., McLachlan, A. and Winter, D., 2001. The effect of grain size on the burrowing of two *Donax* species. *Journal of Experimental Marine Biology and Ecology* 265: 219-238.

Ng, P. K., Guinot, D. and Davie, P. J., 2008. Systema Brachyurorum: Part I. An annotated checklist of extant brachyuran crabs of the world. The Raffles Bulletin of Zoology 17(1), 1-286.

Nguyen, H. L., Leermakers, M., Osán, J., Török, S. and Baeyens, W., 2005. Heavy metals in Lake Balaton: water column, suspended matter, sediment and biota. Science of the Total Environment 340(1-3), 213-230.

Nicholas, H. W. and G. A. Moshiri., 1974. Certain organism-substrate relationships affecting the distribution of *Uca minax* (Crustacea: Decapoda). Hydrsobiologia 44:481-493.

Nigro, K. M., Hathaway, S. A., Wegmann, A. S., Miller-ter Kuile, A., Fisher, R. N., and Young, H. S., 2017. Stable isotope analysis as an early monitoring tool for community-scale effects of rat eradication. Restoration Ecology 25 (6), 1015-1025.

O'Dowd, D. J., Green, P. T. and Lake, P. S., 2003. 'Invasional 'meltdown' on an oceanic island'. Ecology Letters 6(9): 812–817.

Obiri, S., 2007. Determination of heavy metals in water from boreholes in Dumasi in the Wassa Wst District of western region of Republic of Ghana. Environmental monitoring and assessment, 130(1), 455-463.

Ono, Y., 1965. On the ecological distribution of ocypodid crabs in the estuary. The Memoirs of the Faculty of Science, Kyushu University, Series E (Biology) 4, 1-60.

Paine, R. T., 1966. 'Food web complexity and species diversity'. American Naturalist 100(910): 65–75.

Paul, J., Mondal, S., Kayal, R. and Sarkar, D., 2019. Burrow morphology of the ocypodid crab *Ocypode ceratophthalma* at Chandipur Coast, Eastern India and its implications. *Current Science* (00113891) 117(4).

Pitman, R. L., Ballance, L. T. and Bost, C., 2005. 'Clipperton Island: Pig sty, rat hole and booby prize'. *Marine Ornithology* 33: 193-194.

Poff, N. L., 1997. Landscape filters and species traits: towards mechanistic understanding and prediction in stream ecology. *Journal of the North American Benthological Society* 16:391-409.

Rathbun, M. J., 1914. New species of crabs of the families Grapsidae and Ocypodidae. *Proceedings of the United States National Museum* 47, 68-85.

Resh, V. H., 1995. Freshwater benthic macroinvertebrates and rapid assessment procedures for water quality monitoring in developing and newly industrialized countries. *Biological assessment and criteria* 167-177.

Resh, V. H., 2008. Which group is best? Attributes of different biological assemblages used in freshwater biomonitoring programs. *Environmental Monitoring and Assessment* 138:131-138.

Ridd, P. V., 1996. Flow through animal burrows in mangrove creeks. *Estuarine, Coastal and Shelf Science*, 43(5), 617-625.

Roy, M. D., 2013. Diversity and distribution of marine brachyuran crab communities inhabiting West Coast of India. In *Ecology and conservation of tropical marine faunal communities* (pp. 147-169). Springer, Berlin, Heidelberg.

Russell, J. C., Meyer, J. Y., Holmes, N. D. and Pagad, S., 2017. Invasive alien species on islands: impacts, distribution, interactions and management. *Environmental Conservation*, 44(4), 359-370.

Russo, S. Gherardi, F. and Vannini. M., 1998. Anti-predatory role of the droves composed by the tropical crab, *Dotilla fenestrata*. *Ins Soc Life* 2: 191-194.

Salvat, B., 1964. Les conditions hydrodynamiques interstitielles des sediments meubles intertidaux et la répartition verticale de la fauna endogée. *C R Acad Sci Paris* 259: 1576-1579.

Seys, J., Moragwa, G., Boera, P. and Ngoa, M., 1995. Distribution and abundance of birds in tidal creeks and estuaries of the Kenyan Coast between the Sabaki River and Gazi Bay. *Scopus* 19(1), 47-60.

Short, A. D., 1996. The role of wave height, slope, tidal range and embaymentisation in beach classification: a review. *Rev Chil Hist Nat* 69: 589-604.

Singh, N., Koku, J. E. and Balfors, B., 2007. Resolving water conflicts in mining areas of Ghana through public participation a communication perspective. *Journal of creative communications* 2(3), 361-382.

Skov, M., Vannini, M., Shunula, J., Hartnoll, R., and Cannicci, S., 2002. Quantifying the density of mangrove crabs: Ocypodidae and Grapsidae. *Marine Biology*, 141(4), 725-732.

Smith III, T. J., Boto, K. G., Frusher, S. D., and Giddins, R. L., 1991. Keystone species and mangrove forest dynamics: the

influence of burrowing by crabs on soil nutrient status and forest productivity. *Estuarine, coastal and shelf science*, 33(5), 419-432.

Southwood, T., 1977. Habitat, the templet for ecological strategies? *Journal of Animal Ecology* 46:337-365.

Szaniawska, A., 2018. Function and Importance of Crustaceans. In: *Baltic Crustaceans*. Springer, Cham 185-188

Teal, J. M., 1958. Distribution of fiddler crabs in Georgia salt marshes. *Ecology* 39(2), 185-193.

Towns, D. R., Atkinson, I. A. E. and Daugherty, C. H., 2006. 'Have the harmful effects of introduced rats on islands been exaggerated?' *Biological Invasions* 8(4): 863-891.

Trivedi, J. N., Soni, G. M., Trivedi, D. J. and Vachhrajani, K. D., 2015. A new species of *Ilyoplax* (Decapoda, Brachyura, Dotillidae) from Gujarat India. *Journal of Asia-Pacific Biodiversity* 8(2):173-177.

Underwood, A. J., 1984. Paradigms, explanations and generalizations in models for the structure of intertidal communities on rocky shore. *Ecological communities: conceptual issues and the evidence* 151-180.

Unnikrishnan, A. S., Shetye, S. R. and Michael, G. S., 1999. Tidal propagation in the Gulf of Khambhat, Bombay High, and surrounding areas. *Proceedings of the Indian Academy of Sciences-Earth and Planetary Sciences*, 108(3), 155-177.

Vachhrajani, K. D. and Pandya, P. J. Life Under Ecological Flux: An Estuarine Case Study. *Academia* 1(427).

- Van Himbeeck, R. A., Huizinga, W., Roessink, I. and Peeters, E. T., 2019. Behavioral patterns of two fiddler crab species *Uca rapax* and *Uca tangeri* in a seminatural mangrove system. *Zoo biology*, 38(4), 343-354.
- Vogel, F., 1984. Comparative and functional morphology of the spoon-tipped setae on the second maxillipeds in *Dotilla* Stimpson, 1858 (Decapoda, Brachyura, Ocypodidae). *Crustaceana* 47: 225-234.
- Wada, K., 1981. Growth, breeding and recruitment in *Scopimera globosa* and *Ilyoplax pusillus* (Crustacea: Ocypodidae) in the estuary of Waka River, Middle Japan. *Pub Seto Mar Biol Lab* 26: 243-259.
- Wolfrath, B., 1992. Burrowing of the fiddler crab *Uca tangeri* in the Ria Formosa in Portugal and its influence on sediment structure. *Marine Ecology Progress Series* 85, 237-243.
- Wright, J. F., Furse, M. T. and Armitage, P. D., 1993. RIVPACS-a technique for evaluating the biological quality of rivers in the UK. *European Water Pollution Control*, 3, 15-15.
- Zweig, L. D. and Rabeni, C. F., 2001. Biomonitoring for deposited sediment using benthic invertebrates: a test on 4 Missouri streams. *Journal of the North American Benthological Society*, 20(4), 643-657.