LEGEND TO TABLES

Table 1. State wise extent of mangrove cover in India
Table 2. Zonation of common mangrove species along Achara

LEGEND TO FIGURES

Figure 1. Nitrogen transformations
Figure 2. Location of the sampling stations in the Achara estuary
Figure 3. Nitrogen cycle in mangroves
Figure 4. Seasonal variations of monthly averages of temperature
Figure 5. Seasonal changes in pH of water column
Figure 6. Seasonal changes in salinity at Achara estuary.
Figure 7. Seasonal changes in concentrations of dissolved oxygen at high tide
Figure 8. Seasonal changes in concentrations of dissolved oxygen during low tide
Figure 9. Seasonal changes of the dissolved oxygen content and percent saturation at high tide
Figure 10. Seasonal changes of the dissolved oxygen content and percent saturation at low tide
Figure 11. Seasonal variation of daily rainfall (monsoon) at Sindhudurg district (Kankavali)
Figure 12. Nitrogenous nutrients, phosphate, silicate in rain water collected at Achara
Figure 13. Seasonal changes in concentrations of chl a in water column
Figure 14. Seasonal changes in concentrations of chl b in water column
Figure 15. Seasonal changes in concentrations of chl c in water column
Figure 16. Seasonal changes in concentrations of carotenoids in water column
Figure 17. Seasonal changes in concentrations of phaeopigments in water column
Figure 18. Seasonal changes in concentrations of nitrite in water column
Figure 19. Seasonal changes in concentrations of nitrate in water column
Figure 20. Seasonal changes in concentrations of ammonium in water column
Figure 21. Seasonal changes in concentrations of urea in water column
Figure 22. Seasonal changes in concentrations of DON in water column
Figure 23. Seasonal changes in concentrations of phosphate in water column
Figure 24. Seasonal changes in concentrations of silicate in water column
Figure 25. Seasonal changes in concentrations of PON in water column
Figure 26. Seasonal changes in percentage of nitrogenous nutrients in water
Figure 27. Grain size at station 3
Figure 28. Seasonal changes in pH of sediment
Figure 29. Seasonal changes in concentrations of chl a in sediment
Figure 30. Seasonal changes in concentrations of chl b in sediment
Figure 31. Seasonal changes in concentrations of chl c in sediment
Figure 32. Seasonal changes in concentrations of carotenoids in sediment
Figure 33. Seasonal changes in concentrations of phaeopigments in sediment
Figure 34. Seasonal changes in concentrations of nitrite in sediment
Figure 35. Seasonal changes in concentrations of nitrate in sediment
Figure 36. Seasonal changes in concentrations of ammonium in sediment
Figure 37. Seasonal changes in concentrations of urea in sediment
Figure 38. Seasonal changes in concentrations of DON in sediment
Figure 39. Seasonal changes in concentrations of phosphate in sediment
Figure 40. Seasonal changes in concentrations of silicate in sediment
Figure 41. Seasonal changes in concentrations of PON in sediment
Figure 42. Seasonal changes in percentage of nitrogenous nutrients in sediment
Figure 43. Tidal exchange of nitrate between sea and mangroves
Figure 44. Tidal exchange of nitrite between sea and mangroves
Figure 45. Tidal exchange of ammonium between sea and mangroves
Figure 46. Tidal exchange of urea between sea and mangroves
Figure 47. Tidal exchange of DON between sea and mangroves
Figure 48. Tidal exchange of phosphate between sea and mangroves
Figure 49. Tidal exchange of silicate between sea and mangroves
Figure 50. PON concentrations during a tidal cycle
Figure 51. Correlation of nutrient with tidal volume
Figure 52. Seasonal changes in concentrations of chl a during tidal cycle
Figure 53. Seasonal changes in concentrations of chl b during tidal cycle
Figure 54. Seasonal changes in concentrations of chl c during tidal cycle
Figure 55. Seasonal changes in concentrations of carotenoids during tidal cycle
Figure 56. Seasonal changes in concentrations of phaeopigments during tidal cycle
Figure 57. Ratio of DIN: DIP during the tidal cycle
Figure 58. Seasonal changes in concentrations of nitrate in overlying water during incubation.
Figure 59. Seasonal changes in concentrations of nitrite in overlying water during incubation.
Figure 60. Seasonal changes in concentrations of ammonium in overlying water during incubation.

Figure 61. Seasonal changes in concentrations of nitrate and salinity.

Figure 62. Seasonal changes in concentrations of nitrite and salinity.

Figure 63. Seasonal changes in concentrations of ammonium and salinity.

Figure 64. Seasonal changes in concentrations of urea and salinity.

Figure 65. Seasonal changes in concentrations of DON and salinity.

Figure 66. Seasonal changes in concentrations of phosphate and salinity.

Figure 67. Seasonal changes in concentrations of silicate and salinity.

Figure 68. Seasonal changes in ammonium and PON concentrations in water column.

Figure 69. Seasonal changes in concentrations of nitrate and silicate.

Figure 70. Seasonal changes in concentrations of total nitrogen and phosphate.

Figure 71. Seasonal changes in concentrations of ammonium and nitrate.

Figure 72. Seasonal changes in concentrations of ammonium and nitrite.

Figure 73. N:P ratios

Figure 74. Seasonal changes in concentrations of chl a and phaeopigment in water column.

Figure 75. Seasonal changes in concentrations of chla in water column

Figure 76. Chl a: Phaeopigment ratio in sediment

Figure 77. Seasonal changes in concentrations of chlorophyll a and nitrite

Figure 78. Seasonal changes in concentrations of chlorophyll a and nitrate

Figure 79. Seasonal changes in concentrations of chlorophyll a and ammonium

Figure 80. Seasonal changes in concentrations of chlorophyll a and urea

Figure 81. Seasonal changes in concentrations of chlorophyll a and DON

Figure 82. Seasonal changes in concentrations chlorophyll a and phosphate

Figure 83. Seasonal changes in concentrations chlorophyll a and silicate

Figure 84. Seasonal changes in concentrations of nitrite and nitrate in sediment

Figure 85. Seasonal changes in the average concentrations of PON and ammonium in sediment.