

Diatom Diversity in the Coastlines of Dakshin Kannada and Udupi Districts



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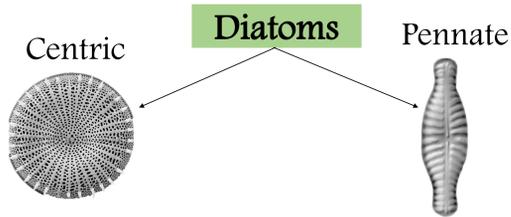
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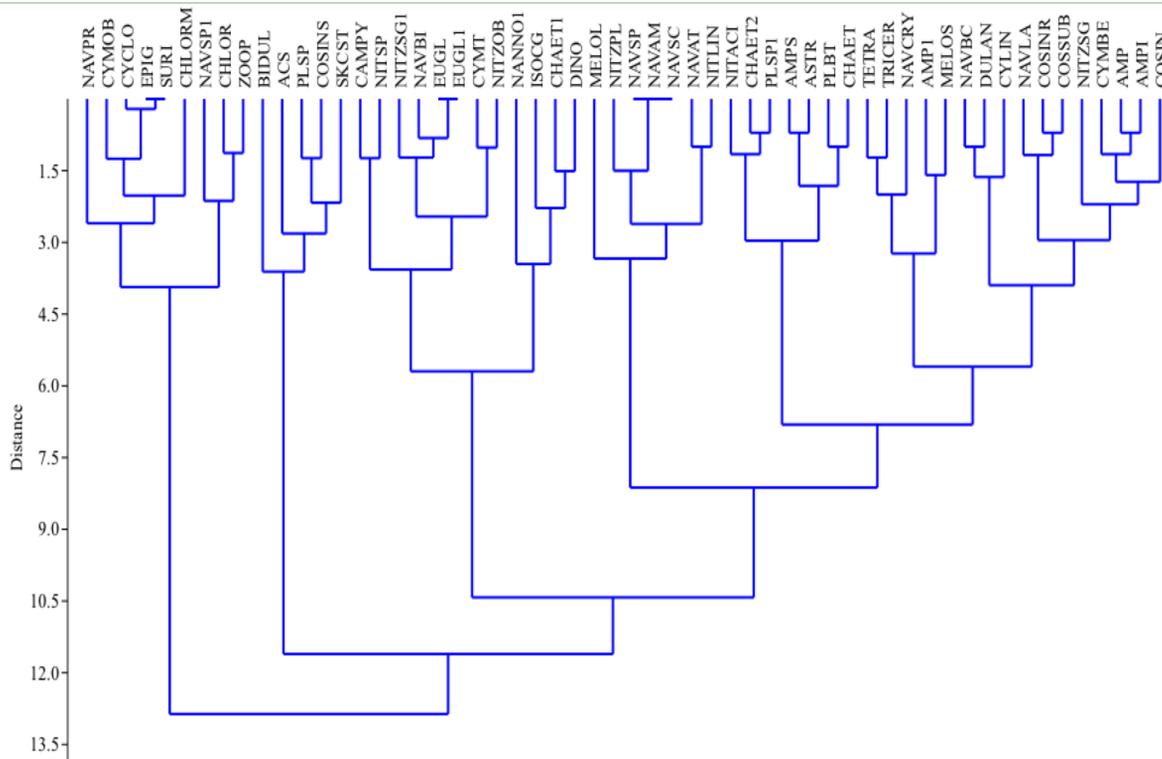
INTRODUCTION

- Diatoms are bio-indicators of water quality in limnological studies.



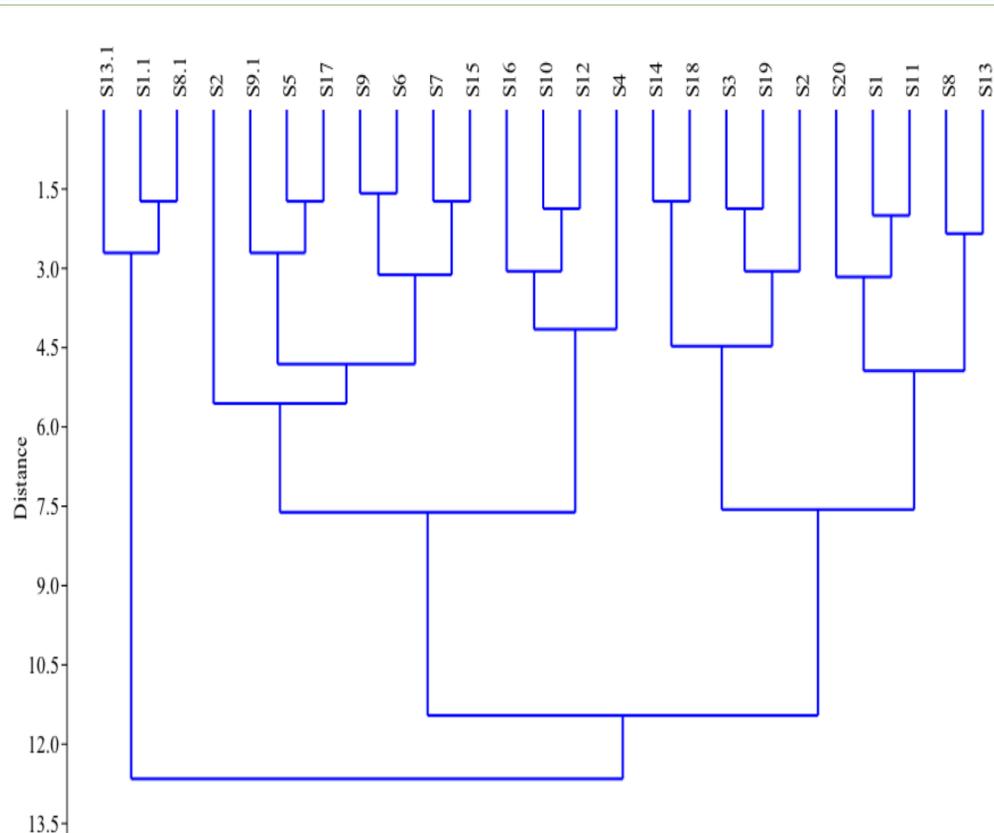
- In the present work, an effort was taken to map the marine planktonic and benthic diatom diversity in two districts of central west coast.

SPECIES BASED CLUSTERING



<i>Achnanthes sp.</i>	ACS
<i>Amphiprora sp.</i>	AMP
<i>Amphiprora sp.</i>	AMPI
<i>Amphora salina</i>	AMPS
<i>Amphora sp.</i>	AMP1
<i>Asterionella sp.</i>	ASTR
<i>Bidulphia sp.</i>	BIDUL
<i>Campylodiscus sp.</i>	CAMPY
<i>Chaetoceros gracilis</i>	CHAET
<i>Chaetoceros sp.</i>	CHAET1
<i>Chaetoceros sp.1</i>	CHAET2
<i>Chlorella sp.</i>	CHLOR
<i>Chlorophycean members</i>	CHLORM
<i>Coscinodiscus radiatus</i>	COSIN
<i>Coscinodiscus radiatus1</i>	COSINR
<i>Coscinodiscus sp.</i>	COSINS
<i>Coscinodiscus subtilis</i>	COSSUB
<i>Cyclotella sp.</i>	CYCLO
<i>Cylindrotheca fusiformis</i>	CYLIN
<i>Cymbella cymbiformis</i>	CYMBE
<i>Cymbella obtusa</i>	CYMOB
<i>Cymbella tumida</i>	CYMT
<i>Dinoflagellate</i>	DINO
<i>Dulaniella salina</i>	DULAN
<i>Epithema gibberula</i>	EPIG
<i>Euglena sp.</i>	EUGL
<i>Euglena sp.1</i>	EUGL1
<i>Isochrysis galbana</i>	ISOCG
<i>Melosira lineatus</i>	MELOL
<i>Melosira sp.1</i>	MELOS
<i>Nanochloropsis oculata</i>	NANNO1
<i>Navicula amphibaena</i>	NAVAM
<i>Navicula atomoides</i>	NAVAT
<i>Navicula bacillum</i>	NAVBC
<i>Navicula bicephala</i>	NAVBI
<i>Navicula cryptocephala</i>	NAVCRY
<i>Navicula lanceolata</i>	NAVLA
<i>Navicula mutica</i>	NAVPR
<i>Navicula permagna</i>	NAVSC
<i>Navicula scutelloids</i>	NAVSP
<i>Navicula sp.</i>	NAVSP1
<i>Nitzschia acicularis</i>	NITACI
<i>Nitzschia linearis</i>	NITLIN
<i>Nitzschia obtusa</i>	NITZOB
<i>Nitzschia palea</i>	NITZPL
<i>Nitzschia sigma</i>	NITZSG
<i>Nitzschia sigma</i>	NITZSG1
<i>Nitzschia sp.</i>	NITSP
<i>Pleurosigma balticum</i>	PLBT
<i>Pleurosigma sp.</i>	PLSP
<i>Pleurosigma sp.1</i>	PLSP1
<i>Skeletonema costatum</i>	SKCST
<i>Surirella sp.</i>	SURI
<i>Tetraselmus sp.</i>	TETRA
<i>Triceratium sp.</i>	TRICER
<i>Zooplankton</i>	ZOOP

STATION BASED CLUSTERING



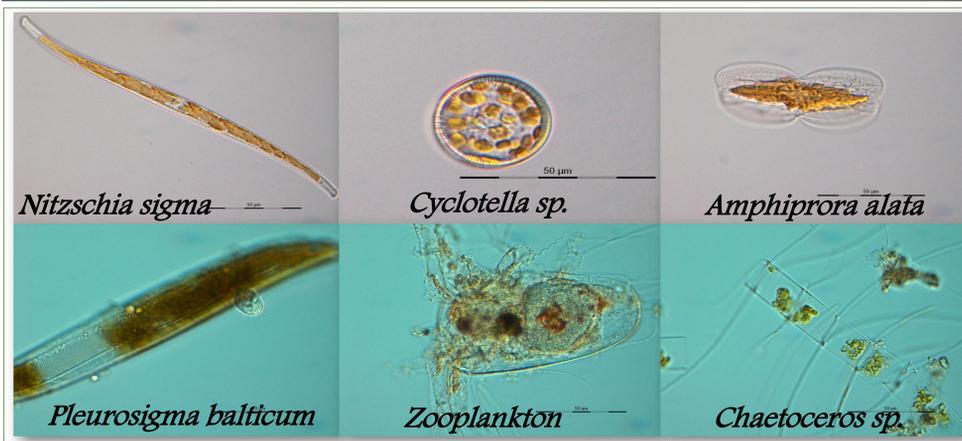
MATERIALS & METHODS

- Planktonic diatom sampling was carried out using a plankton net 20 µm mesh size, fitted to a collection silo of 1 litre capacity.
- Benthic diatoms were collected using a spatula by scrapping available hard surfaces at each stations.

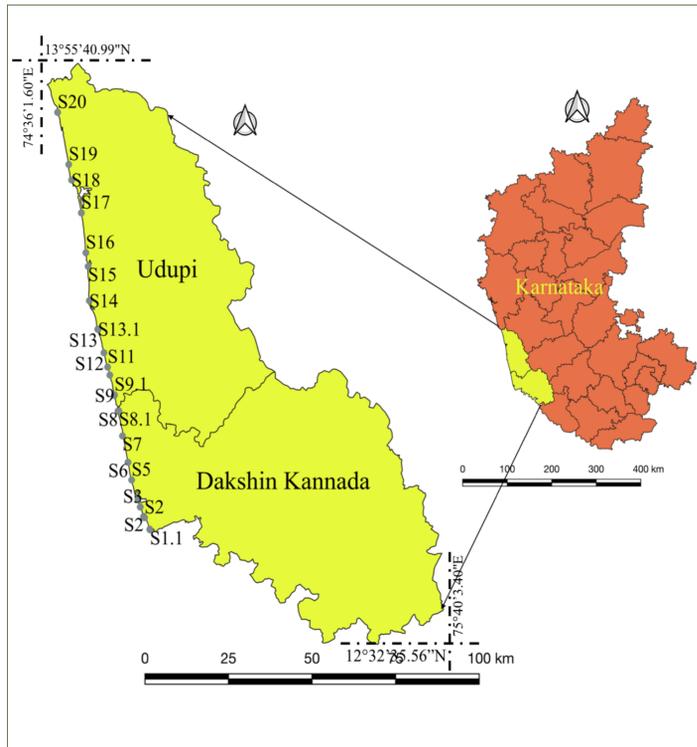
Diatoms	Nature of Substrata
Epilithons	Stones, Rocks (Cobbles, Boulders)
Epipelons	Sediments
Epiphytons	Other macrophytes and Plants
Episammons	Sand

- The collected diatoms were analyzed using Olympus BX-51 fluorescence microscope.
- The diatoms were identified using standard diatom keys.

SPECIES COMPOSITION



STUDY AREA



MATERIALS & METHODS

