Conclusion
The present study highlights a wide spectrum of distribution patterns of higher filamentous marine fungi along west coast of India. Among 111 species belonging to 63 genera, 6 were new generic reports (*Bicorniosporella, Carinispora, Hypoploeda, Herpotrichea, Lautisporopsis* and *Varicosporina*) and 15 species: *Arenariomyces triseptatus, Anthostomella nypensis, Asterosphaeriella nypae, Asterosphaeriella striatispora, Didymosphaeria maritima, Halosarpeia kandeliae, Halosphaeria appendiculata, Lindra obtusa, Lulworthia opaca, Massarina ramaunculica, Pleospora spartinae, Saccardoella mangrovei, Cirrenalia adarca, Helicorhoidion nypicola* and *Trichocladium nypae* were new reports from India. 5 species were new reports from Tamil Nadu, 14 from Kerala, 18 from Mahe (Puducherry), 3 from Lakshadweep Islands, 2 from Karnataka, 7 from Goa, 7 from Maharashtra and 3 from Gujarat. And one species each was new report for west coast and south India. *Didymosphaeria maritima* was a new species recorded from the tropics. Of the 111 species, 7 were identified up to generic level (*Aniptodera sp I, Aniptodera sp II, Halosarpeia sp, Bathyascus sp, Hypoploeda sp, Zopfiella sp* and *Zalerion sp*).

A critical analysis of fungi recorded in the present study in the light of Kohlmeyer’s (1969, 1974, 1979) definition on marine fungi revealed that all the 111 marine fungi could be classified as marine as they belong to those genera which were hitherto recorded from marine environments and regarded as typically marine.

The study reports the maximum number of marine fungi recorded in a single study and is comparable with 100 species from Malaysia (*Alias et al.*, 1997), 95 from Brunei (*Hyde, 1988b*), 88 from India (*Prasannarai & Sridhar, 2001; Sarma & Vittal, 2004*) and 80 from India (*Raveendran & Manimohan, 2007*).
Latest estimate of obligate marine fungi is 800. The total number of filamentous higher marine fungi is 465 (Kohlmeyer & Volk. Kohlmeyer, 2003). Of this 465, 111 species i.e 23.87% were obtained in the current study. A checklist of marine fungi from India by Borse (2002b) reveals 146 marine fungi from India. Of this 146 species, 73 species i.e 50% were encountered in the present study. However, according to plant-fungus ratio, the fungi expected from west coast of India were quite higher than those obtained.

Though studies conducted on marine fungi have so far been on taxonomy, biodiversity and ecology there is still an urgent need to document the mycota of coastal areas from different parts of the world as the coastal ecosystems are being reclaimed / destroyed at an alarming rate i.e 1% per year (Ong, 1982, 1995). Human disturbance such as oil spills, hospital wastes and industrial effluents discharges, leachates containing pesticides are ever increasing in the marine environment (Molotoris & Schaumann, 1986). Mangroves and other coastal areas are particularly vulnerable to the above disturbances as they are exposed to stress factors, which in turn affect microorganism like marine fungi in such habitats (Gayatri & Raveendran, 2008b, 2010). Hence, it is suggested that microbial diversity studies in addition to floral and faunial diversity studies need to be undertaken with high priority from coastal ecosystem (Sarma, 2007). As the marine mycota are considered as the backbone of marine ecosystem (Gayatri & Raveendran, 2008b) an urgent need for a global awareness campaign against anthropogenic activities in the vicinities of coastal areas has to be undertaken with immediate effect.