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C E R T I F I C A T E

This is to certify that The mini dissertation entitled " **Mangrove Vegetation(fauna-flora) of Sharavati Estury in Honnavar Uttarkannada of Western Costal Karnataka, India**" submitted by VIJAYKUMAR B KOTTALAGI in partial fulfillment for graduation program B.sc CBZ combination in Zoology subject is based on field visit and observation done by him under my guidance and supervision.

This mini dissertation has not been submitted elsewhere.

Place : Gokak

Date: 20 Jan 2023

Dr. Umesh. M. Shagoti

Research & supervisor

IQAC Co-ordinator
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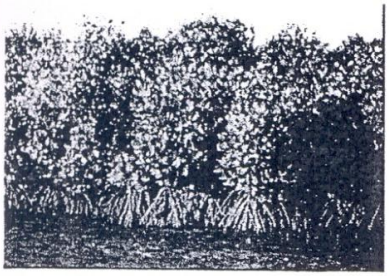

Figure 1.1: The 'Walking trees', Rhizophora mucrona on still roots

Figure 1.2. Breathing roots of Avicennia officinalis

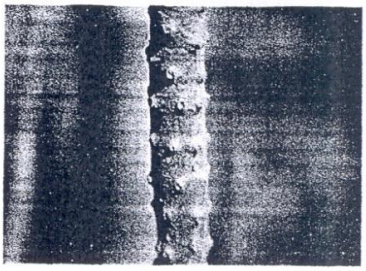

Figure 1.3: Officinalis-part of breathing root enlarged showing lenticels (air pores)

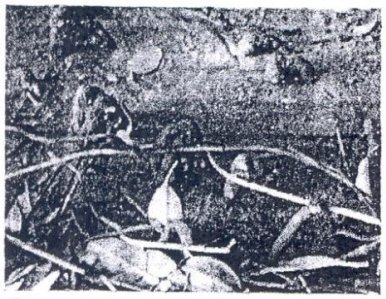

Figure 1.4. Knee roots of Bruguiera gymnorrhiza

Figure 1.5. The stem base of Kandelia candel showing buttresses and stilt roots

Figure 1.6: The stem base of Bruguiera gymnorrhiza with stilt roots

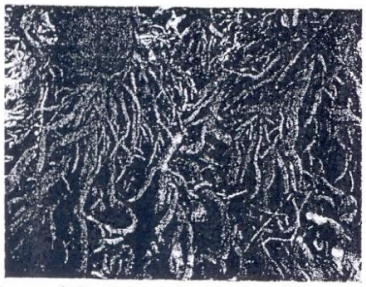

Figure 1.7: Serpentine roots of Excoecaria agallocha

Figure 1.8: Rhizophora mucronata showing viviparous propagules

Figure 1.9: Litter fall amidst the stilt roots of Rhizophora mucronata

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