

Fatty acid fingerprinting of *Cymbella* sp. isolated from Pichavaram mangrove waters

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Hundred strains of *Cymbella* sp were isolated from Pichavaram mangrove waters, Tamilnadu, India and made its unialgal culture. All strains were grown in F/2 medium at 21°C for 21 days in 2000lux with 12:12 light: dark. Genomic DNA was isolated from all strains and 18s rRNA was sequenced and submitted to NCBI database. Fatty acid fingerprinting of 100 *Cymbella* strains were determined by using Innowax column in Agilent 1100 model gas chromatography. The major fatty acids were Arachidonic acid, Behenic acid, Eicosadienoic acid, Elaidic acid, Eicosanoic Acid, Heptadecanoic acid, Heneicosanoic acid, Lignoceric acid, Linolelaidic acid, Linolenic acid Myristic acid, Myristoleic acid, Non Decanoic acid, Nervonic acid, Oleic acid, Palmitoleic acid, Pentadecanoic acid, Stearic acid, Tridecanoic acid, Tricosanoic acid. On the basis of fatty acid fingerprinting it was possible to distinguish between the *Cymbella* sp.