

## PROJECT PROFILE

<b>Title of the Project</b>	:	<b>Development of salt tolerant beneficial microbial consortia from mangroves for bioremediation</b>
<b>Principle Investigator</b>	:	Shri Anish V. Pachu
<b>Co Investigators</b>	:	Dr. V. Mohan, Dr. A. Karthikeyan
<b>Duration of Project (Start &amp; End)</b>	:	3 years (01-04-2019 to 31-03-2022)
<b>Objectives</b>		<p>Short-term objectives</p> <ol style="list-style-type: none"> <li>1) To investigate the abundance and diversity of plant growth promoting microbes in mangrove ecosystem.</li> <li>2) To determine the edapho-climatic factors influencing the occurrence and distribution of beneficial microbes in mangrove ecosystem.</li> <li>3) To screen and select the potential salt tolerant beneficial microbial strains under in-vitro.</li> <li>4) To determine the efficacy of the beneficial microbes on growth improvement of selected tree species in salt affected soils under nursery condition.</li> </ol> <p>Long-term objective</p> <ol style="list-style-type: none"> <li>1) To develop effective salt tolerant beneficial microbial bio-inoculants exclusively for tree crops in salt affected area</li> </ol>
<b>Funding agency</b>	:	ICFRE
<b>Summary/Achievements</b>	:	<p>The research project tries to explore the beneficial microbes from mangroves for their possible utilization in enhancing the growth and biomass of the plant species under salt stress. The scope of the programme is to benefit the utilization of halo-tolerant beneficial microbes of mangroves for better survival and growth enhancement of plants in salinity stress. The study will benefit largely on scientific advancement towards developing adaptive measures to plant growth stress under soil salinity by bio-inoculating salt-tolerant beneficial plant growth promoting microflora. Conservation and effective utilization of such problematic soils are one of the very important steps towards conceptualizing a resilient ecosystem as land areas under soil salinity have been expanding at an alarming rate ever since the rise in temperature and decreased precipitation due to global climatic variability.</p>