Project title	Development of Nano-biopesticides for application in forestry
Principal Investigator	Dr. N. Senthilkumar
Co-Investigators	Smt. R. Sumathi
Project duration (Start & End)	3 years: 2019-2022
Objectives	1. Isolation and taxonomic confirmation of endophytic fungi from selected tropical tree species. 2. Screening and evaluation of endophytic fungi of entomopathogenic significance. 3. Characterization of chitosan encapsulated (nano-encapsulation) endophytic fungi of entomopathogenic significance. 4. Development and evaluation of nano-biopesticides against insect pests of forestry and agriculture importance.
Progress	Isolated 112 endophytic fungi from the leaves of *Tectona grandis* (26 trees), *Ailanthus excelsa* (38 trees), *Pterocarpus santalinus* (33 trees) and *Gmelina arborea* (33 trees). Endophytic fungi viz., *Trichoderma* spp. *Fusarium* spp. *Aspergillus* spp. *Cladosporium* spp. *Colletotrichum* spp. *Curvilaria mucor* spp. *and Mucor* spp. were confirmed in all tree species selected for the study. Endophytic fungi viz, *Cladosporium* sp. *Colletotrichum* sp. and *Curvilaria* sp. were found effective against the Ailanthus defoliator *Eligma narcissus*.
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