Title	:	Enhancing the Productivity and Active Ingredients of Valuable Medicinal Plants *Salacia oblonga* and *Hemidesmus indicus*
Principal Investigators	:	P. Kathirvel, IFS, DCF
Co-Investigator	:	Dr. K. Panneer Selvam
Duration	:	4 Years (2018 to 2021)
Objectives	:	a. To assemble and evaluate different ecotypes for higher productivity and active ingredients. b. To standardize the propagation techniques and early rooting pattern for mass production and commercial cultivation. c. To standardize cultivation packages and post harvesting techniques for higher productivity and active ingredients for better marketing.
Funding Agency		Tamil Nadu State Planning Commission
Summary/Achievements	:	The present investigation on enhancing the productivity and active ingredients of valuable medicinal plants *Salacia oblonga* and *Hemidesmus indicus* was carried out at the Institute of Forest Genetics and Tree Breeding, Coimbatore, Tamil Nadu. Plant parts of the two species were collected and the quantification of the available phytochemicals was achieved. Plant propagation studies were mainly aimed to achieve through seeds and stem cuttings. Matured fruits of Salacia oblonga were collected from natural populations from Therkumalai near Kuttralam, Thenkasi District. The seeds of Hemidesmus indicus were not available and hence only cuttings were used for further study. There were marked variation in the growth of cuttings of *Hemidesmus indicusdue* to site of collection and potting. It was found that the cuttings from the source Pachamalai were superior in growth characteristics over the other sources and those from Karumandurai exhibited the poorest performance. Hence, it can be concluded that large scale multiplication of the species can be achieved in a better way by using cuttings from Pachamalai grown in a medium of soil, sand and vermicompost at a ratio of 2:1:1. The plantation raised through semi hard wood cutting of *Salacia oblanga* is showing better growth in respect of average shoot length and branches than the seed origin in the field conditions. The growth of the seedlings of Hemidesmus indicus collected from five different populations did not show any significant difference between them.