## **Agronomy and Soil Science**

## **Objectives**

- To promote, planned and harmonious growth of bivoltine silk industry by enhancing the quality mulberry leaf productivity.
- Promotion of eco-friendly technologies, maintenance of soil health and redress of agroecological condition with curtailment of inorganic fertilizers in mulberry cultivation production.
- To promote technological up-gradation for quality mulberry leaf production.
- To provide leadership in mulberry crop-based agronomic research by developing new concepts and approaches of sustainable quality mulberry leaf production suited to farmers.
- To develop appropriate technologies to enhance the production and productivity of mulberry leaf on a sustainable basis.

## **Technologies Promoted**

- For cultivation of improved mulberry varieties like Goshoerami, TR-10 and KNG with wider spacing of 60 x 60 cm<sup>2</sup> (pit system) is recommended for tree type of cultivation in Kashmir region.
- For raising of saplings in nursery, inoculation of AM fungi is recommended in nursery beds for growth, root proliferation and curtailment of phosphate.
- A new pruning technique developed for temperate by top clipping in March followed by bottom pruning in June for dwarf plantation is recommended under irrigated conditions of Kashmir.
- To make sericulture more remunerative intercropping with saffron, Levendor and pulse crop (cowpea) for better additional income.

## **Institutional Research Projects**

#	Project Code and	Duration	Objective		
	Title				
Co	Concluded Research Projects				
1	PPS-3474: Survey, isolation, identification and characterization of native AM fungi and endophytic bacteria in the mulberry rhizosphere of Kashmir region	2012-2015	Collection, isolation and characterization of AM fungi and bacterial endophytes associated with mulberry root system		
2	PPS-3490:	2012-2015	To evaluate the fertility status of		

	Sustainability of soil		the soils under temperate		
	health under temperate		plantation and plan an integrated		
	mulberry ecosystem		nutrient management		
			programme for soil sustainance		
3	PPS-3603: Soil	2016-2019	To know the soil health of		
	Sustainability of		sericulture farmers of North		
	sericulture farmers of		Western India and provide them		
	North Western India		balanced recommendation of		
	through soil health		fertilizers for sustainable		
	cards		sericulture		
4	PIN-3608:	2017 – 2020	To develop a package of		
	Development of		practice for autumn rearing		
	package of practice for		through fortification of mulberry		
	autumn rearing through		leaf		
	fortification of				
	mulberry leaf				
Co	Continuous Programme				
1	SS Pam-1	Nutrient analysis of soils and	1. Evaluation of soil health		
		mulberry under temperate	status at CSR&TI, Pampore and		
		conditions	nested units		
			2. Biochemical analysis of		
			mulberry varieties		