## Sophisticated Analytical Instruments Facility Available at ICAR-DMR, Solan

Equipment	Model	Purpose the Equipment is Used for	Contact Person
HPLC	Purchased in 1995 HITACHI	To separate, identify, and quantify each component in a mixture.	director.mushroom@icar.gov.in
PCR machine	Purchased in 2008 APPENDORF/ BIOTRON	To amplify segments of DNA via the <b>polymerase chain reaction (PCR)</b> .	
Lypholizer	Purchased in 2010 CHRIST ALPHA	To hydrate at low temperature, used typically for preparation of biological sample for DNA extraction and protein extraction.	
Double Beam Spectrophotometer	Purchased in 2013 LABINDIA   Perkin Elmer	To determine the amount of light of a specific wavelength absorbed by an analyte in a sample.	
Ion Exchange Chromotography	Purchased in 2015 EKTA	For purification designed to overcome limitations of using columns packed with beads.	director.mushroom@icar.gov.in
RTPCR Machine	Purchased in 2016 BIORAD	monitors the amplification of a targeted DNA molecule during the PCR, i.e. in real-time, and not at its end, as in conventional PCR. Real-time PCR can be used quantitatively (quantitative real-time PCR), and semi-quantitatively, i.e. above/below a certain amount of DNA molecules (semi quantitative real-time PCR).	director.mushroom@icar.gov.in
Table Top Electron Microscope	Purchased in 1995 EMCRAFT	For quick SE image observation without specimen preparation.	
Gel Documentation System	Purchased in 2006 AIPHA Innotech	For the imaging and <b>documentation</b> of nucleic acid and protein suspended within polyacrylamide or agarose <b>gels</b>	
CHNS Analyser	Velp Scientifica, Italy	For analysis of Carbon, Hydrogen, Nitrogen and Sulphur in solid & liquid samples	director.mushroom@icar.gov.in