Molecular Biology Laboratory

The Molecular Biology Laboratory is in charge of detecting phytopathogens that cannot be detected using traditional techniques, which is why molecular tools must be used. PCR techniques for phytopathogens with DNA genome and RT-PCR for RNA phytopathogens are performed.

Likewise, this laboratory is in charge of analyzing and corroborating through sequencing, the results of samples testing positive for phytopathogens, thus confirming their identity and providing support as to the presence of such pathogen detected by traditional techniques, in such a way that a much more comprehensive and efficient work is performed.

The laboratory uses different techniques according to the phytopathogen suspected to be present. Subsequently, the concentration and quality of nucleic acid is verified, and finally the endpoint PCR or Real-Time PCR test, or its Reverse Transcription-PCR (RT-PCR) variant, is performed, verifying the result of presence or absence of the phytopathogen via electrophoresis.