

Plant diseases detection using nanowire as biosensor transducer

Abstract

The plant disease such as Cucumber Mosaic Virus (CMV) and Papaya Ring Spot Virus (PRSV) is a most dangerous disease that can decrease productivity and quality of the vegetable and fruit. Besides that, its also can destroy and kill those plant in long term when infected and to tackle this problem at early stages, the nanowire based biosensor application is a most reliable sensor nowadays because of advantages towards detecting biological molecule especially plant diseases. In order to dealing with tiny form of molecules such as virus is very difficult and due to the nanostructure uniqueness such as nanowire, it can be done by undergo formation of nanowire process. Result will be elaborated about how nanowire working environment in order to detecting those virus.

Keywords; Cucumber Mosaic Virus (CMV), Formation of Nanowire Process, Nanowire, Papaya Ring Spot Virus (PRSV)