

Conclusion

From the results of the present study and the works done by several workers, as stated above it may be concluded that some natural triterpenoids and their derivatives may be used to check specific plant pathogens after phytotoxicity test *in vivo*. Therefore, the outcome of the investigation not only would enrich the understanding of structure and their biological activities among the four types of natural triterpenoid groups (Lupeol, betulinic acid, cerin and friedelin) and some of their derivatives, but at the same time would provide a scientific base to control plant pathogens. Implication of the results was discussed in the respective discussion portions of section-2 of the chapters II, III and IV. The results were encouraging since natural triterpenoid compounds and their derivatives were potential to control fungal and bacterial pathogens. On the basis of phytotoxicity tests, it was found that 100ppm concentration of all the 11 compounds were not phytotoxic(result shown).At higher concentrations(200ppm-500ppm) the compounds were phytotoxic. From the present study, it was observed that several plant pathogens may be controlled by the compounds tested. But best antimicrobial activity differed for different pathogens. Considering all the evidences of experimental tests it was found that best control may be achieved by compound-F and Cerin in case of *Colletotrichum gloeosporioides*. Similarly, *Fusarium equiseti* may be best controlled by compound-G and Cerin. The third fungi, *Curvularia eragrostidis* and two bacteria (*Ralstonia solanacearum* and *Erwinia carotovora*) may be best controlled by compound-B. In case of controlling *Xanthomonas sp* compound-B and -F were proved to be best. The seventh pathogen, *Pseudomonas syringae* was significantly controlled by compound-H.