

LIST OF TABLES

- Table 3.1** List of plants used for extraction of botanicals
- Table 3.2** Regions of collection of fruit rot samples of bottle gourd
- Table 3.3** List of antagonistic microorganisms with their identification No.
- Table 3.4** Primers used for extraction of defense genes
- Table 4.1** Percent disease incidence on the basis of field survey during the year 2013-2014
- Table 4.2** Pathogenicity of *Fusarium incarnatum* on bottle gourd fruits
- Table 4.3** Pathogenicity of *Colletotrichum gloeosporioides* on bottle gourd fruits
- Table 4.4** Pathogenicity test of *Colletotrichum gloeosporioides* on whole plants of two different *Lagenaria siceraria* varieties
- Table 4.5** Pathogenicity test of *Fusarium incarnatum* on whole plants of two different *Lagenaria siceraria* varieties
- Table 4.6** Mycelia growth and sporulation of *C. gloeosporioides* in different solid media
- Table 4.7** Mycelia growth and sporulation of *Fusarium incarnatum* in different solid media
- Table 4.8** Effect of different pH on growth of *C. gloeosporioides*
- Table 4.9** Effect of different pH on growth of *F. incarnatum*
- Table 4.10** Effect of different temperature on mycelial growth of *C. gloeosporioides*
- Table 4.11** Effect of different temperature on mycelial growth of *F. incarnatum*
- Table 4.12** Pathogenicity of *Colletotrichum gloeosporioides* on susceptible bottle gourd fruits (Gadda-1), after induction of resistance in plants with abiotic inducers

- Table 4.13** Pathogenicity of *Fusarium incarnatum* on susceptible bottle gourd fruits (Gadda-1), after induction of resistance in plants with abiotic inducers
- Table 4.14** Pathogenicity of *Colletotrichum gloeosporioides* on susceptible bottle gourd plants (Gadda-1), after induction of resistance in plants with abiotic inducers.
- Table 4.15** Pathogenicity of *Fusarium incarnatum* on susceptible bottle gourd plants (Gadda-1), after induction of resistance in plants with abiotic inducers.
- Table 4.16** Peroxidase activity of bottle gourd plants (Gadda-1) pre-treated with chemical inducers followed by challenge-inoculation with *C. gloeosporioides*
- Table 4.17** Peroxidase activity of bottle gourd plants (Gadda-1) pre-treated with chemical inducers followed by challenge-inoculation with *F. incarnatum*
- Table 4.18** β -1,3-glucanase activity of bottle gourd plants (Gadda-1) pre-treated with chemical inducers followed by challenge-inoculation of *C. gloeosporioides*
- Table 4.19** β -1,3-glucanase activity of bottle gourd plants (Gadda-1) pre-treated with chemical inducers followed by challenge-inoculation of *F. incarnatum*
- Table 4.20** Chitinase activity of bottle gourd plants (Gadda-1) pre-treated with chemical inducers followed by challenge-inoculation of *C. gloeosporioides*
- Table 4.21** Chitinase activity of bottle gourd plants (Gadda-1) pre-treated with chemical inducers followed by challenge-inoculation of *F. incarnatum*
- Table 4.22** PAL activity of bottle gourd (Gadda-1) pre-treated with chemical inducers followed by challenge-inoculation by *C. gloeosporioides*
- Table 4.23** PAL activity of bottle gourd (Gadda-1) pre-treated with chemical inducers followed by challenge-inoculation by *F. incarnatum*
- Table 4.24** Transcript accumulation in different treated and/or inoculated bottle gourd plants after 4 days

Table 4.25 Control of *Colletotrichum gloeosporioides* using different bacterial antagonists

Table 4.26 Control of growth of *Fusarium incarnatum* using different bacterial antagonists

Table 4.27 Effect of antifungal activity of selected plant extracts on the growth of *Colletotrichum gloeosporioides* tested by poisoned food technique

Table 4.28 Effect of antifungal activity of selected plant extracts on the growth of *Fusarium incarnatum* tested by poisoned food technique