



**Figure S1.** Graphical abstract of this study

**Table S1.** NCBI GenBank accessions for entomopathogenic fungi used in this study

| Fungal identification              | Strain     | Accession number | Reference                  |
|------------------------------------|------------|------------------|----------------------------|
| <i>Beauveria bassiana</i>          | BbGD06     | MH483648.1       | (Niu et al., 2019)         |
| <i>Cordyceps amoenerosea</i>       | CBS 107.73 | AY624168.1       | (Luangsa-Ard et al., 2005) |
| <i>Purpureocillium lilacinum</i>   | PIGD60     | MH483708.1       | (Niu et al., 2019)         |
| <i>Metarhizium anisopliae</i>      | MaGD32     | MH483681.1       | (Niu et al., 2019)         |
| <i>Metarhizium carneum</i>         | PacGD23    | MH483672.1       | (Niu et al., 2019)         |
| <i>Beauveria bassiana</i>          | BbGD06     | MH483648.1       | (Niu et al., 2019)         |
| <i>Beauveria bassiana</i>          | BbFJ11     | MH483631.1       | (Niu et al., 2019)         |
| <i>Lecanicillium psalliotae</i>    | LpGD62     | MH483710.1       | (Niu et al., 2019)         |
| <i>Cordyceps javanica</i>          | lffJ01     | MH483617.1       | (Niu et al., 2019)         |
| <i>Beauveria bassiana</i>          | BbFJ01     | MH483616.1       | (Niu et al., 2019)         |
| <i>Metarhizium anisopliae</i>      | MaGD74     | MH483714.1       | (Niu et al., 2019)         |
| <i>Cordyceps japonica</i>          | BCC 2787   | AY624200.1       | (Luangsa-Ard et al., 2005) |
| <i>Cordyceps tenuipes</i>          | Arsef 5135 | AY624196.1       | (Luangsa-Ard et al., 2005) |
| <i>Cordyceps javanica</i>          | CBS 134.22 | AY624186.1       | (Luangsa-Ard et al., 2005) |
| <i>Cordyceps ghanensis</i>         | CBS 105.73 | AY624185.1       | (Luangsa-Ard et al., 2005) |
| <i>Cordyceps coleopterora</i>      | CBS 102.73 | AY624176.1       | (Luangsa-Ard et al., 2005) |
| <i>Paecilomyces cateniobliquus</i> | CBS 153.83 | Y624173.1        | (Luangsa-Ard et al., 2005) |

**Table S2.** NCBI GenBank accessions for selected entomopathogenic fungi obtained during this study

| <b>Fungal identification</b>  | <b>Strain</b> | <b>Site</b>    | <b>Accession number</b> |
|-------------------------------|---------------|----------------|-------------------------|
| <i>Beauveria bassiana</i>     | TA-2          | Tanta          | OL631250                |
| <i>Metarhizium anisopliae</i> | KZ-2          | Kafr El-Zayat  | OL631251                |
| <i>Metarhizium anisopliae</i> | KSH-8         | Kafr El-Shaikh | OL631252                |
| <i>Beauveria bassiana</i>     | KSH-2         | Kafr El-Shaikh | OL631253                |
| <i>Beauveria bassiana</i>     | TA-4          | Tanta          | OL631254                |
| <i>Beauveria bassiana</i>     | DM-6          | Damietta       | OL631255                |
| <i>Cordyceps javanica</i>     | DM-3          | Damietta       | OL631256                |