

Reporting Summary

Nature Portfolio wishes to improve the reproducibility of the work that we publish. This form provides structure for consistency and transparency in reporting. For further information on Nature Portfolio policies, see our [Editorial Policies](#) and the [Editorial Policy Checklist](#).

Statistics

For all statistical analyses, confirm that the following items are present in the figure legend, table legend, main text, or Methods section.

n/a Confirmed

- | | | |
|-------------------------------------|-------------------------------------|--|
| ☐ | ☒ | The exact sample size (n) for each experimental group/condition, given as a discrete number and unit of measurement |
| ☐ | ☒ | A statement on whether measurements were taken from distinct samples or whether the same sample was measured repeatedly |
| ☐ | ☒ | The statistical test(s) used AND whether they are one- or two-sided
<i>Only common tests should be described solely by name; describe more complex techniques in the Methods section.</i> |
| ☒ | ☐ | A description of all covariates tested |
| ☒ | ☐ | A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons |
| ☐ | ☒ | A full description of the statistical parameters including central tendency (e.g. means) or other basic estimates (e.g. regression coefficient) AND variation (e.g. standard deviation) or associated estimates of uncertainty (e.g. confidence intervals) |
| ☐ | ☒ | For null hypothesis testing, the test statistic (e.g. F , t , r) with confidence intervals, effect sizes, degrees of freedom and P value noted
<i>Give P values as exact values whenever suitable.</i> |
| ☒ | ☐ | For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings |
| ☒ | ☐ | For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes |
| ☒ | ☐ | Estimates of effect sizes (e.g. Cohen's d , Pearson's r), indicating how they were calculated |

Our web collection on [statistics for biologists](#) contains articles on many of the points above.

Software and code

Policy information about [availability of computer code](#)

Data collection	Fungal sequence information was retrieved using BLAST. The sequences of <i>C. incanum</i> MAFF 238704 and <i>C. liriopes</i> MAFF 242679 in GenBank were also used. Sequences similar to ABA and BOT genes of <i>Colletotrichum</i> strains, <i>B. cinerea</i> , and some other strains were collected with BLASTP search using Biopython (v.1.7.6; E-value: 1e-4 or 1e-5) against newly analyzed genomes in this study, <i>Homo sapiens</i> genome assembly GRCh38.p13, and GenBank NR database on February/March 2020.
Data analysis	Mauve program v1.1.1, circlize v.0.4.3, MAFFT, Orthofinder v.2.5.5, Mirlo (https://github.com/mthon/mirlo), IQ-TREE v.1.6.11, IQ-TREE v.2.1.2, IQ-TREE v.2.0.3, Biopython v.1.7.6, GenomeMatcher v.3.00, Tophat2 v2.1.1, cuffdiff v2.2.1, AgriGO v. 2, CentriMo (https://meme-suite.org/meme/doc/centrimo.html), R v3.6.2, TAIR Bulk Data Retrieval

For manuscripts utilizing custom algorithms or software that are central to the research but not yet described in published literature, software must be made available to editors and reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Portfolio [guidelines for submitting code & software](#) for further information.

Data

Policy information about [availability of data](#)

All manuscripts must include a [data availability statement](#). This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A description of any restrictions on data availability
- For clinical datasets or third party data, please ensure that the statement adheres to our [policy](#)

Accession codes: Newly obtained fungal whole-genome data have been deposited in DDBJ (Ct61: BQXX01, Ct3: BQXV01, Ct4: BQXW01, KHC23: BPPY01, C. liriopes: BPPX01). Additionally, raw sequencing data of RNA-seq transcriptomic data have been deposited in DDBJ (DRA012868, DRA12867).

Human research participants

Policy information about [studies involving human research participants and Sex and Gender in Research](#).

Reporting on sex and gender	No applicable.
Population characteristics	No applicable.
Recruitment	No applicable.
Ethics oversight	No applicable.

Note that full information on the approval of the study protocol must also be provided in the manuscript.

Field-specific reporting

Please select the one below that is the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

- ☒ Life sciences ☐ Behavioural & social sciences ☐ Ecological, evolutionary & environmental sciences

For a reference copy of the document with all sections, see [nature.com/documents/nr-reporting-summary-flat.pdf](https://www.nature.com/documents/nr-reporting-summary-flat.pdf)

Life sciences study design

All studies must disclose on these points even when the disclosure is negative.

Sample size	No statistical methods were used to predetermine sample size. Sample sizes were determined by the authors previous studies and experience. Sample sizes are described in the figure legends or methods.
Data exclusions	No data was excluded.
Replication	All the experiments were repeated several times on different timing using independent biological samples.
Randomization	The inoculated plants were randomly rearranged frequently during incubation.
Blinding	Blinding was not relevant to this study. All samples were evaluated under standardized incubation conditions. The principal findings were supported by several independent experiments conducted by multiple authors from different laboratories.

Reporting for specific materials, systems and methods

We require information from authors about some types of materials, experimental systems and methods used in many studies. Here, indicate whether each material, system or method listed is relevant to your study. If you are not sure if a list item applies to your research, read the appropriate section before selecting a response.

Materials & experimental systems

n/a	Involved in the study
☒	☐ Antibodies
☒	☐ Eukaryotic cell lines
☒	☐ Palaeontology and archaeology
☒	☐ Animals and other organisms
☒	☐ Clinical data
☒	☐ Dual use research of concern

Methods

n/a	Involved in the study
☒	☐ ChIP-seq
☒	☐ Flow cytometry
☒	☐ MRI-based neuroimaging