

Code description. Decision support systems reduce fungicide use by half compared to calendar-based strategies without increasing disease risk

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Code description

Source code (R language) for manuscript “Decision support systems reduce fungicide use by half compared to calendar-based strategies without increasing disease risk”

For questions, comments or remarks about the code please contact E. Lázaro (lazarole@gva.es)

Source code has been structured in 6 R scripts and the dataset (`data.txt`) that must be uploaded during the execution of each one of the scripts:

- `data_description.R` contains the full code to reproduce and replicate Figure 1.
- `data_description_supp.R` contains the full code to reproduce and replicate Figures S1, S2, S3, S4 and S5.
- `mi.R` contains the full code to reproduce and replicate i) the meta-analysis of disease incidences under the different control strategies (MI) related models, ii) the MI model selection (Table S5) and iii) the MI effect sizes (Figures 2 and S7).
- `mi_supp.R` contains the full code to reproduce and replicate i) the MI model evaluation (Figures S6) and ii) the MI sensitivity analysis (Figure S11)
- `mis.R` the full code to reproduce and replicate i) the meta-analysis relating disease incidences to the number of sprays under the different control strategies (MIS), ii) the MIS model selection (Table S7) and iii) the MIS effect sizes (Figures 3, 4 and S9).
- `mis_supp.R` contains the full code to reproduce and replicate i) the MIS model evaluation (Figures S8) and the MIS sensitivity analysis (Figure S12).
- `data.txt` contains the dataset that must be uploaded during the execution of each one of the scripts

Comments:

- The scripts have been created under UTF-8 encoding.
- The scripts have been executed with the R version 3.6.0 (2019-04-26); Platform: x86_64-w64-mingw32/x64 (64-bit); Running under: Windows >= 8 x64 (build 9200)
- It is recommended to execute the R scripts in the order in which they have been introduced in the present document.