

# Package ‘funresMech’

September 24, 2026

**Title** Mechanistic Functional Response Analysis

**Version** 1.0.4

**Description** Implements the mechanistic functional response model proposed by Okuyama (2012) <[doi:10.1016/j.biocontrol.2011.10.008](https://doi.org/10.1016/j.biocontrol.2011.10.008)> for host-parasitoid systems. Provides tools for model fitting, likelihood profiling, stochastic simulation, and visualization of parasitism distributions. Includes an interactive 'shiny' application for complete analysis workflows, built with 'plotly' for interactive graphics and 'rmarkdown' for reproducible reports.

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**Encoding** UTF-8

**Depends** R (>= 4.1.0)

**Imports** DEoptim, dplyr, future, ggplot2 (>= 3.4.0), magrittr, parallel, plotly, rlang, rmarkdown, shiny, shinyBS, shinythemes, stats, utils

**Suggests** kableExtra, knitr, testthat (>= 3.0.0)

**URL** <https://github.com/Segon03/funresMech>

**BugReports** <https://github.com/Segon03/funresMech/issues>

**Config/testthat/edition** 3

**Config/Needs/check** r-lib/actions/dependencies

**Config/roxygen2/version** 8.1.0

**NeedsCompilation** no

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**Repository** CRAN

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`run_app`*Run the funresMech Shiny App*

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**Description**

Launches the interactive application for mechanistic functional response analysis, based on the Okuyama model.

**Usage**

```
run_app(...)
```

**Arguments**

... Additional arguments passed to `shiny::runApp()` (e.g., `port`, `host`, `launch.browser`).

**Value**

This function launches a Shiny app and does not return a value.

**Examples**

```
if (interactive()) {  
  run_app()  
}
```

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