REAP-2 Report

18 October, 2022

```
library(dplyr)
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
       filter, lag
##
## The following objects are masked from 'package:base':
##
##
       intersect, setdiff, setequal, union
library(kableExtra)
##
## Attaching package: 'kableExtra'
## The following object is masked from 'package:dplyr':
##
       group_rows
```

Setting

- 1. Dose-response curve plot
- 2. Model summary table

Slope and effect estimations

```
dt.footnote <- params$table_esti

dt.footnote <- readRDS("/Users/rrrrita/Documents/GitHub/REAP-2/dt.footnote.rds")

names_spaced <- c(
    ' ', 'Estimate (m)', 'Std.Err.',
    'm > 1',' ',
    'Estimate', 'Std.Err.','Pairwise comparison')
```

```
hd = paste("IC/EC",50,"Estimation")
options(knitr.kable.NA = '')
    dt.footnote %>%
     dplyr::select(Model,Slope,Slope.Std.Err,Slope.z.Pvalue,IC10,IC10.Std.Err,IC10.Pvalue)%>%
     mutate(Slope = abs(Slope)) %>%
     tibble::add column(new col = NA, .after = c("Slope.z.Pvalue"))%>%
     kbl(align = "c",col.names=names_spaced) %>%
      # kable styling("striped") %>%
      column_spec(c(2,4,6,8), width = "6em") %>%
      column_spec(c(5), width = "4em") %>%
      add_header_above(c(" " = 1, "Hill Coefficient" = 3, " "=1, "Effect Estimation" = 3))%>%
      footnote(
        number = c("m > 1: p-value based on one-sided t-test for hypothesis testing on hill coefficient
                   "Pairwise comparison: p-value based on ANOVA test (Cohen, 2000). Concentrations that
                   "95% confidence intervals can be approximated by Estimate +/- t-value(0.975, df=n-1)
                   "Effect estimate is indicated by triangles in the dose-response curve plot.")
```

	Hill Coefficient					
	Estimate (m)	Std.Err.	m > 1	Estimate	Std.Err.	Pairwise
			l			comparison
Jeko-1	2.180	0.084	<.0001	0.065	0.003	-
Jeko-R	1.738	0.088	<.0001	0.093	0.005	< 0.0001
Rec-1	2.102	0.080	<.0001	0.119	0.004	3e-04
Mino	1.468	0.109	<.0001	0.162	0.016	0.0117
Jeko-NO #1	1.295	0.113	0.0045	0.188	0.022	0.3335
MAVER-1	1.319	0.105	0.0012	0.197	0.020	0.7835
Jeko-NO #11	1.426	0.129	5e-04	0.311	0.036	0.0077
JVM2	1.045	0.124	0.3565	0.394	0.059	0.2307

 $^{^{1}}$ m > 1: p-value based on one-sided t-test for hypothesis testing on hill coefficient > 1

Model comparison

```
comp <- params$table_compare

if (!is.null(comp)){
   comp %>%
   kbl(align = "l",col.names = c(" "," ")) %>%
   kable_classic(full_width = F, html_font = "Cambria") %>%
   kable_material(c("striped"))
   # kable_styling("striped")
}
```

² Pairwise comparison: p-value based on ANOVA test (Cohen, 2000). Concentrations that give specified effect (default at

³ 95% confidence intervals can be approximated by Estimate +/- t-value(0.975, df=n-1)*Std.Err.

⁴ Effect estimate is indicated by triangles in the dose-response curve plot.