Metabolome\_venns

## Load packages

#load packages  
library(data.table)  
library(VennDiagram)

## Load and prep data

#load and prepare 0dpi data  
zero\_data <- data.table::fread("data/p\_cutoff\_0.05/0dpi\_venn.csv", na.strings = "")  
  
zero\_mock\_SA <- as.list(na.omit(zero\_data[,1]))  
zero\_mock\_JA <- as.list(na.omit(zero\_data[,2]))  
zero\_mock\_BABA <- as.list(na.omit(zero\_data[,3]))  
  
#load and prepare 1dpi data  
one\_data <- data.table::fread("data/p\_cutoff\_0.05/1dpi\_venn.csv", na.strings = "")  
  
one\_SA <- as.list(na.omit(one\_data[,1]))  
one\_JA <- as.list(na.omit(one\_data[,2]))  
one\_BABA <- as.list(na.omit(one\_data[,3]))  
  
#load and prepare 2dpi data  
two\_data <- data.table::fread("data/p\_cutoff\_0.05/2dpi\_venn.csv", na.strings = "")  
  
two\_SA <- as.list(na.omit(two\_data[,1]))  
two\_JA <- as.list(na.omit(two\_data[,2]))  
two\_BABA <- as.list(na.omit(two\_data[,3]))

## Plot and save venn diagrams

#note sa = yellow, ja = magenta baba = dark-green  
  
#set up pdf to save graphs  
venns <- "final\_figures/metabolome\_venns\_0.05.pdf"  
pdf(file = venns, width = 10, height = 10)  
  
#zero day venn diagram  
vennPlot <- venn.diagram(  
 list(zero\_mock\_SA$zero\_MS, zero\_mock\_JA$zero\_MJ, zero\_mock\_BABA$zero\_MB),   
 filename = NULL, fill=c("#DDCC77", "#AA4499", "#117733"), print.mode = c("raw", "percent"),   
 alpha=c(0.5,0.5,0.5), cex=2.5, category.names = c(" "," ", " "), main = "Significant metabolites 0dpi",   
 main.cex = 2, ext.text = TRUE, ext.percent = 0.1, ext.pos = 3, ext.length = 0.7, ext.dist = -0.02)  
  
grid.newpage()  
  
grid.draw(vennPlot)  
  
#one day venn diagram  
vennPlot <- venn.diagram(  
 list(one\_SA$SA\_primed, one\_JA$JA\_primed, one\_BABA$BABA\_primed),   
 filename = NULL, fill=c("#DDCC77", "#AA4499", "#117733"), print.mode = c("raw", "percent"),   
 alpha=c(0.5,0.5,0.5), cex=2.5, category.names = c(" "," ", " "), main = "Significant primed metabolites 1dpi",   
 main.cex = 2, ext.text = TRUE, ext.percent = 0.1, ext.pos = 3, ext.length = 0.7, ext.dist = -0.02)  
  
grid.newpage()  
  
grid.draw(vennPlot)  
  
#two day venn diagram  
vennPlot <- venn.diagram(  
 list(two\_SA$SA\_primed, two\_JA$JA\_primed, two\_BABA$BABA\_primed),   
 filename = NULL, fill=c("#DDCC77", "#AA4499", "#117733"), print.mode = c("raw", "percent"),   
 alpha=c(0.5,0.5,0.5), cex=2.5, category.names = c(" "," ", " "), main = "Significant primed metabolites 2dpi",   
 main.cex = 2, ext.text = TRUE, ext.percent = 0.1, ext.pos = 3, ext.length = 0.7, ext.dist = -0.02)  
  
grid.newpage()  
  
grid.draw(vennPlot)  
  
dev.off()