

Making a forest plot

2022-10-05

Make a plot in the style of a forest plot by squashing two plots together and aligning their y axes. The first “plot” on the left hand side is a text plot, ie it’s just a print out of a table.

```
library(ggplot2)
library(ggpubr)
library(ggstance)
library(dplyr)
library(tidyr)

# Example

plot_g = ggplot(iris) +
  aes(x=Petal.Width, y = Species) +
  ggstance::geom_violinh() +
  theme(
    axis.text.y=element_blank(),
    axis.ticks=element_blank(),
    axis.title.y = element_blank()
  )

information_for_table = iris %>%
  group_by(Species) %>%
  summarise(across(where(is.numeric), mean))

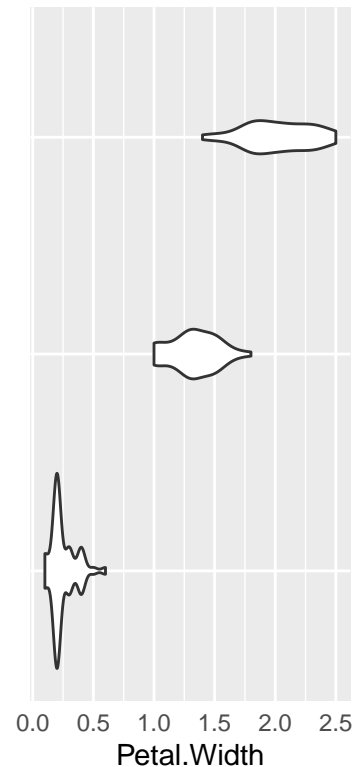
input_text_df = information_for_table %>%
  tidyr::pivot_longer(cols = !Species) %>%
  mutate(across(everything(), as.character))

plot_text = ggplot(input_text_df) +
  aes(x = name, y = Species, label = value) +
  geom_text() +
  ylab(NULL) + xlab(" ") +
  theme(
    plot.title = element_text(hjust = 0.5, size=12), ## centering title on text
    axis.line=element_blank(),
    axis.title.y=element_blank(),
    legend.position="none",
    panel.background=element_blank(),
    panel.border=element_blank(),
    panel.grid.major=element_blank(),
    panel.grid.minor=element_blank(),
    plot.background=element_blank()
  ) +
  scale_x_discrete(position = "top")
```

```
forest_plot_iris = ggpubr::ggarrange(
  plot_text,
  plot_g,
  align = "h",
  nrow = 1,
  widths = c(5,2)
)

forest_plot_iris
```

	Petal.Length	Petal.Width	Sepal.Length	Sepal.Width
virginica -	5.552	2.026	6.588	2.974
versicolor -	4.26	1.326	5.936	2.77
setosa -	1.462	0.246	5.006	3.428



Changing the design of the right hand visualization

```
plot_g2 = ggplot(iris) +
  aes(x=Petal.Width, y = Species) +
  ggstance::geom_boxploth() +
  ggthemes::theme_few() +
  theme(
    axis.text.y=element_blank(),
    axis.ticks=element_blank(),
    axis.title.y = element_blank()
  )

ggpubr::ggarrange(
  plot_text,
  plot_g2,
```

```
align = "h",
nrow = 1,
widths = c(5,2)
)
```

