

help("coord\_radar")



Species

versicolor

setosa

5

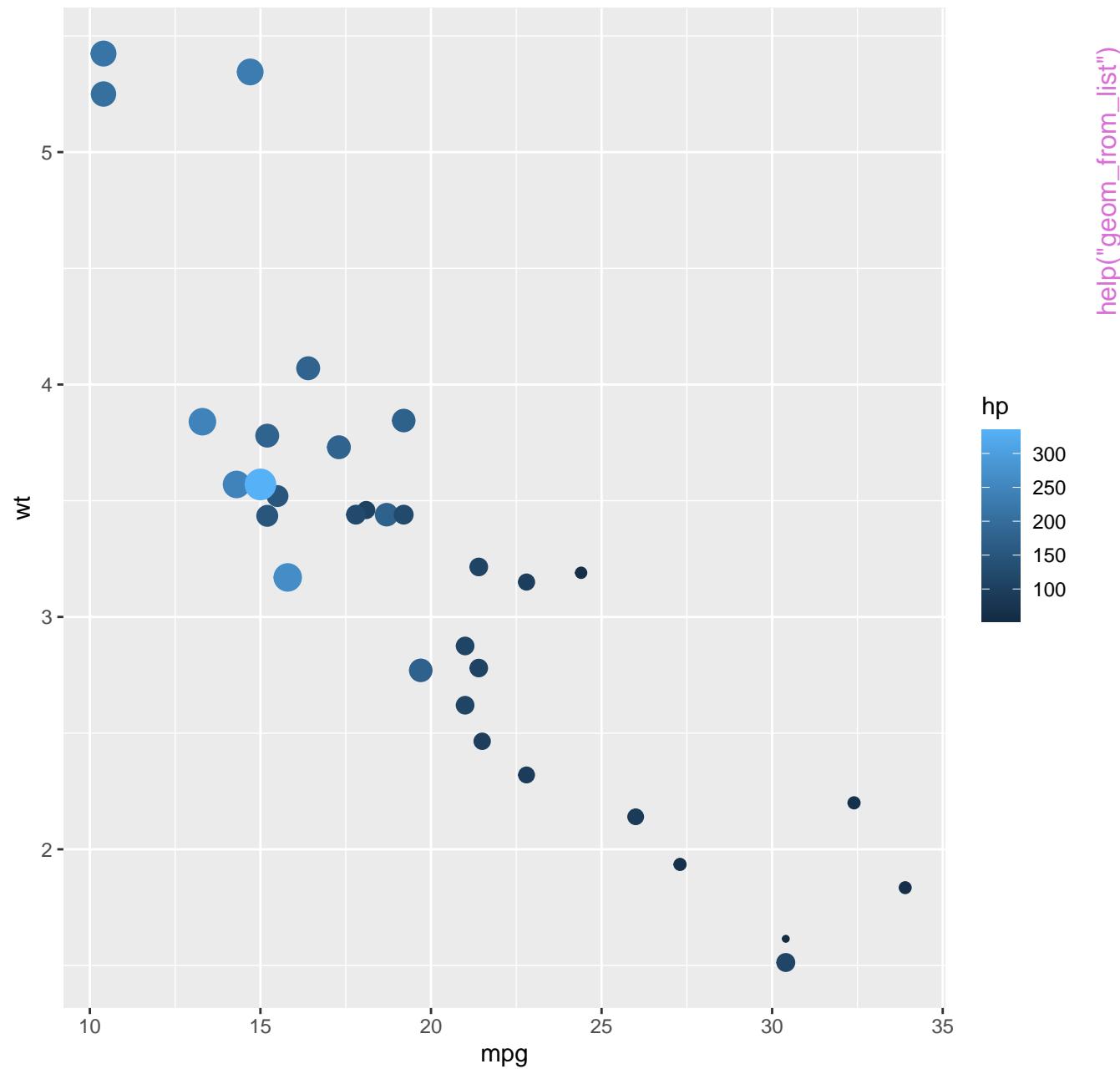
6

7

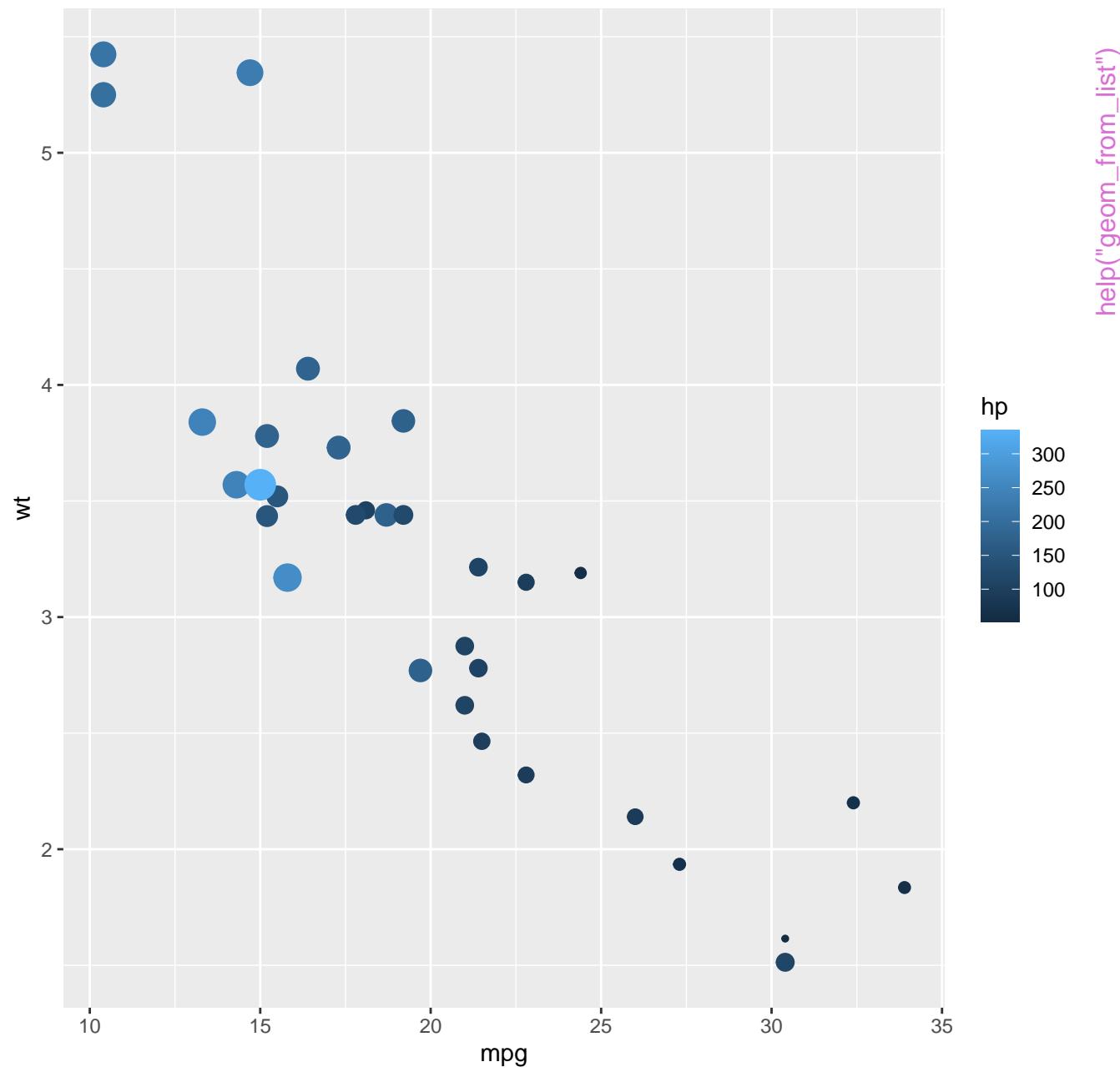
Sepal.Length

help("geom\_binomdensity")

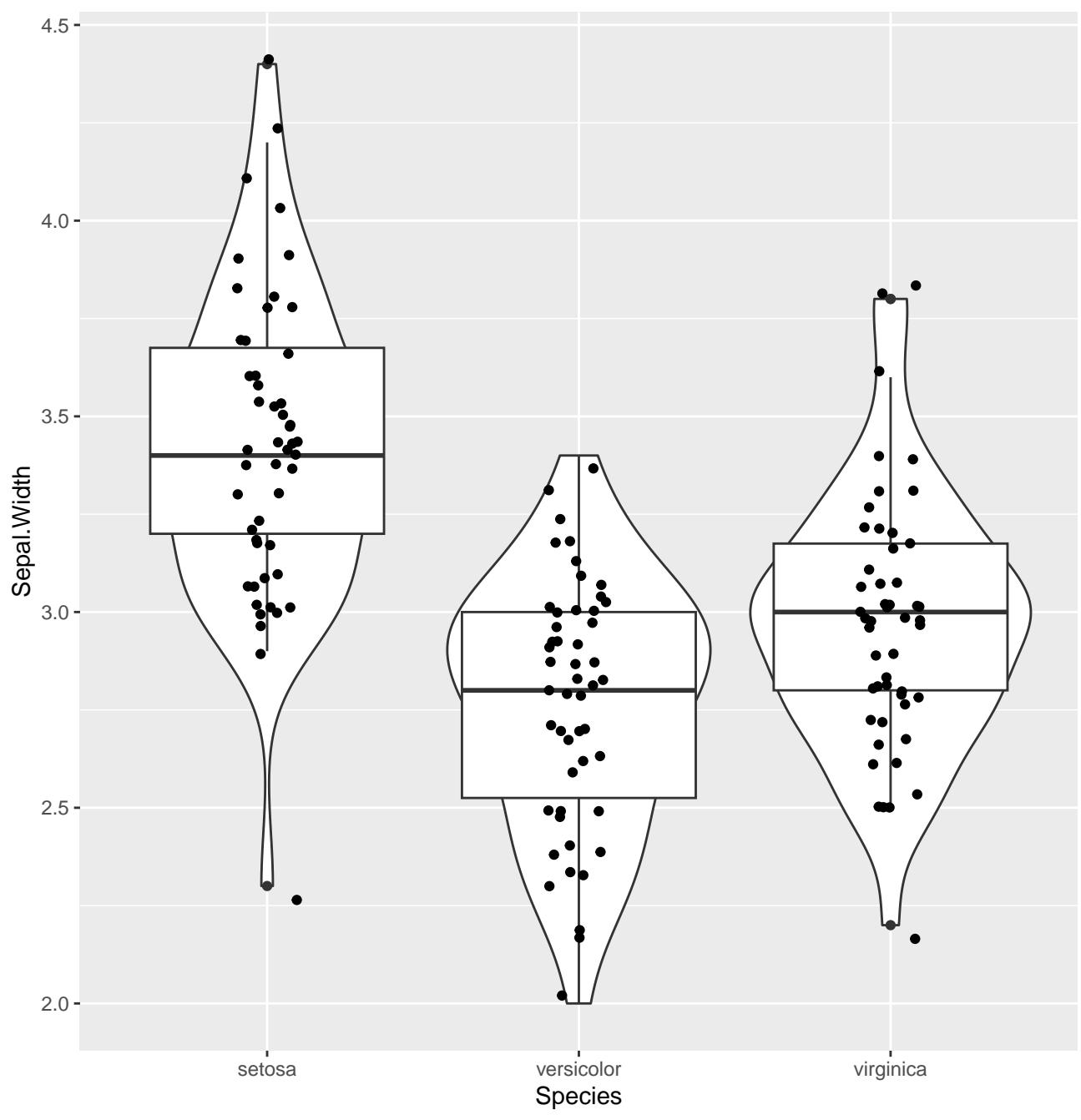
## A Title



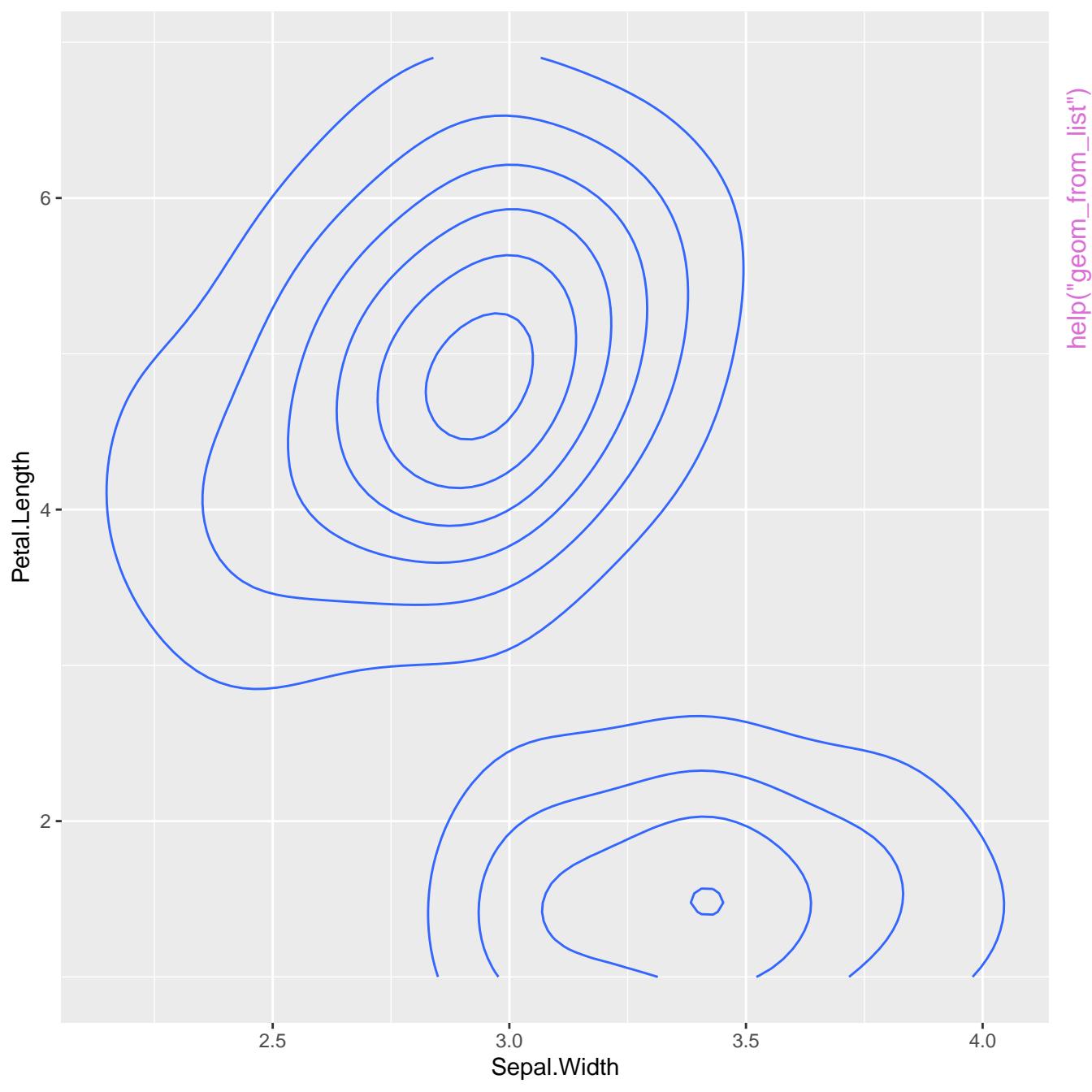
# A Title

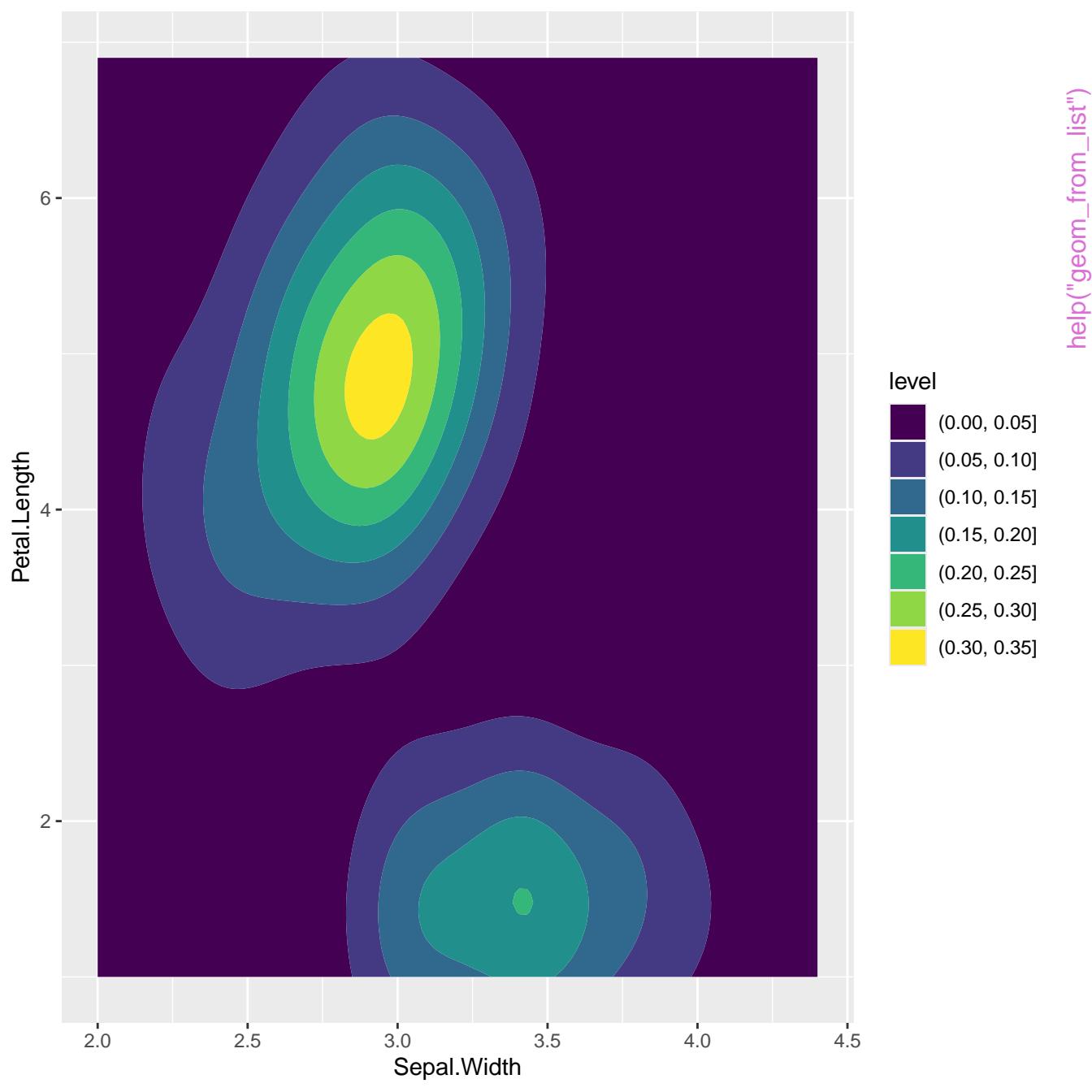


help("geom\_from\_list")

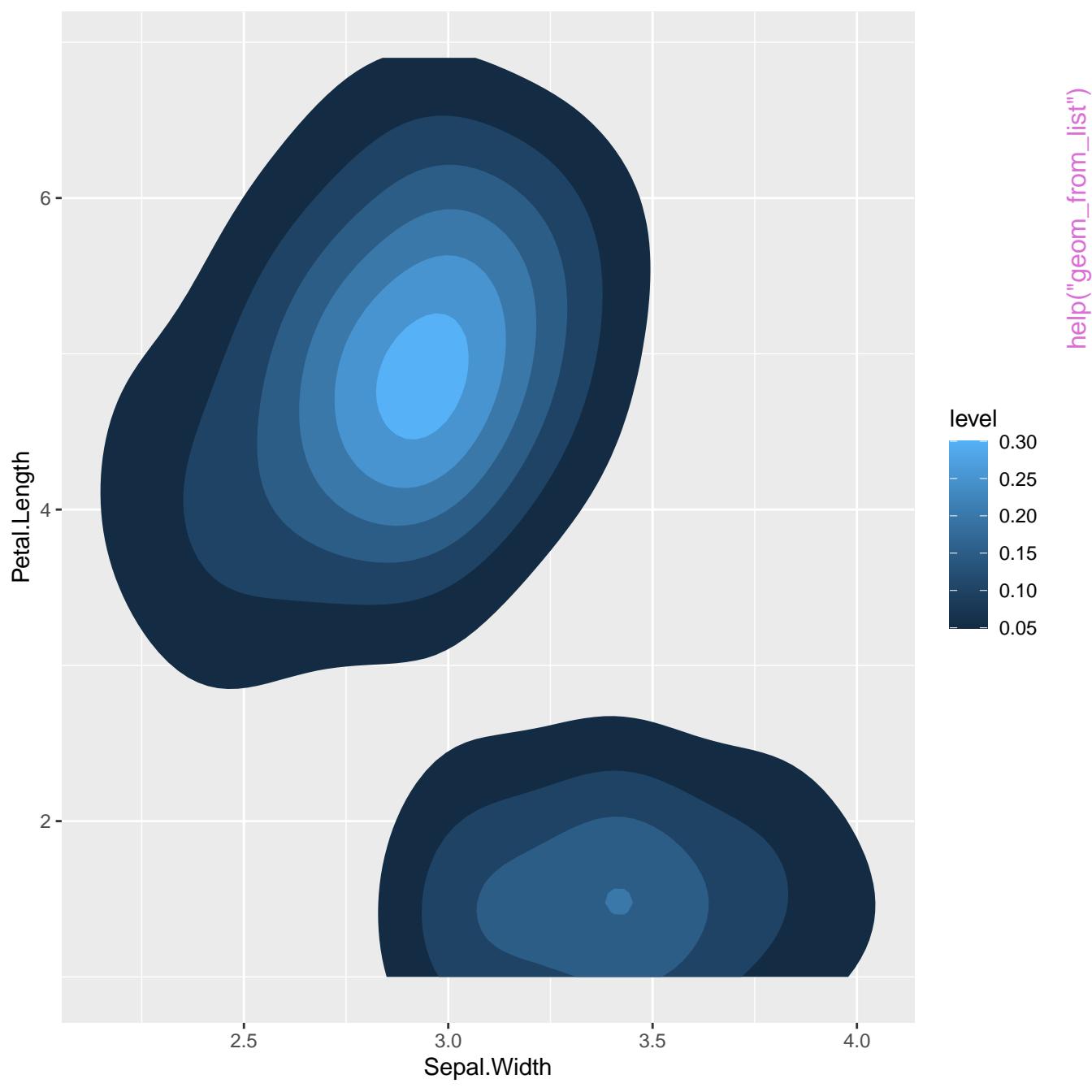


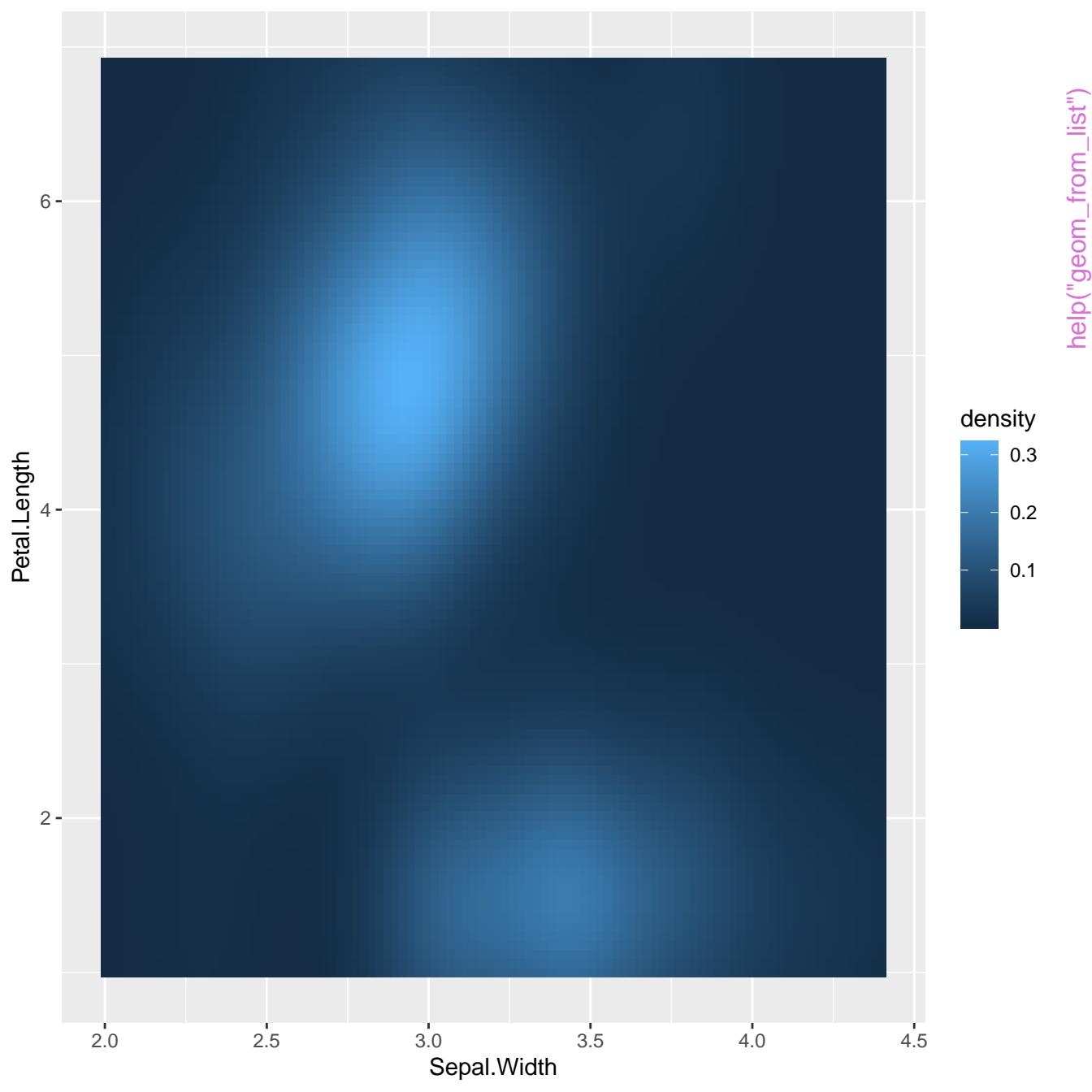
help("geom\_from\_list")

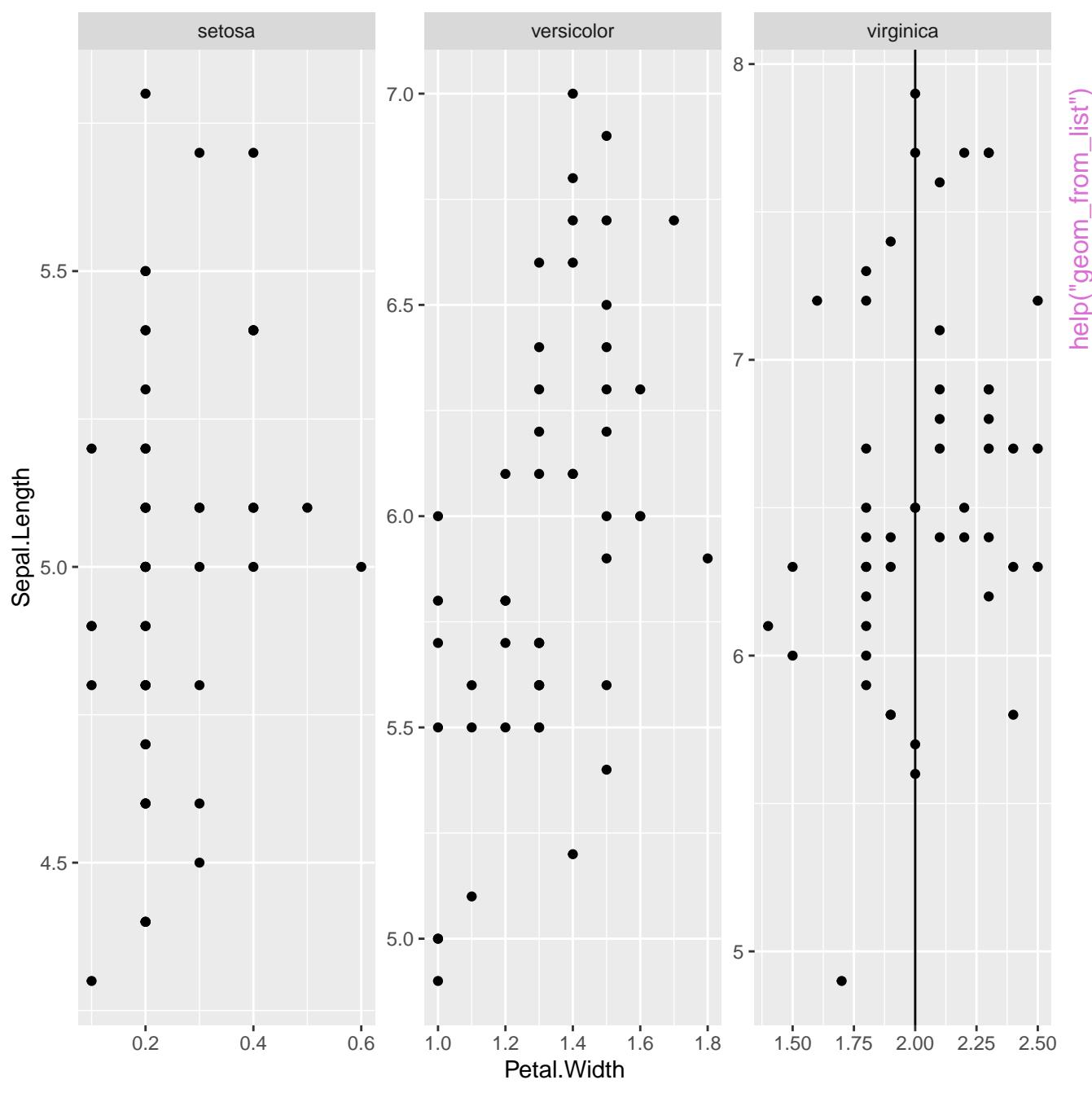




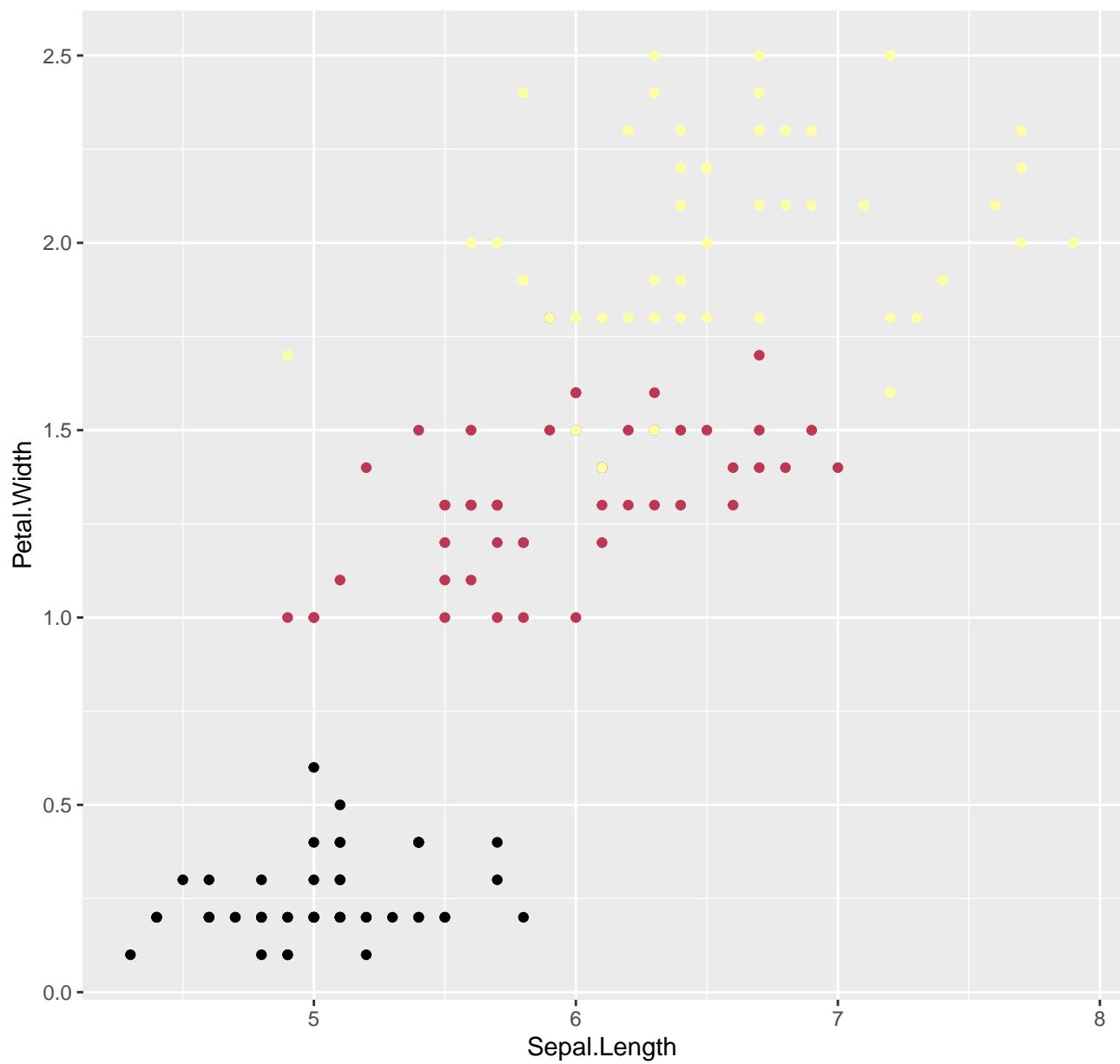
help("geom\_from\_list")





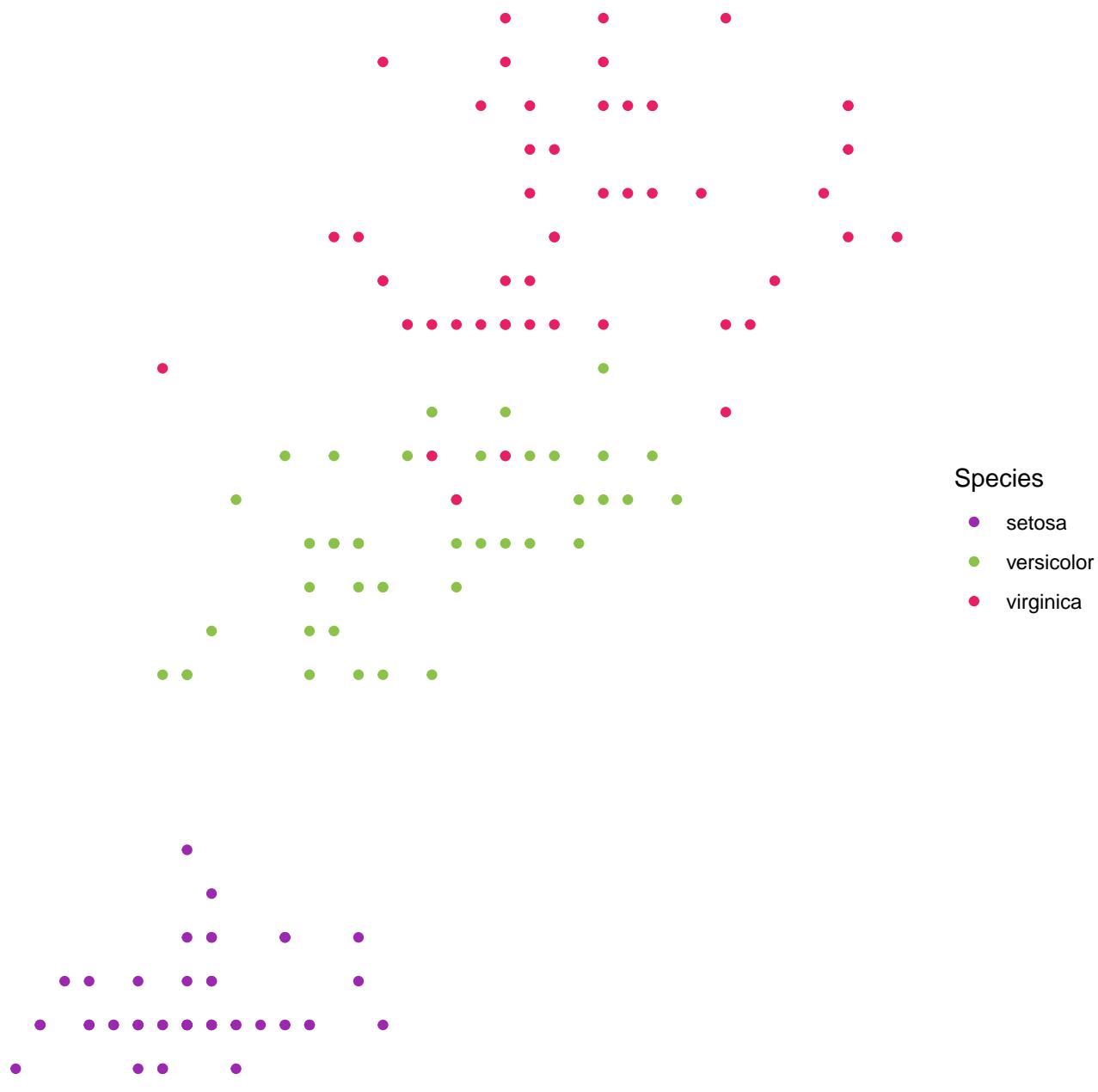


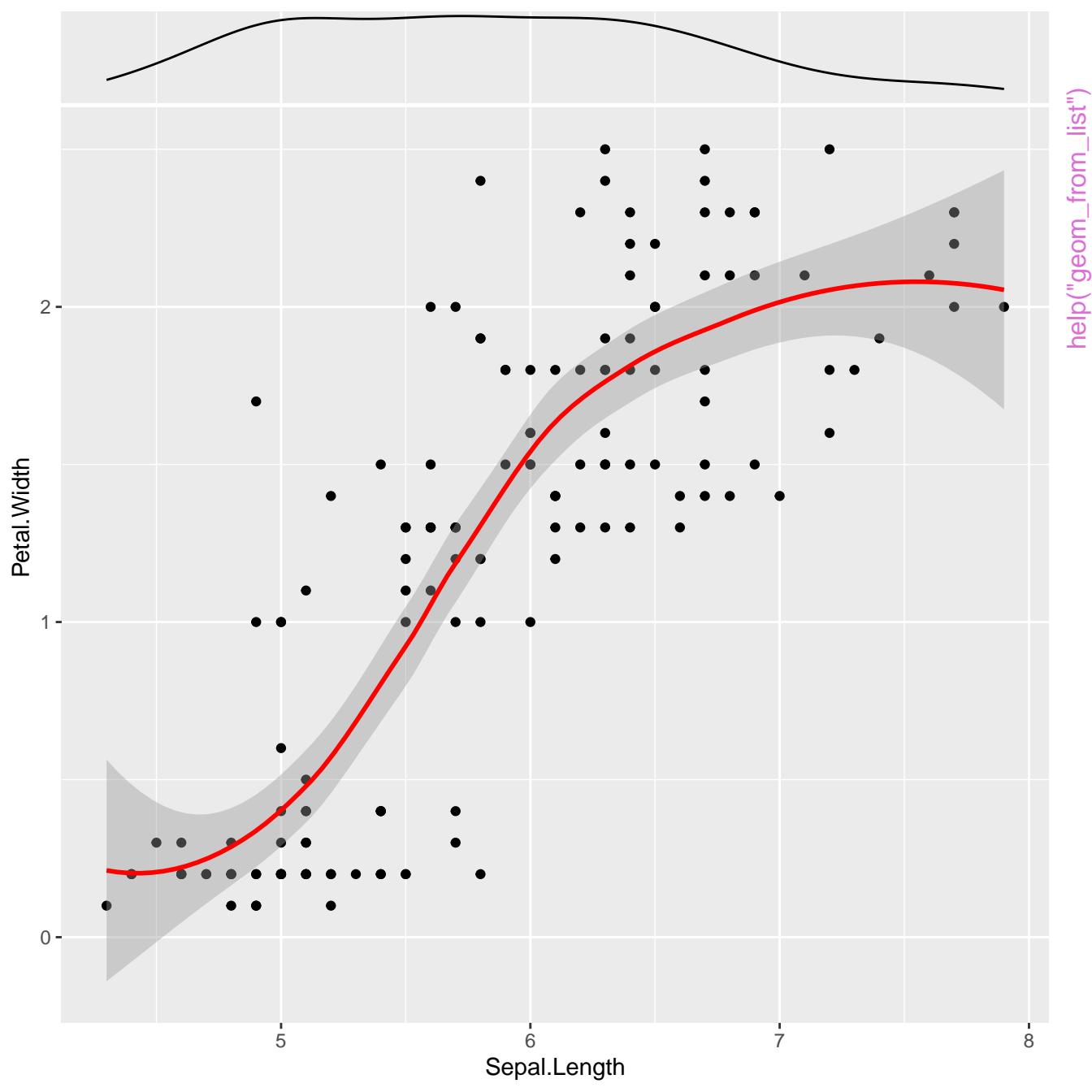
Species ● setosa ● versicolor ● virginica



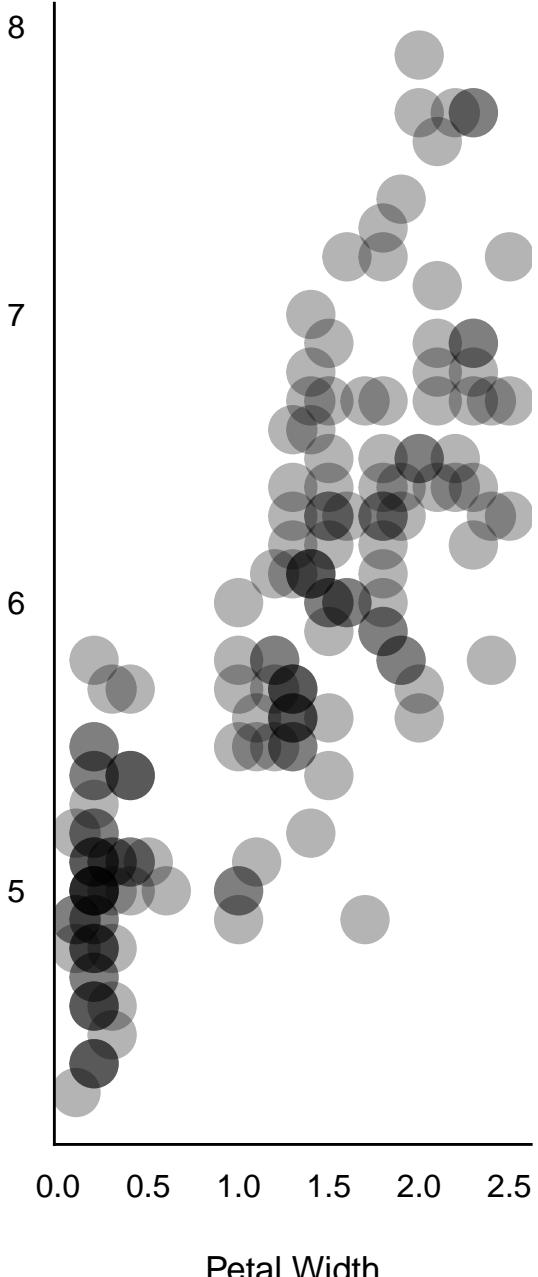
help("geom\_from\_list")

```
help("geom_from_list")
```



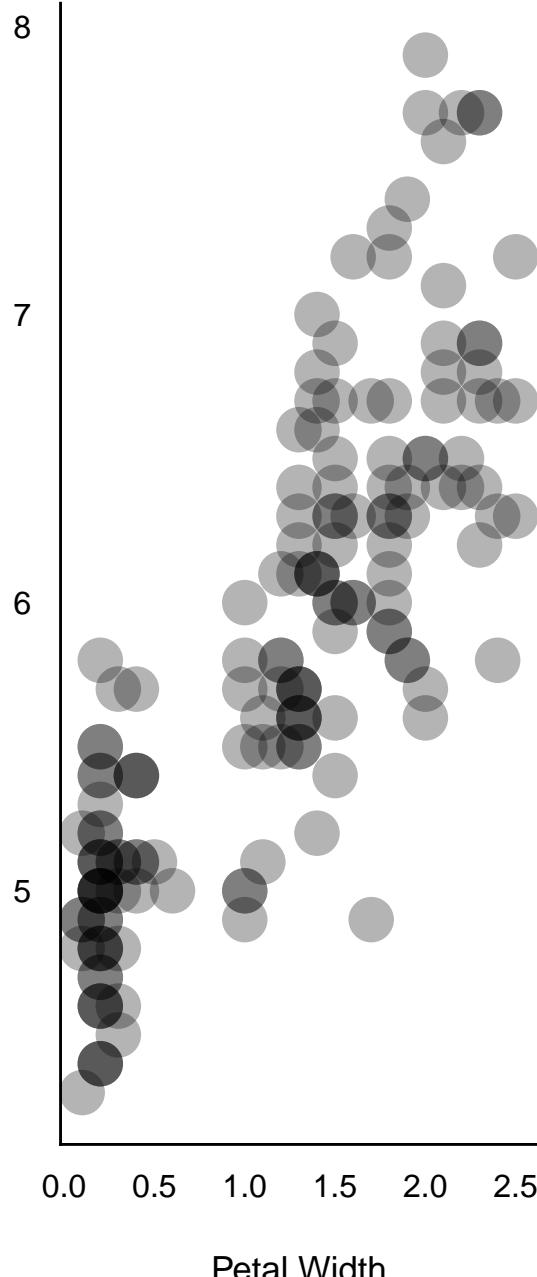


Sepal.Length



Petal.Width

Sepal.Length



Petal.Width

help("geom\_point2")

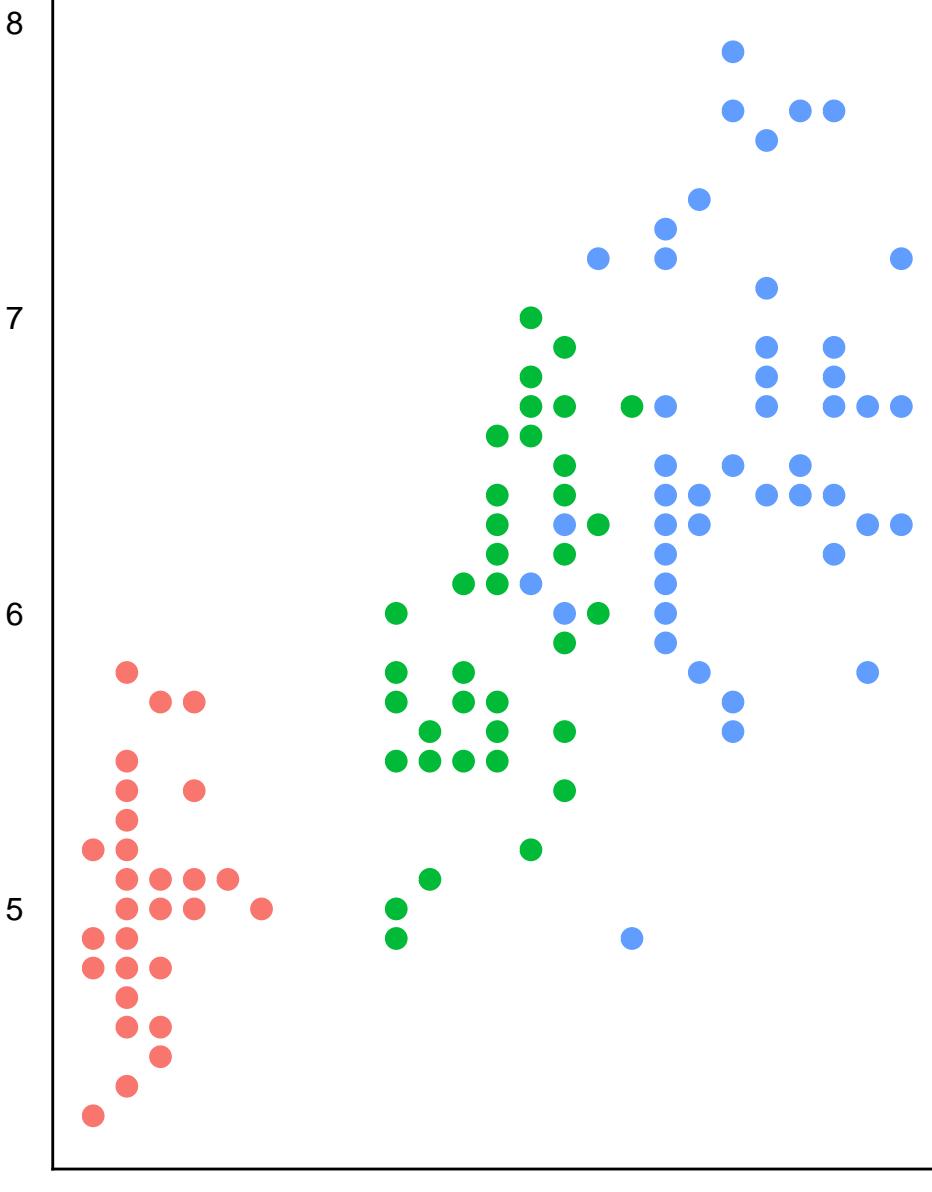
help("geom\_point2")

Sepal.Length

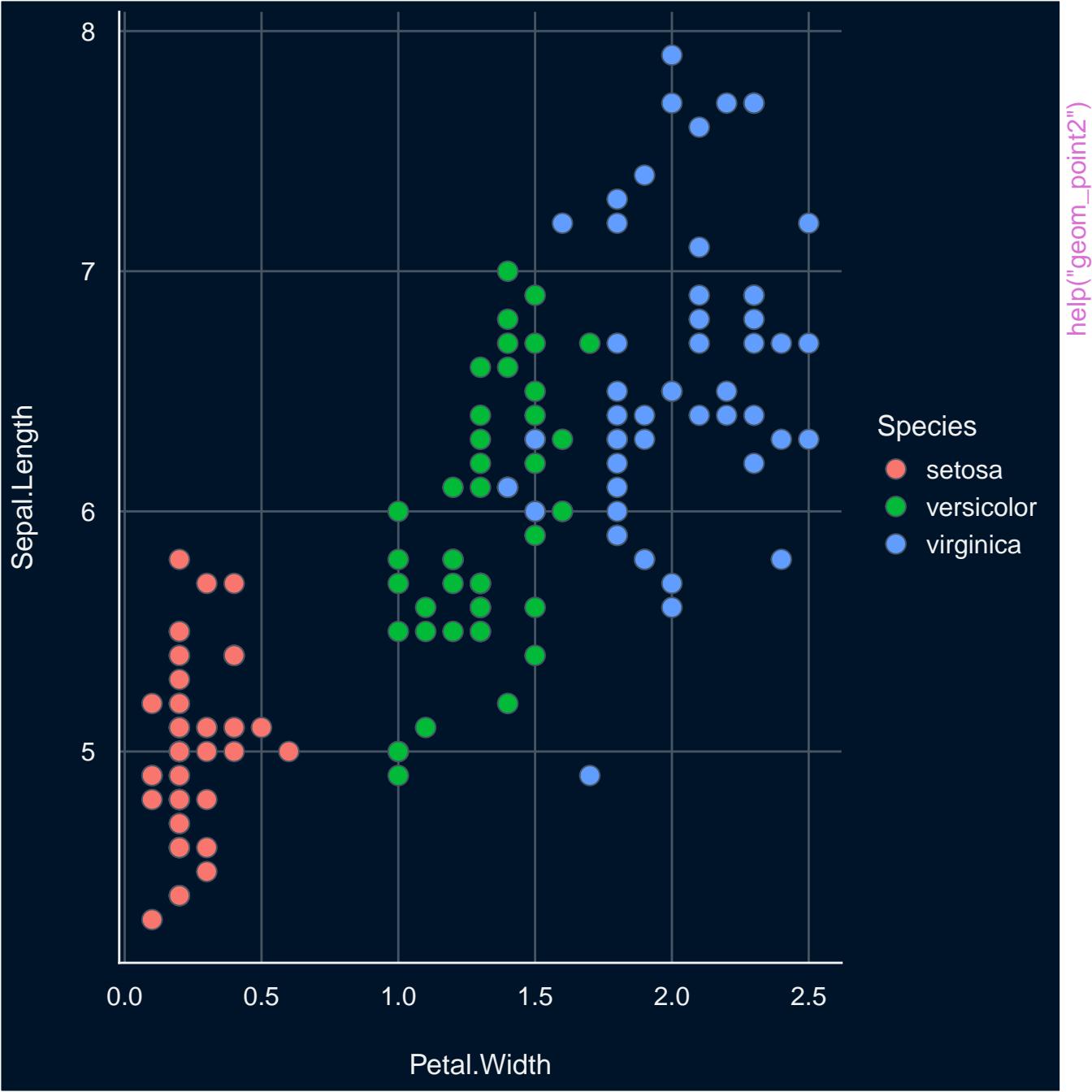
0.0 0.5 1.0 1.5 2.0 2.5

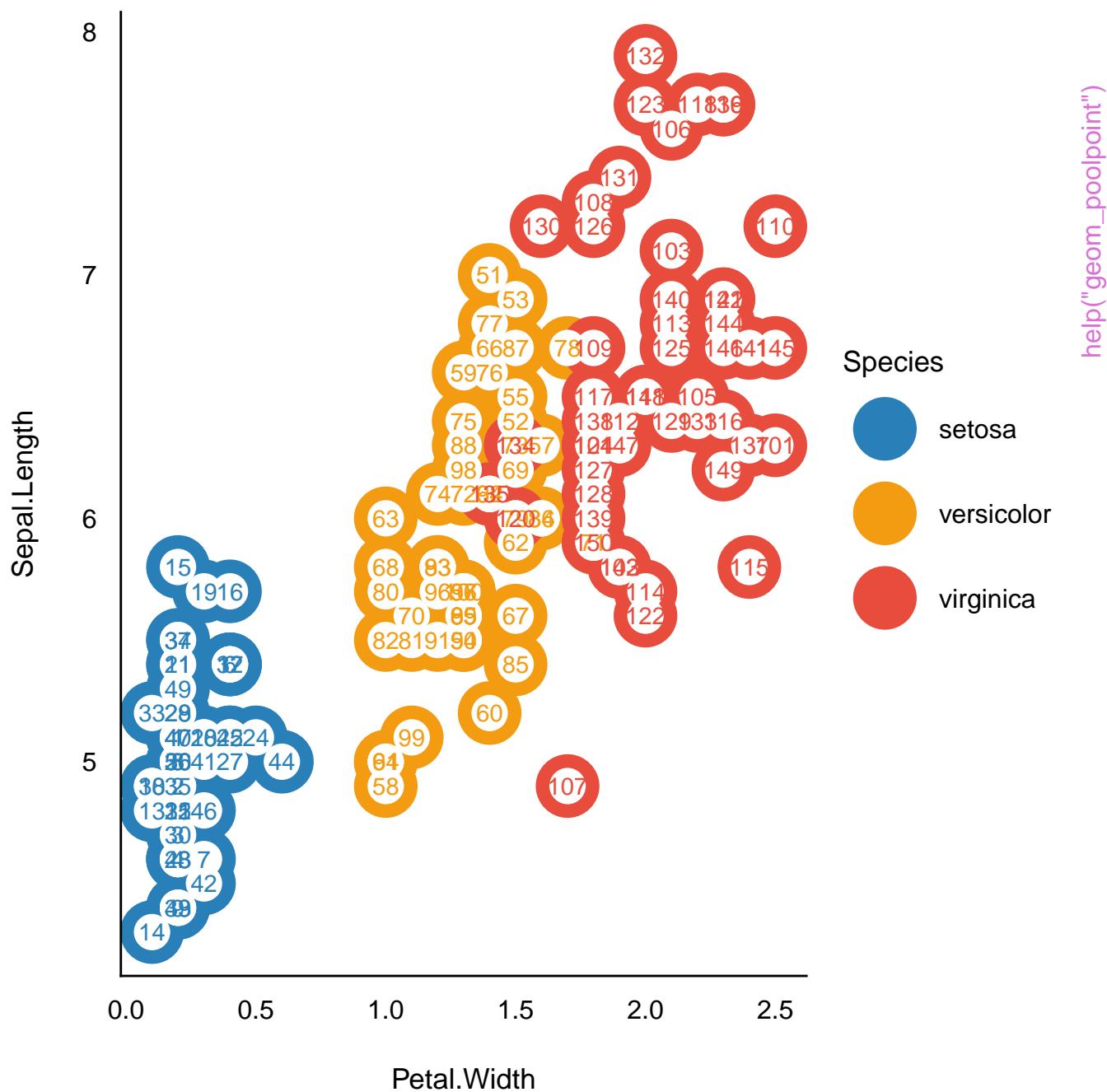
Petal.Width

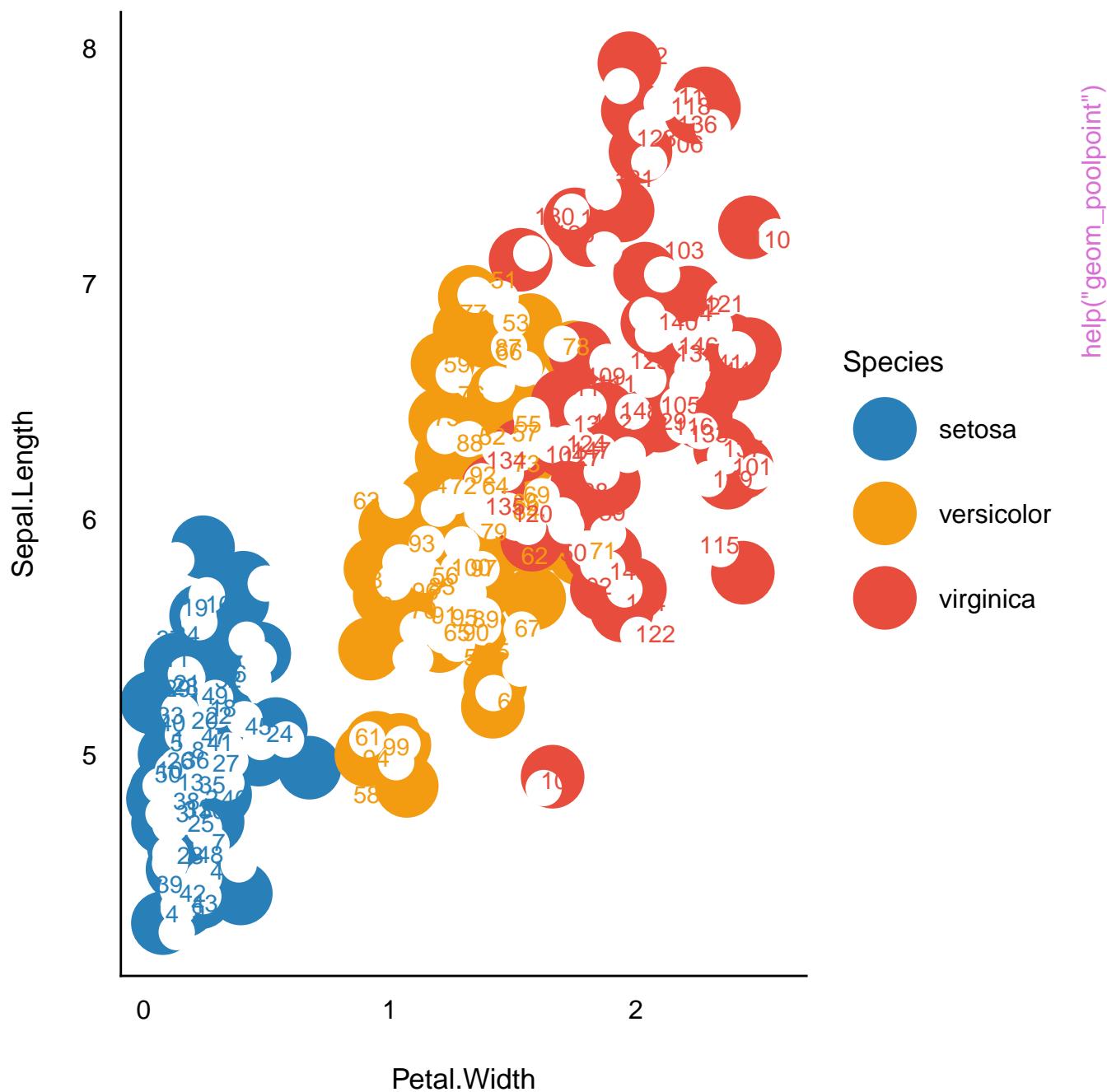
Species  
setosa  
versicolor  
virginica



help("geom\_point2")

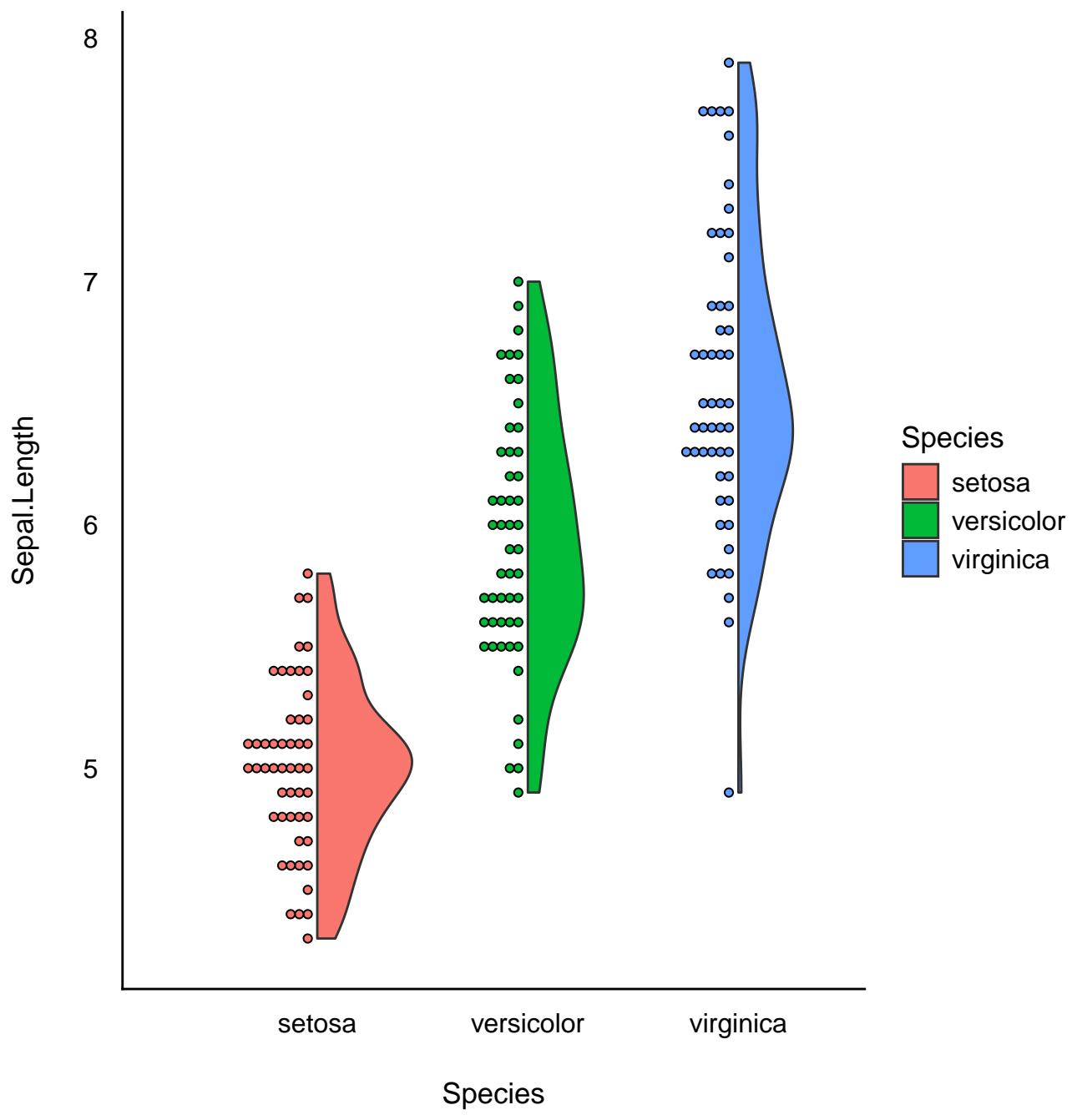




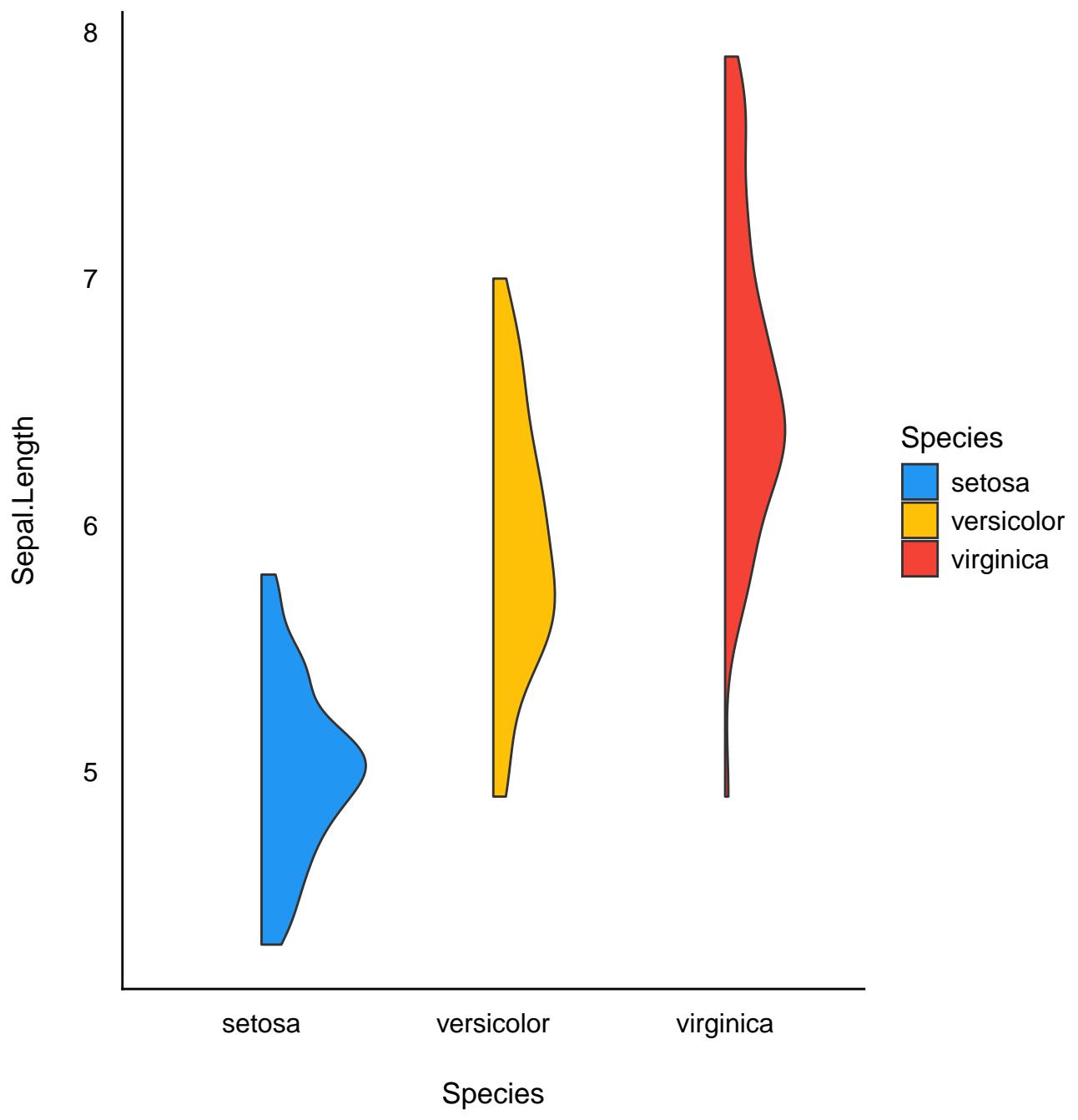


help("geom\_pointr")

help("geom\_violin")

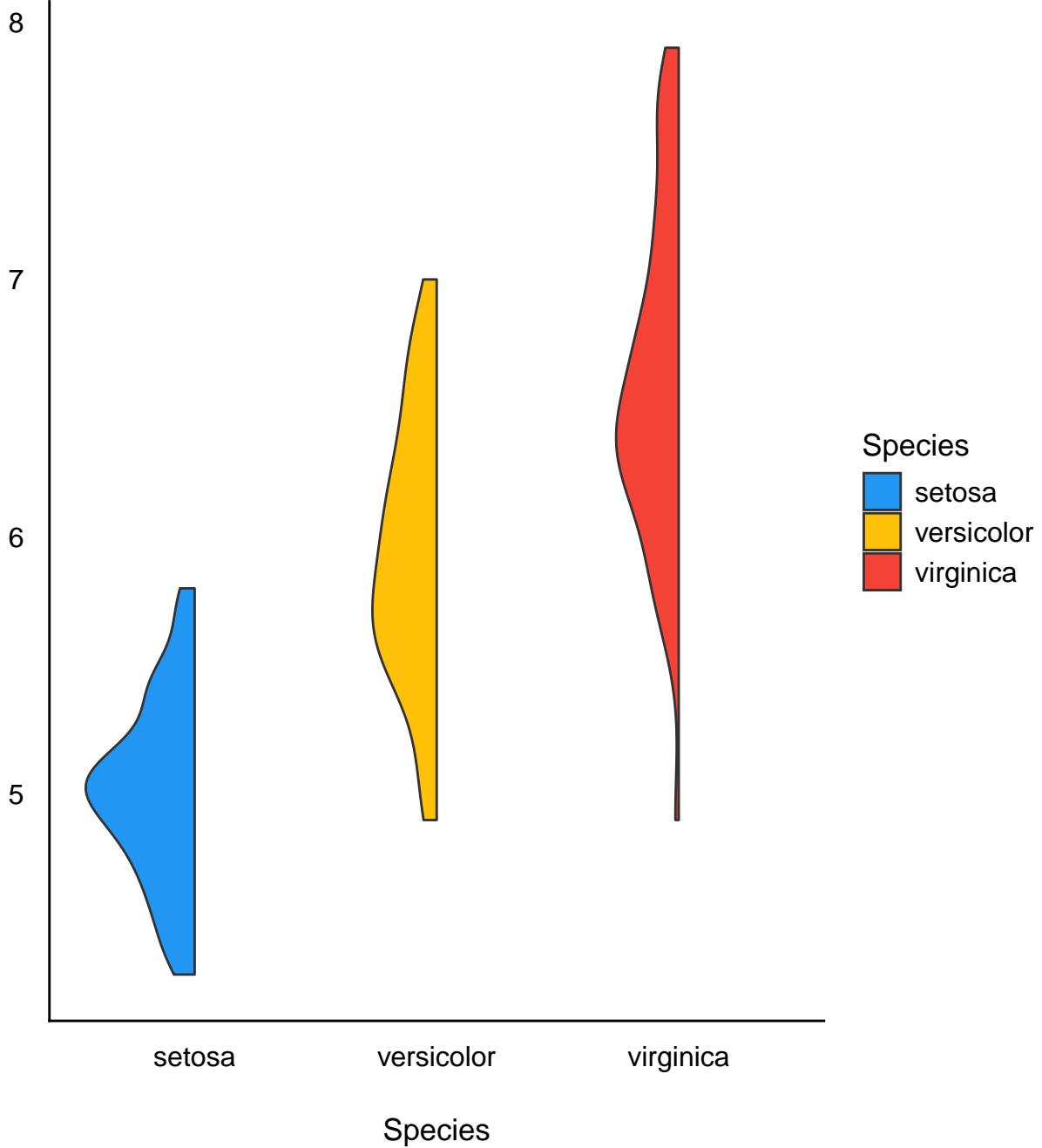


help("geom\_violinhalf")



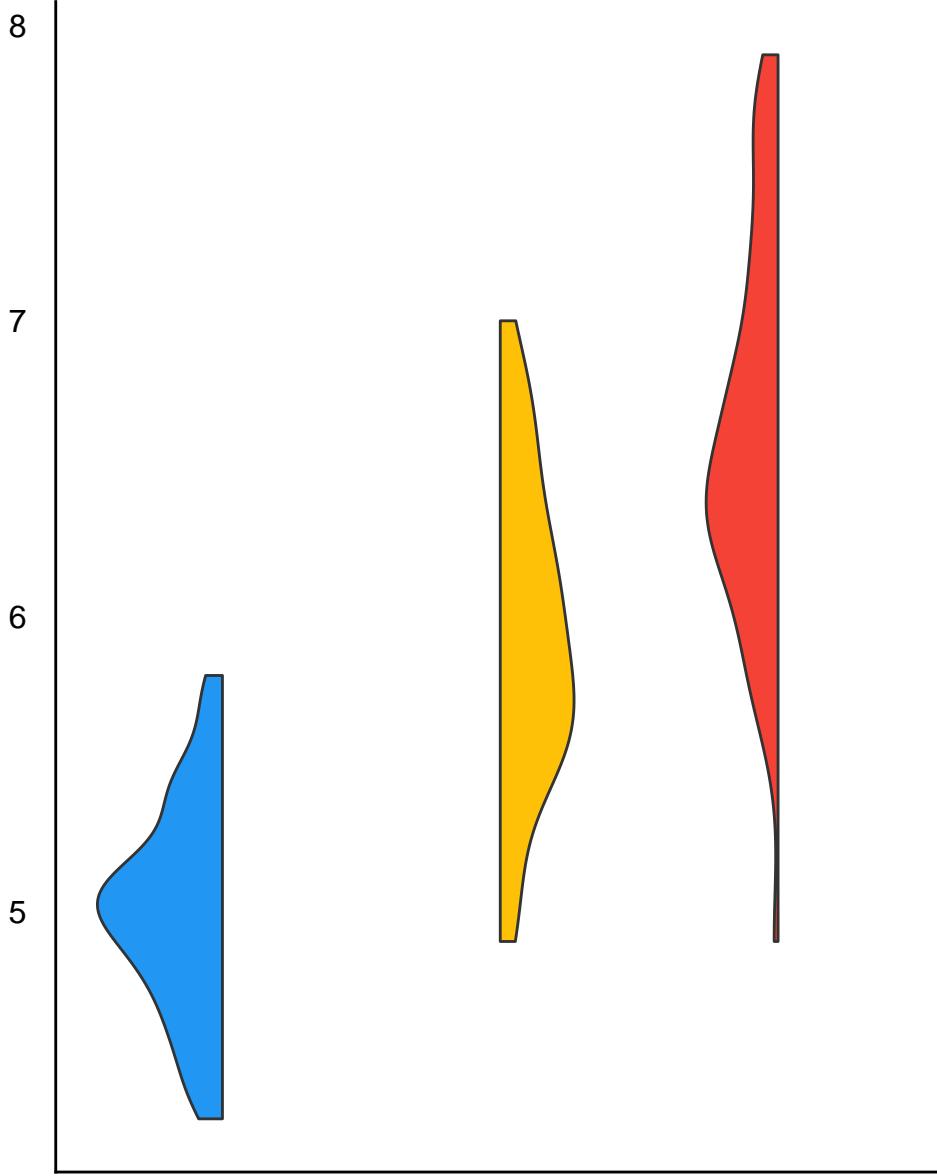
help("geom\_violinhalf")

Sepal.Length



help("geom\_violinhalf")

Sepal.Length



Species  
setosa  
versicolor  
virginica

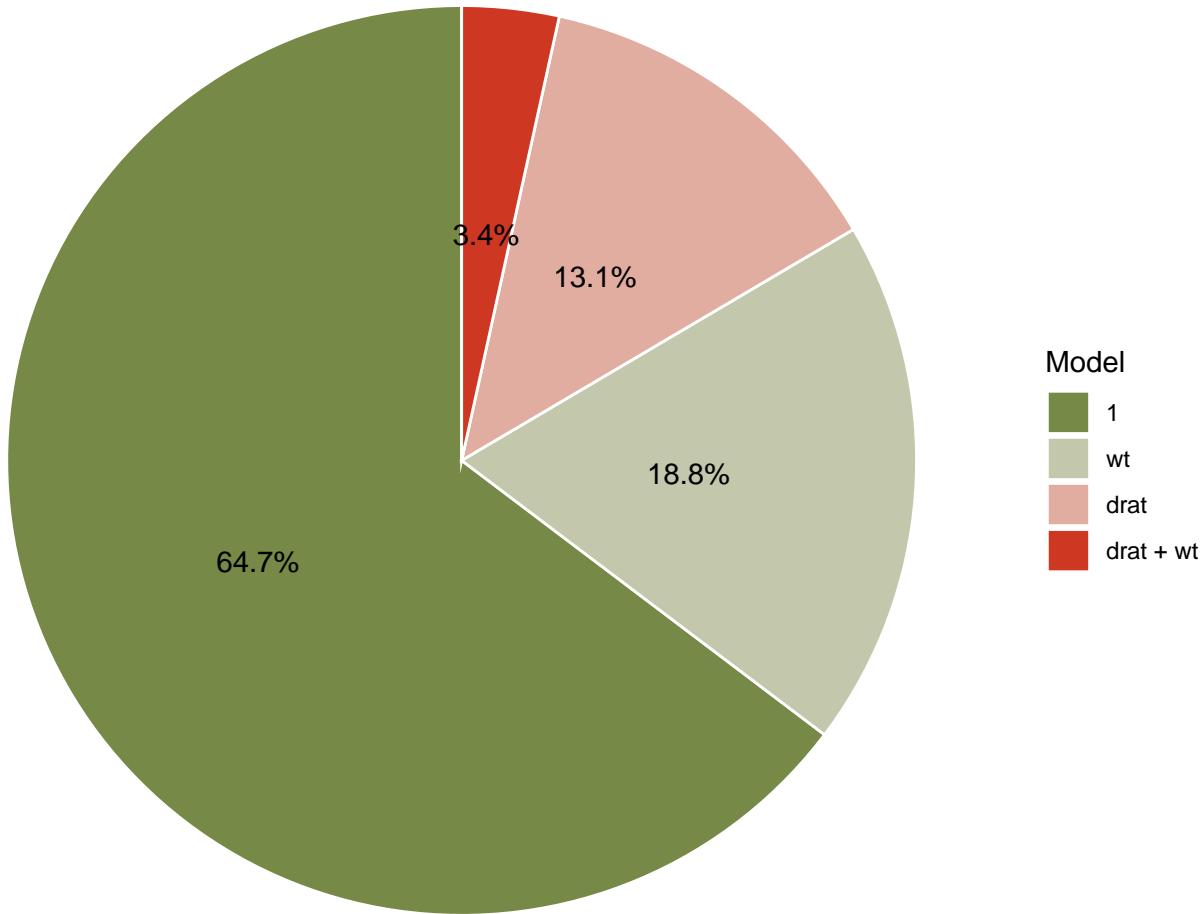
setosa

versicolor

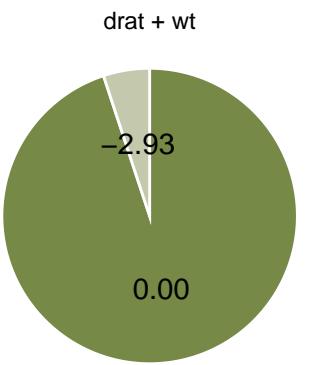
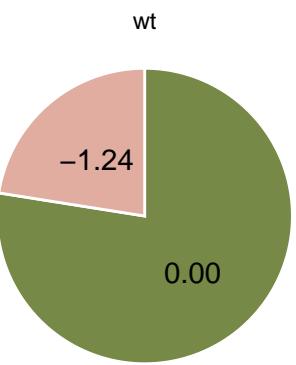
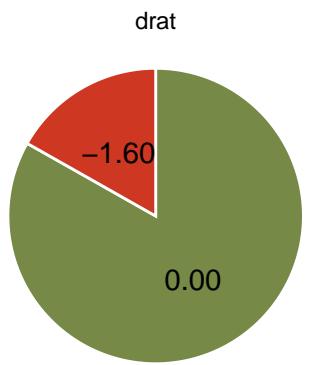
virginica

Species

```
help("plot.see_bayesfactor_models")
```



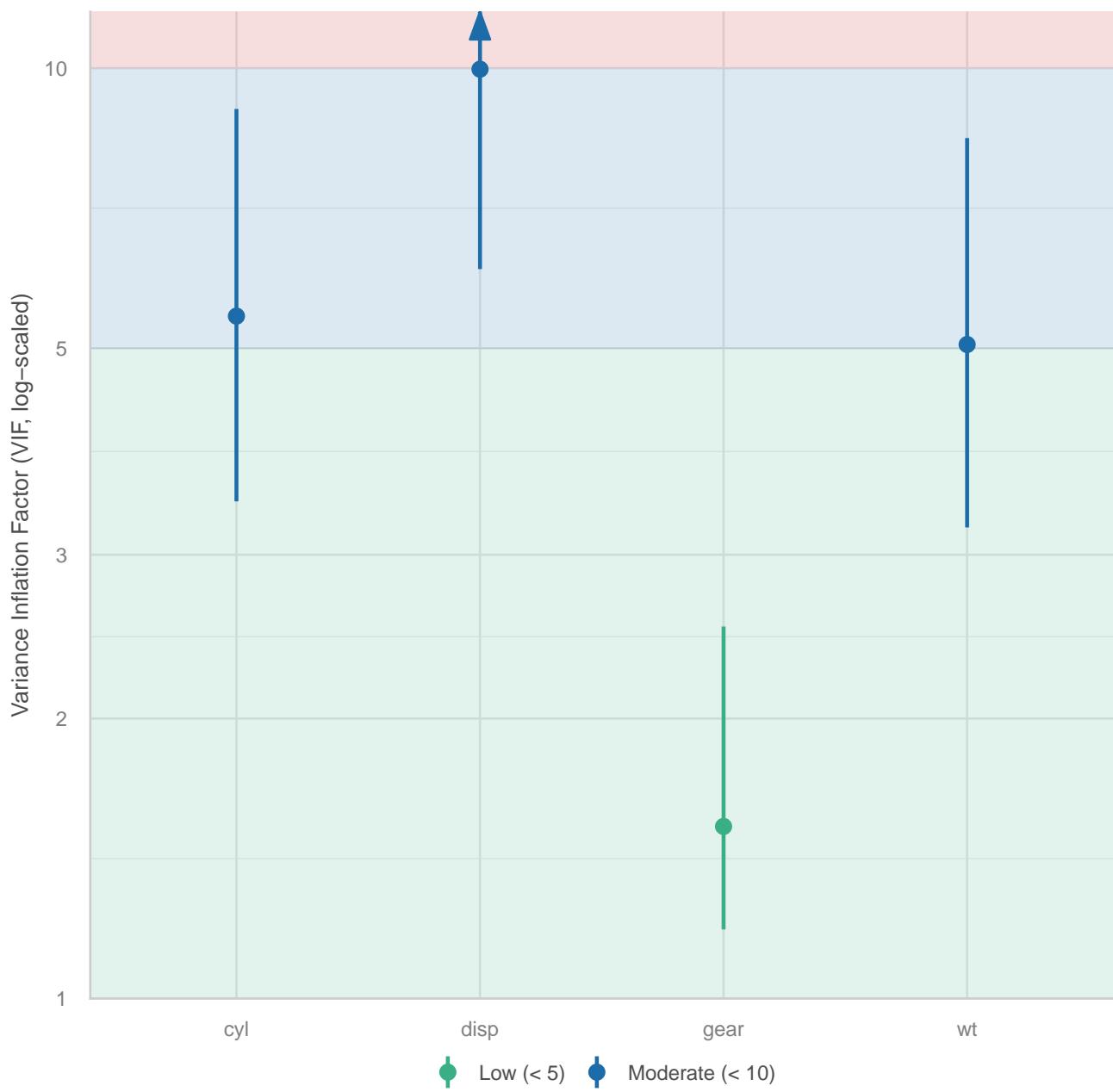
help("plot.see\_bayesfactor\_models")



Labels are  $\log(BF)$ .

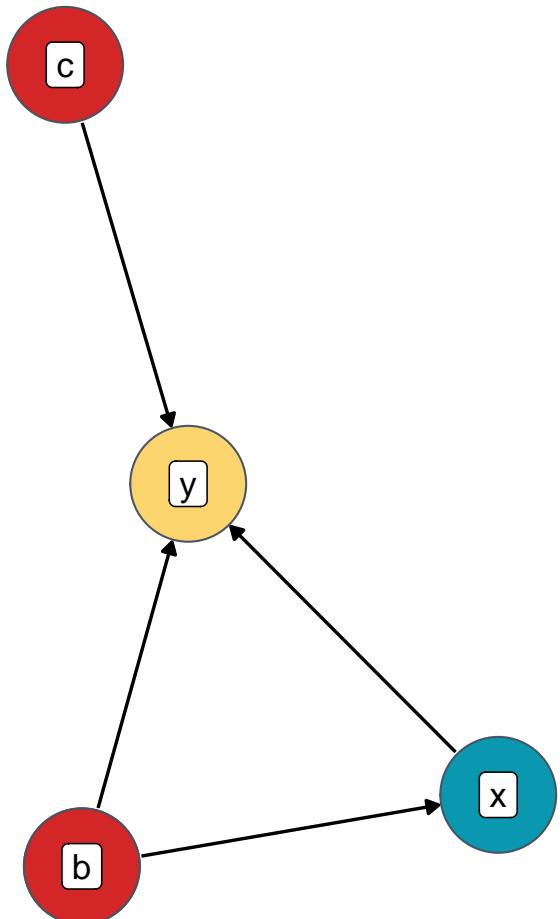
# Collinearity

High collinearity (VIF) may inflate parameter uncertainty

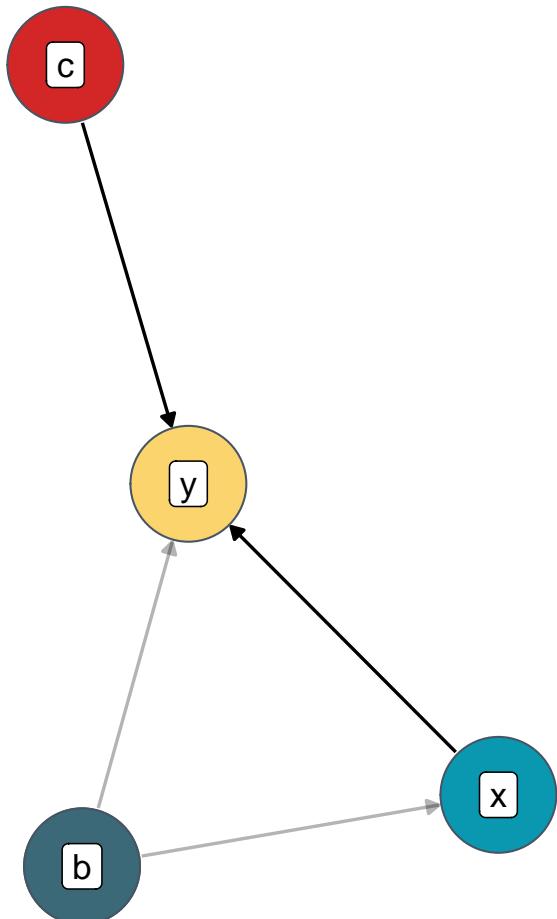


help("plot.see\_check\_collinearity")

Current model



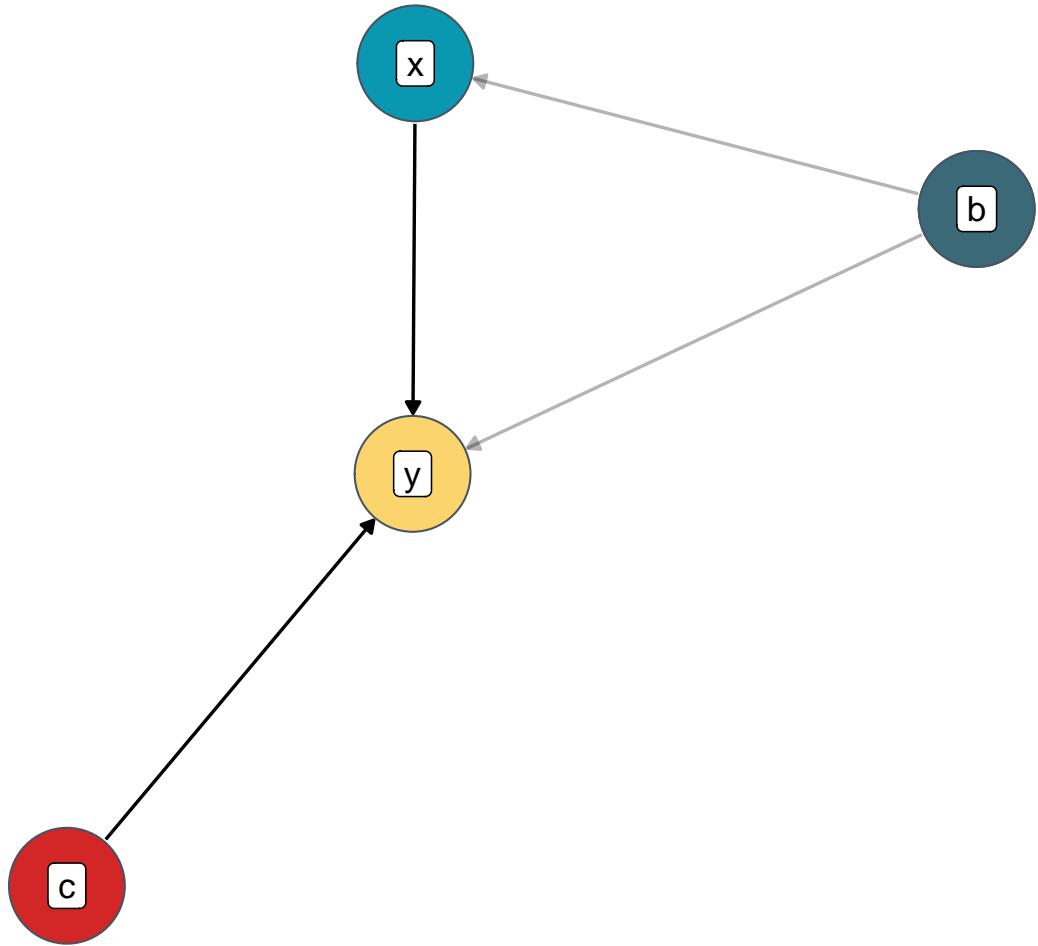
Required model (total effect)



● outcome ● exposure ● adjusted

help("plot.see\_check\_dag")

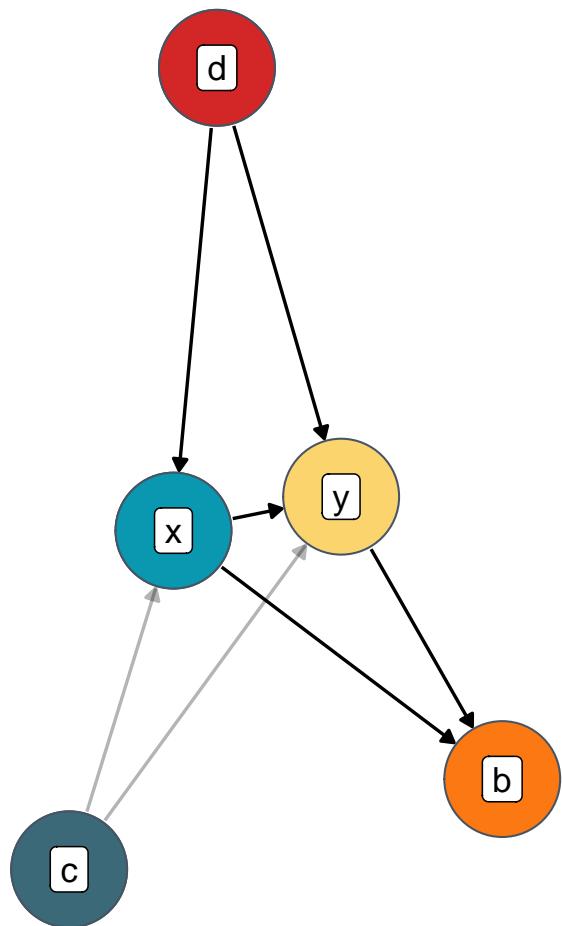
## Required model (total effect)



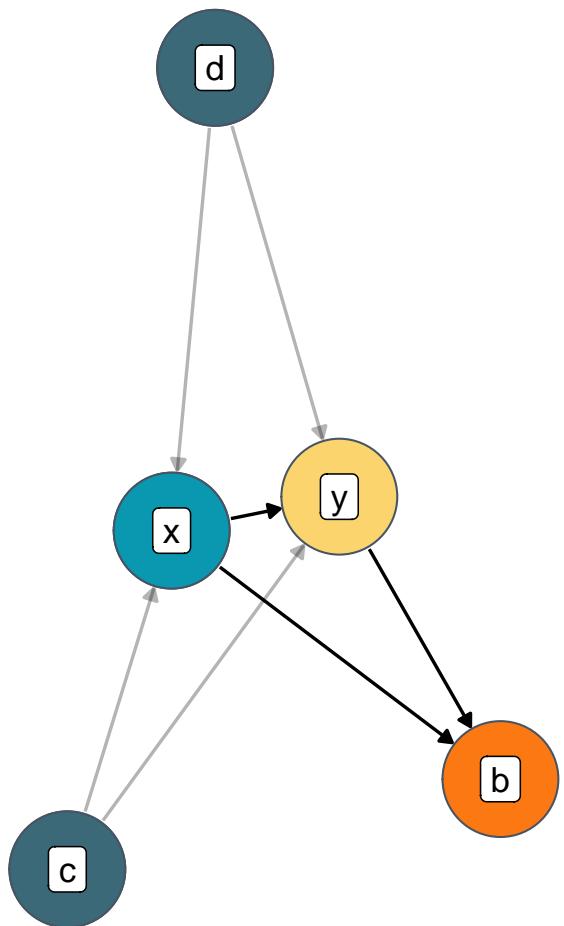
● outcome ● exposure ● adjusted ● unadjusted

help("plot.see\_check\_dag")

Current model



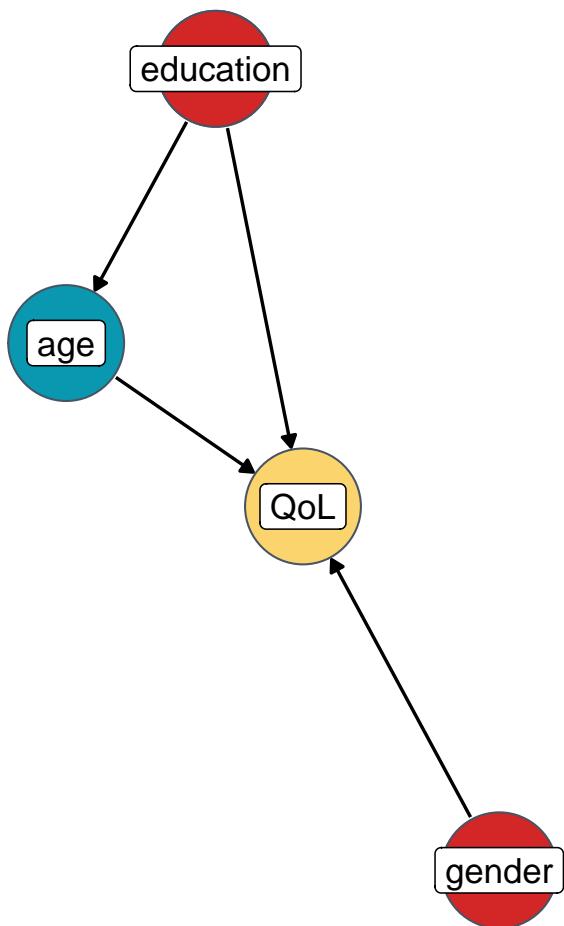
Required model (total effect)



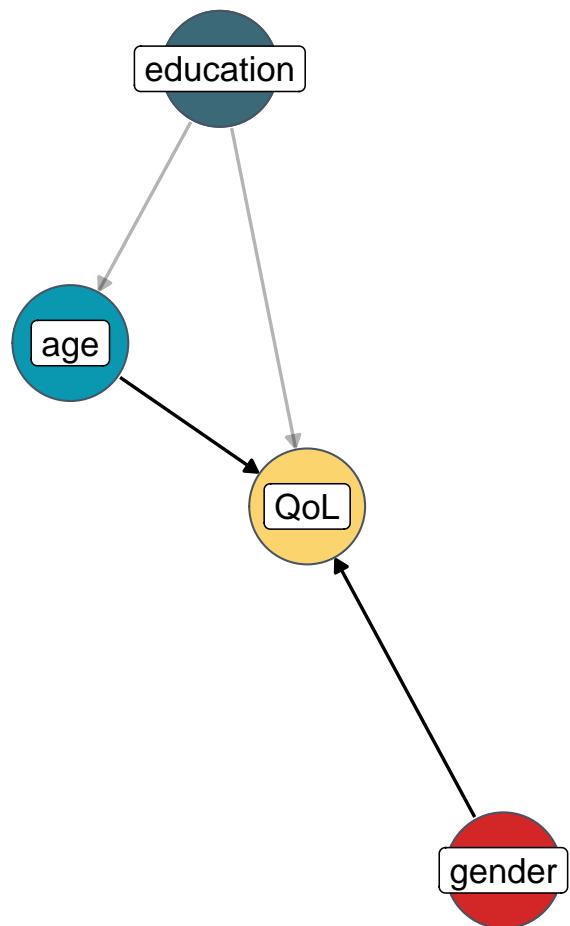
Legend:  
Yellow circle: outcome  
Teal circle: exposure  
Dark teal circle: adjusted  
Red circle: unadjusted  
Orange circle: collider

help("plot.see\_check\_dag")

Current model



Required model (total effect)

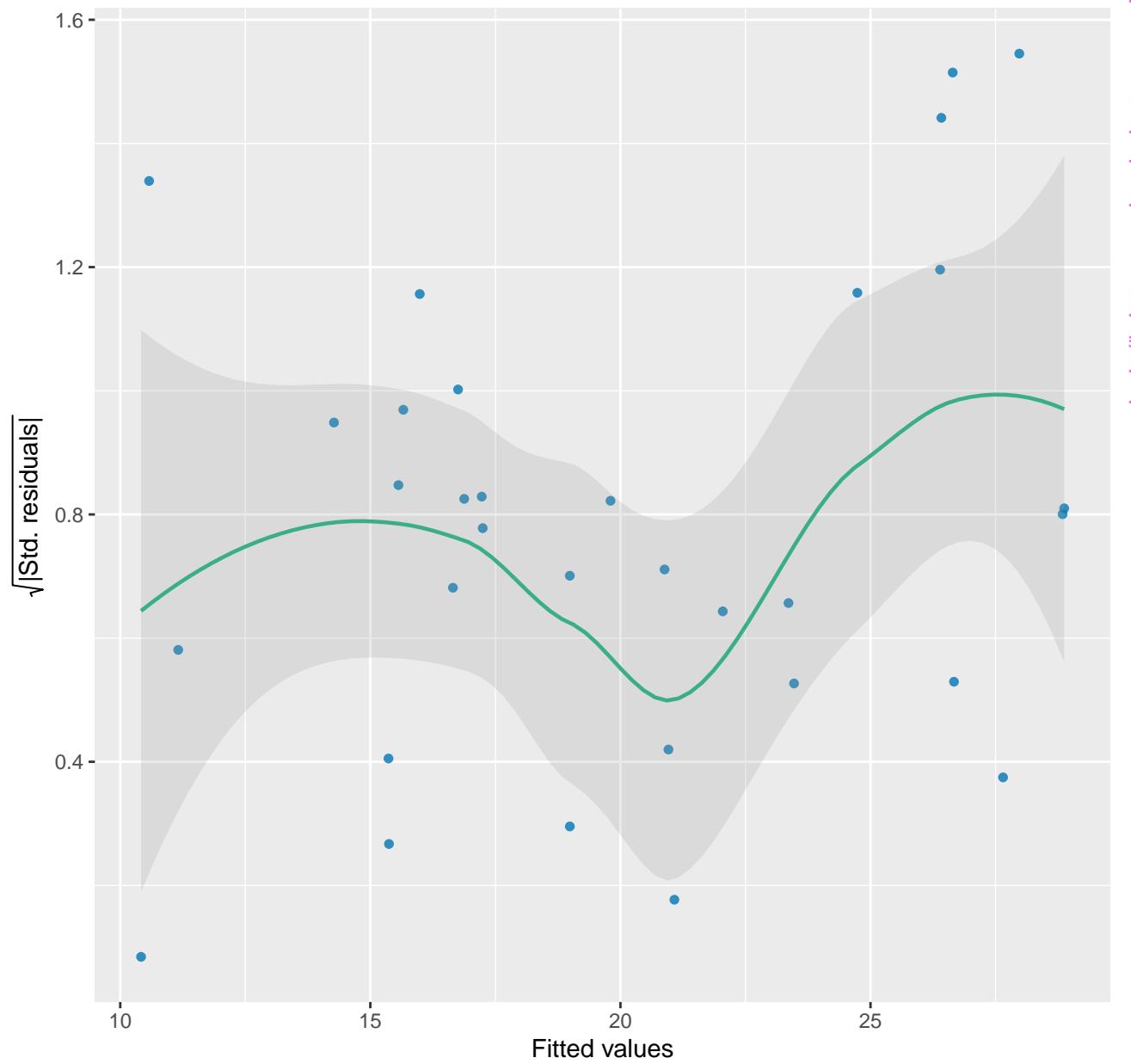


● outcome ● exposure ● adjusted

help("plot.see\_check\_dag")

# Homogeneity of Variance

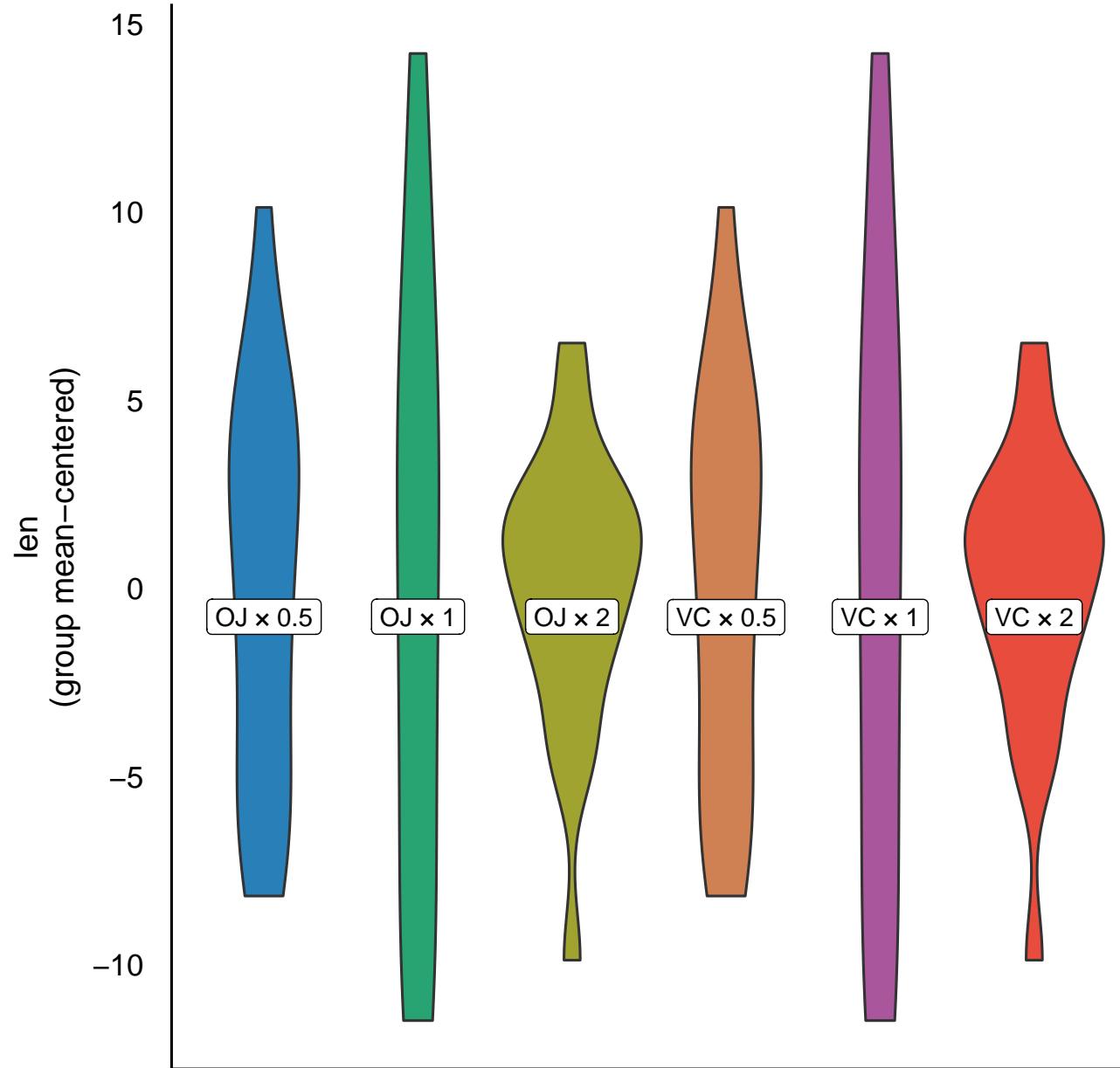
Reference line should be flat and horizontal



help("plot.see\_check\_heteroscedasticity")

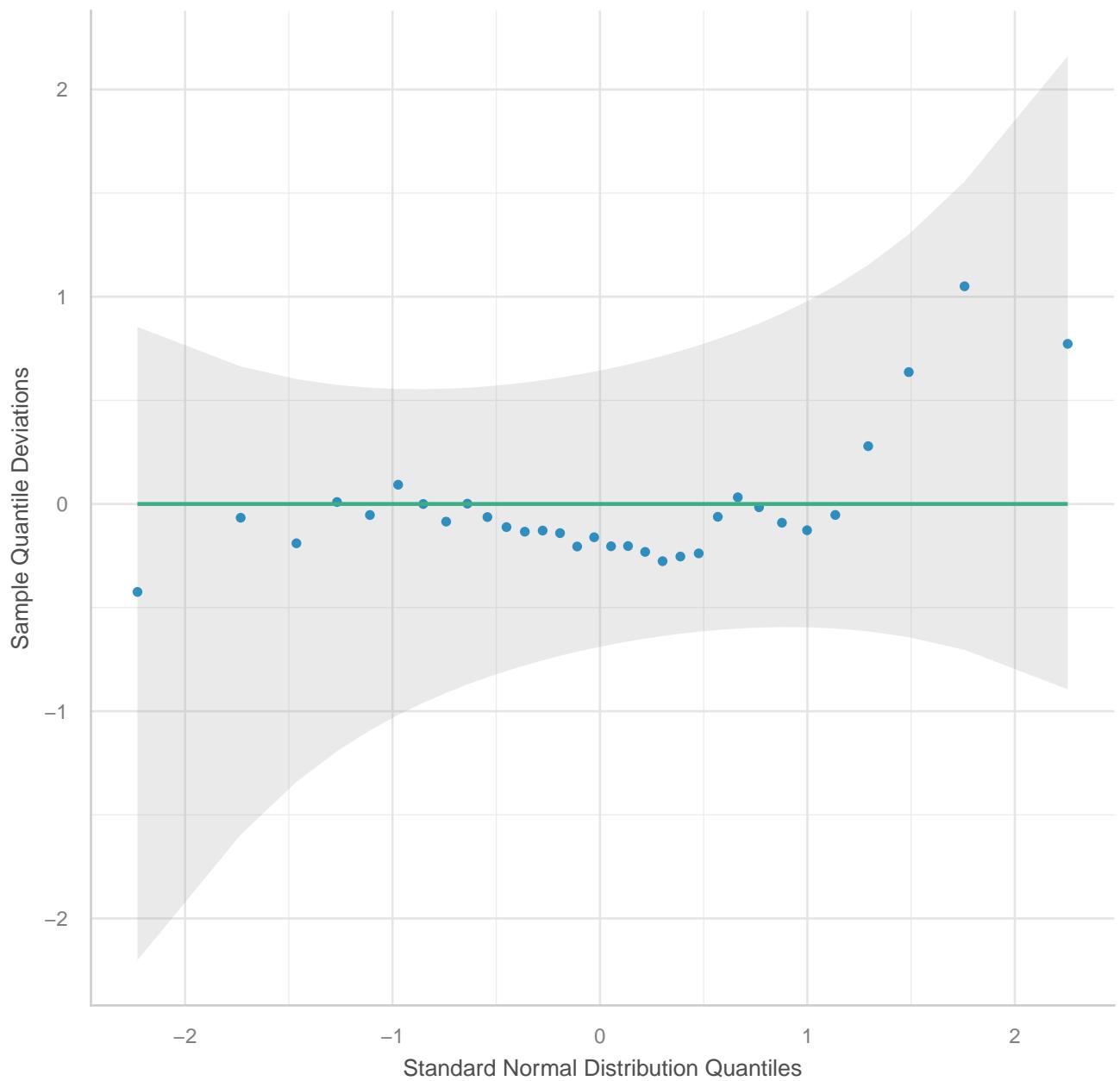
# Homogeneity of Variance (Bartlett Test)

Groups should be evenly spread



## Normality of Residuals

Dots should fall along the line

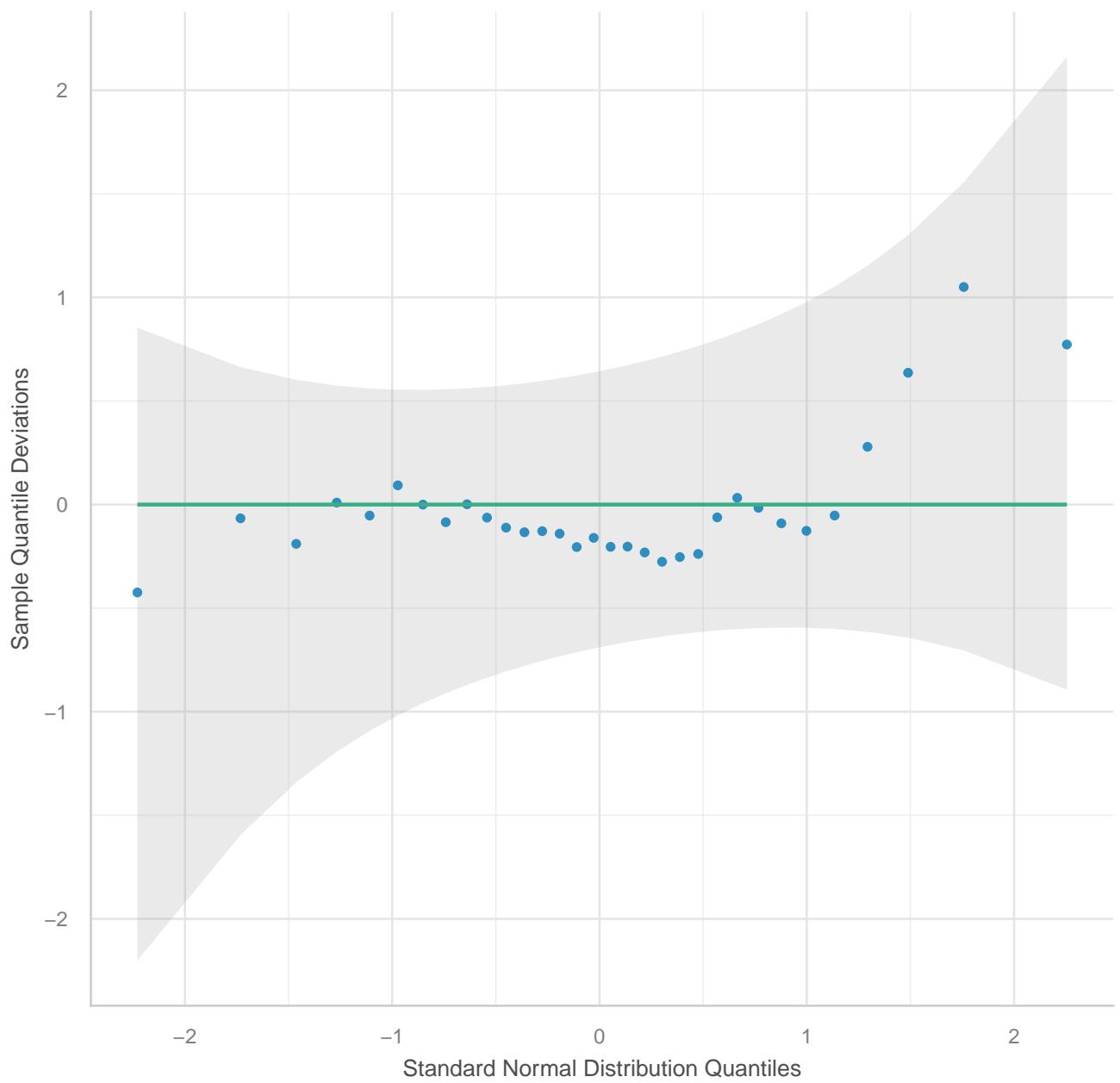


help("plot.see\_check\_normality")

## Normality of Residuals

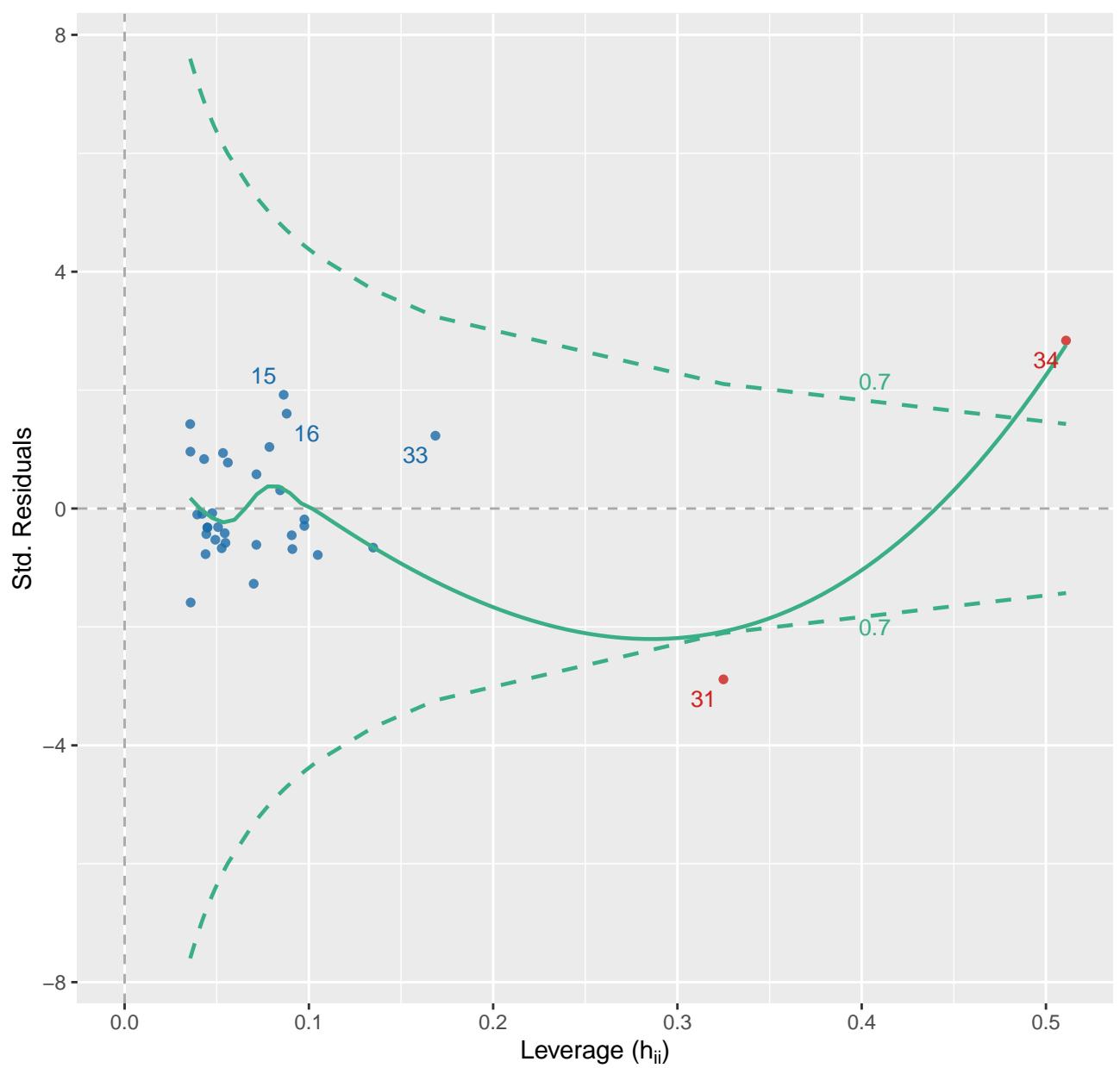
Dots should fall along the line

help("plot.see\_check\_normality")

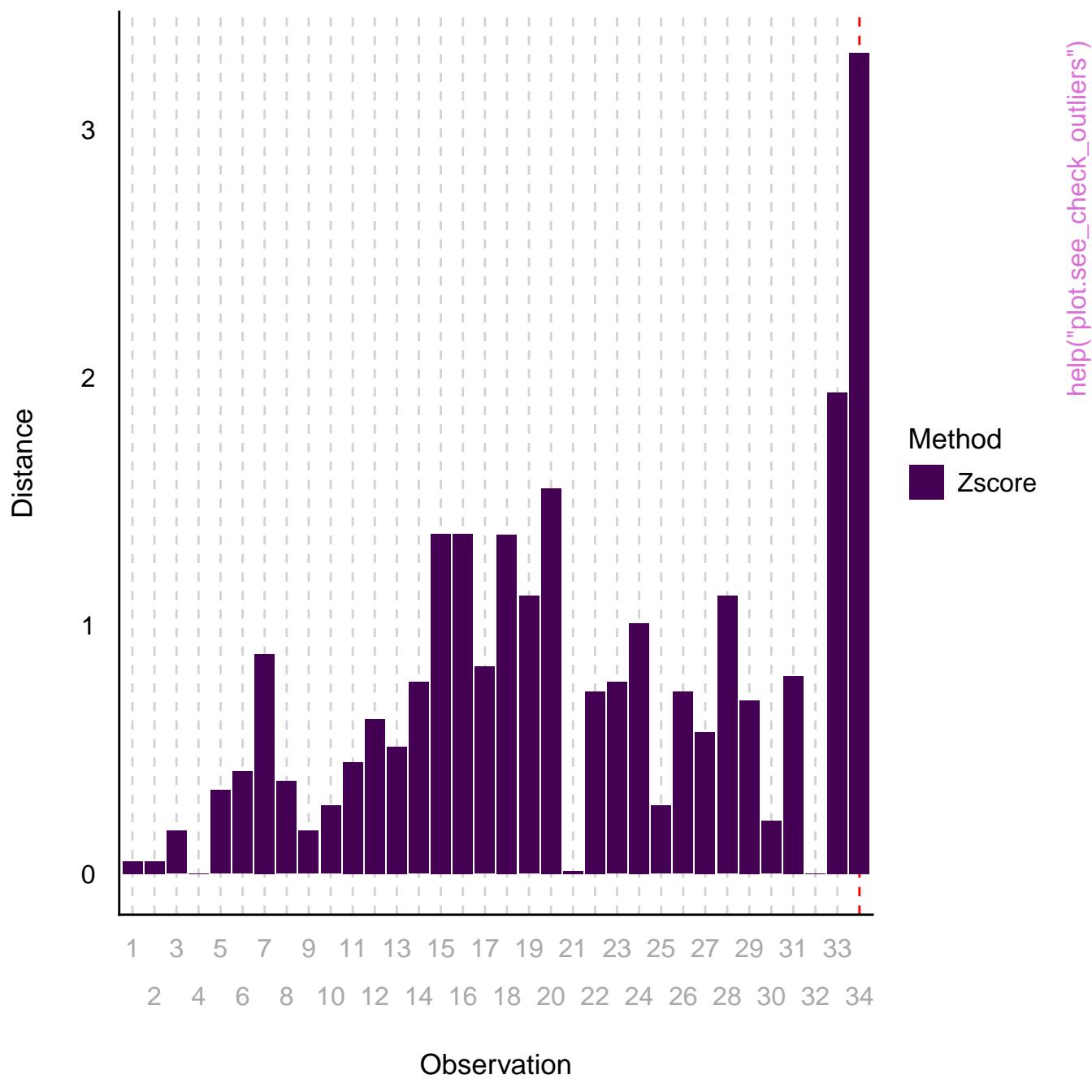


# Influential Observations

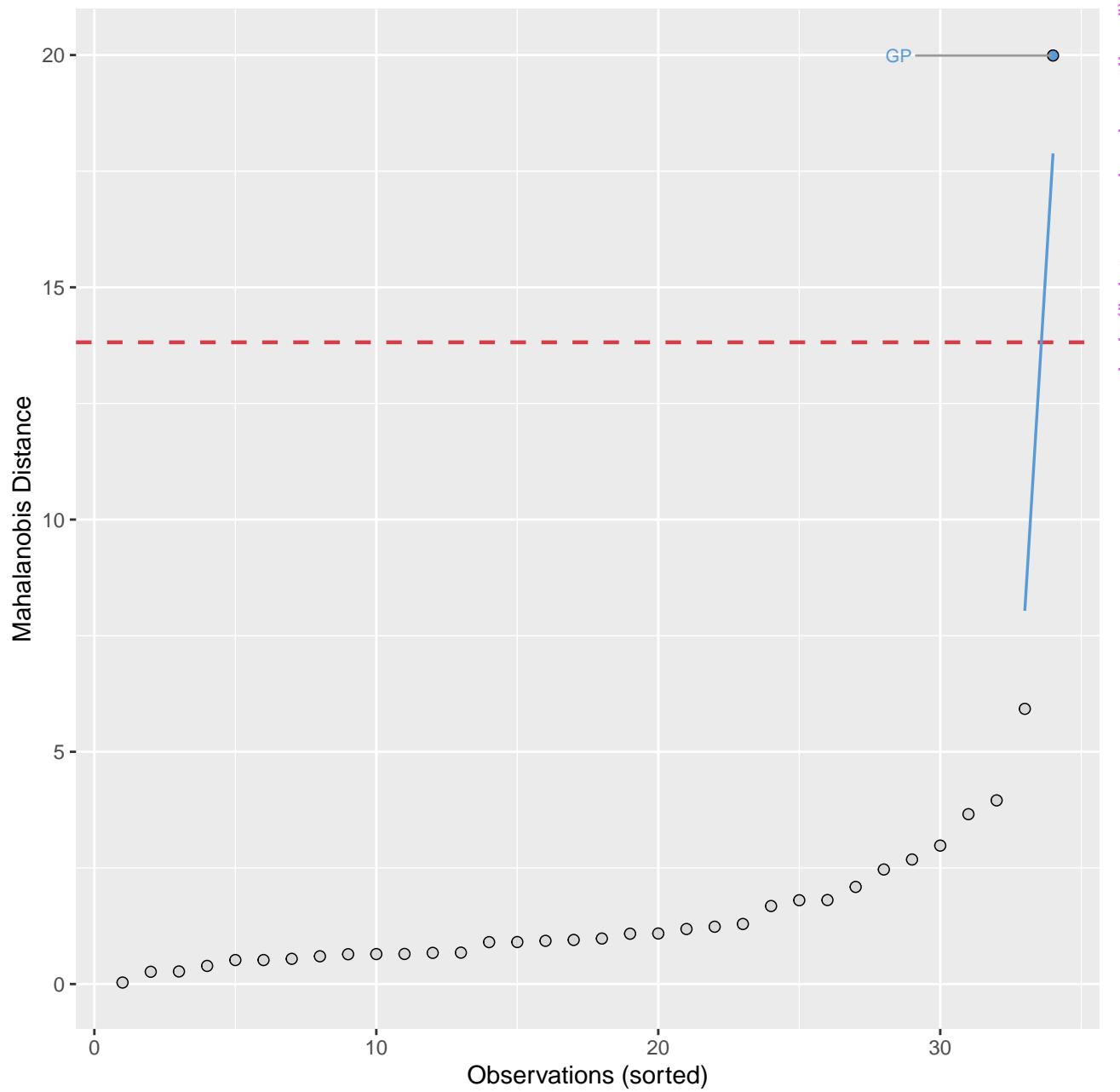
Points should be inside the contour lines



```
help("plot.see_check_outliers")
```



# Scree Outlier Detection



help("plot.see\_compare\_parameters")

Parameter

Species [versicolor]

Species [virginica]

Petal Length

Species [versicolor] × Petal Length

Species [virginica] × Petal Length

-4 -2 0 2

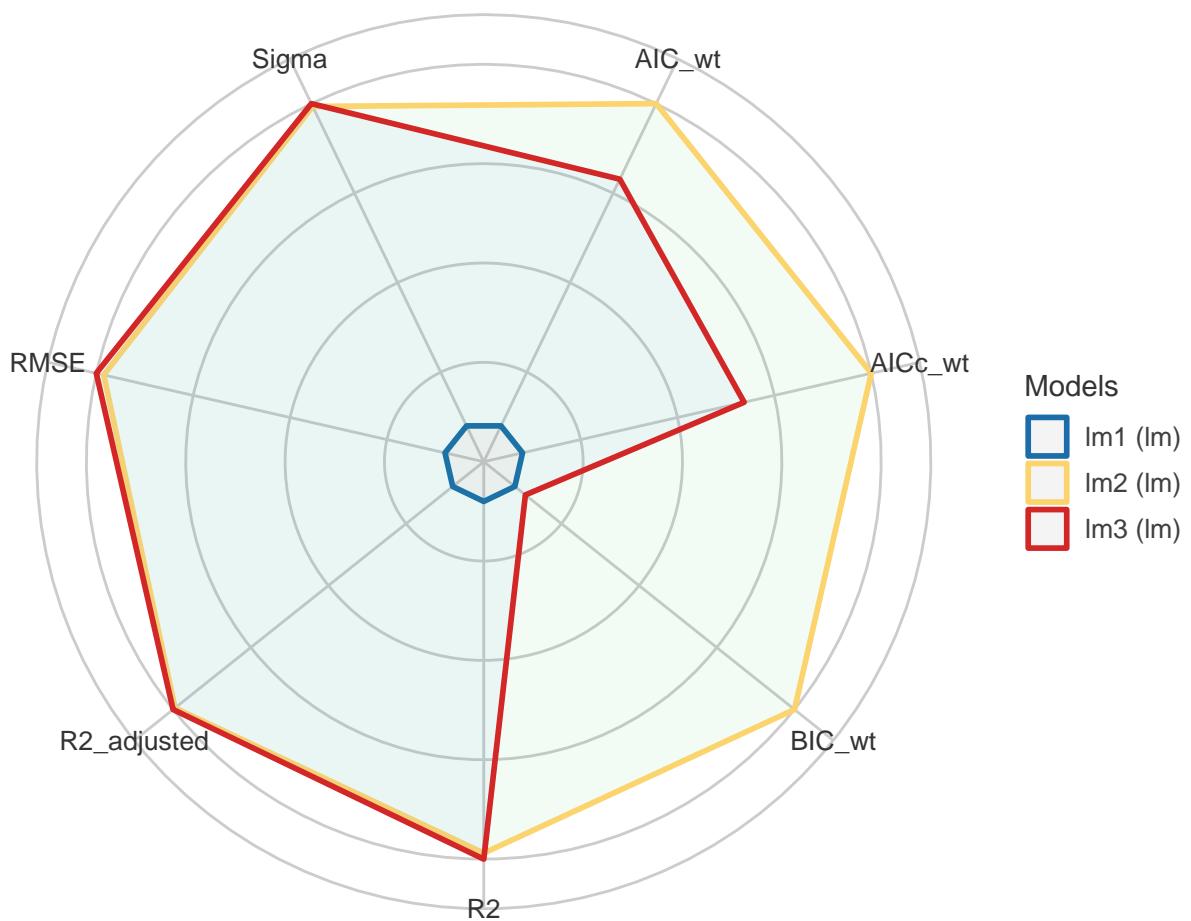
Estimate

Model  
Im1  
Im2  
Im3



help("plot.compare\_performance")

## Comparison of Model Indices



Parameter

factor(am)



factor(cyl)



factor(am):factor(cyl)

0.00 0.25 0.50 0.75 1.00

Eta2 (partial)

help("plot.see\_effectsize\_table")

Parameter

factor(am)



factor(cyl)



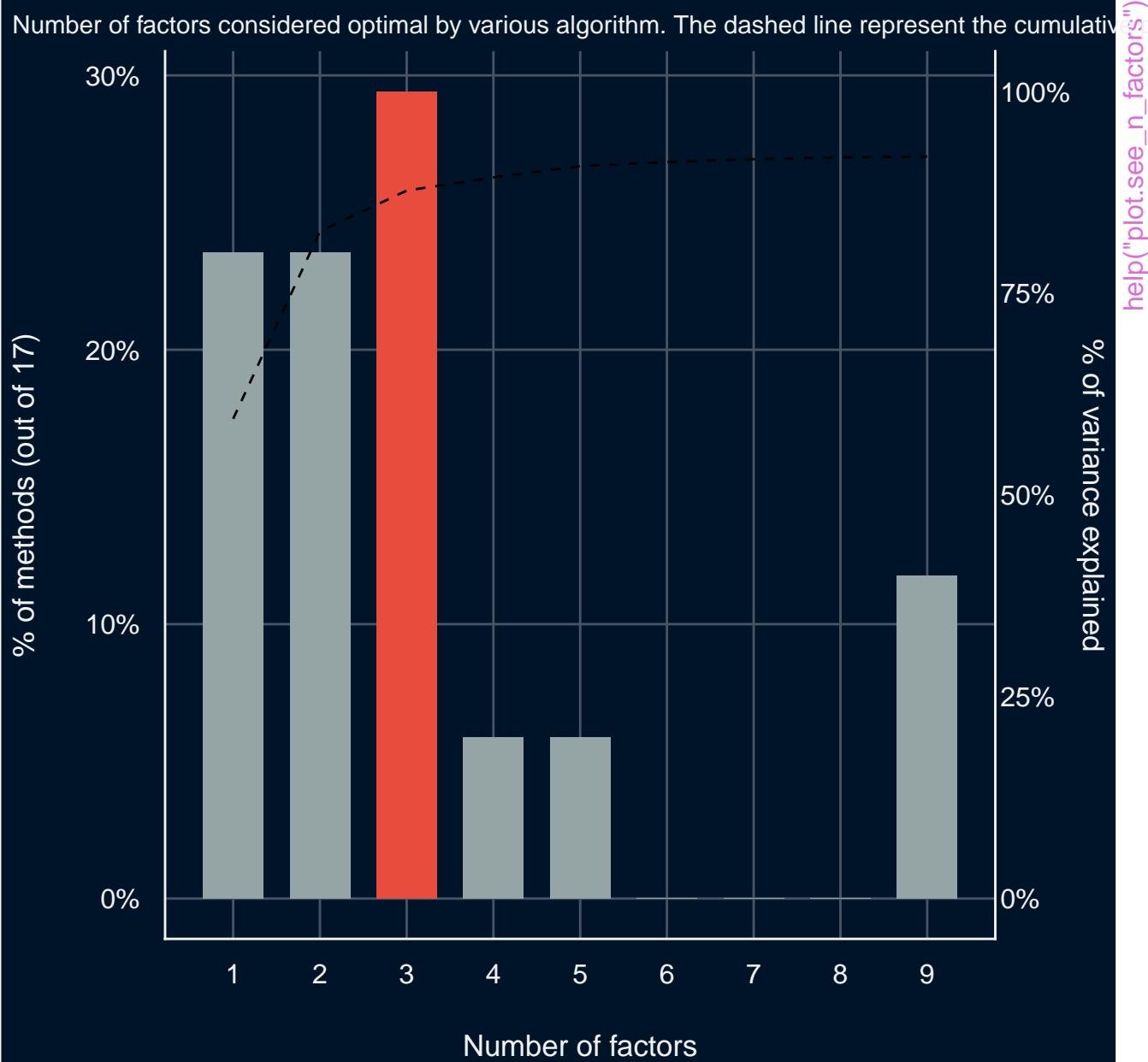
factor(am):factor(cyl)

0.00 0.25 0.50 0.75 1.00

Eta2 (partial)

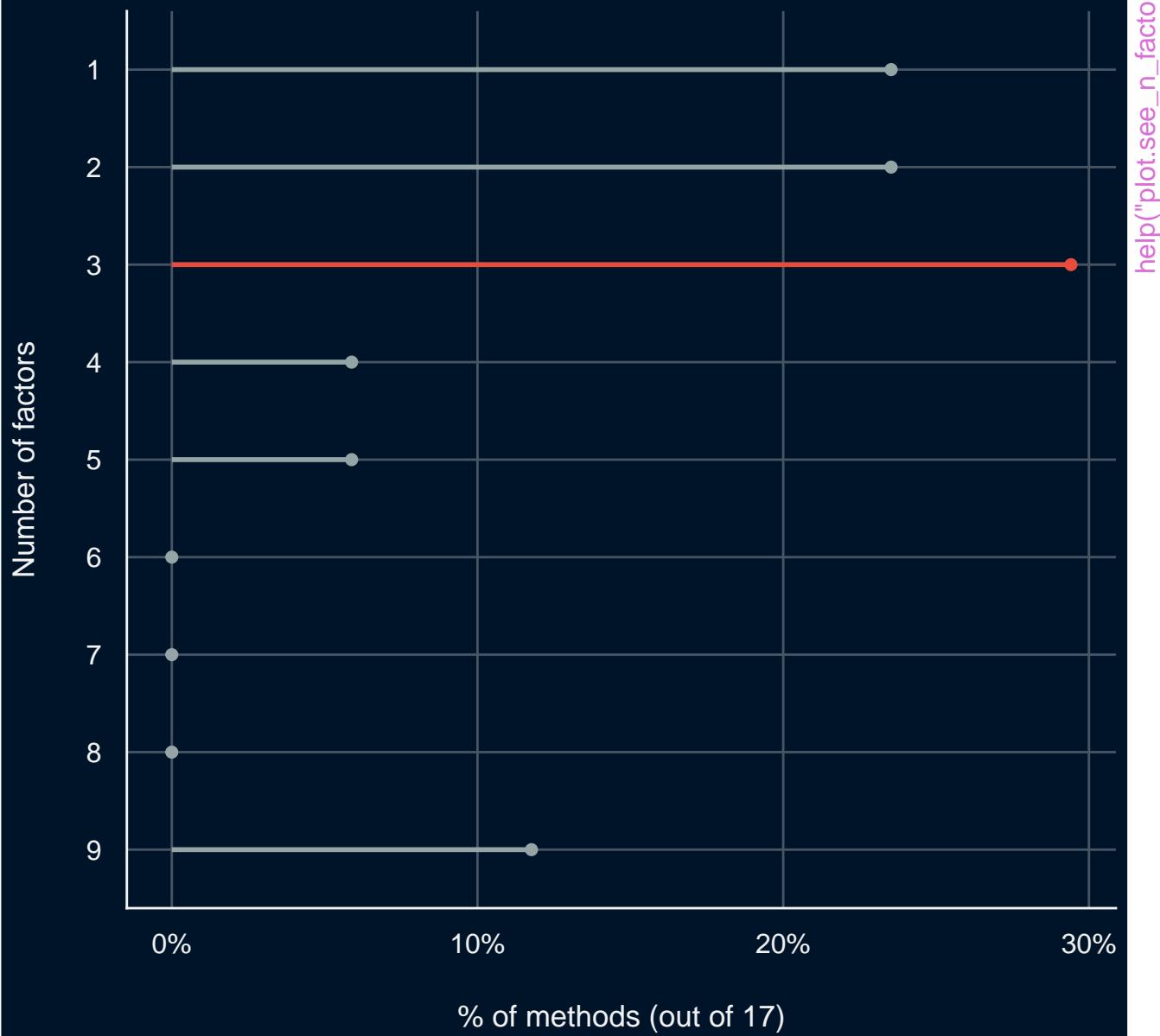
help("plot.see\_equivivalence\_test")

# How many factors to retain



# How many factors to retain

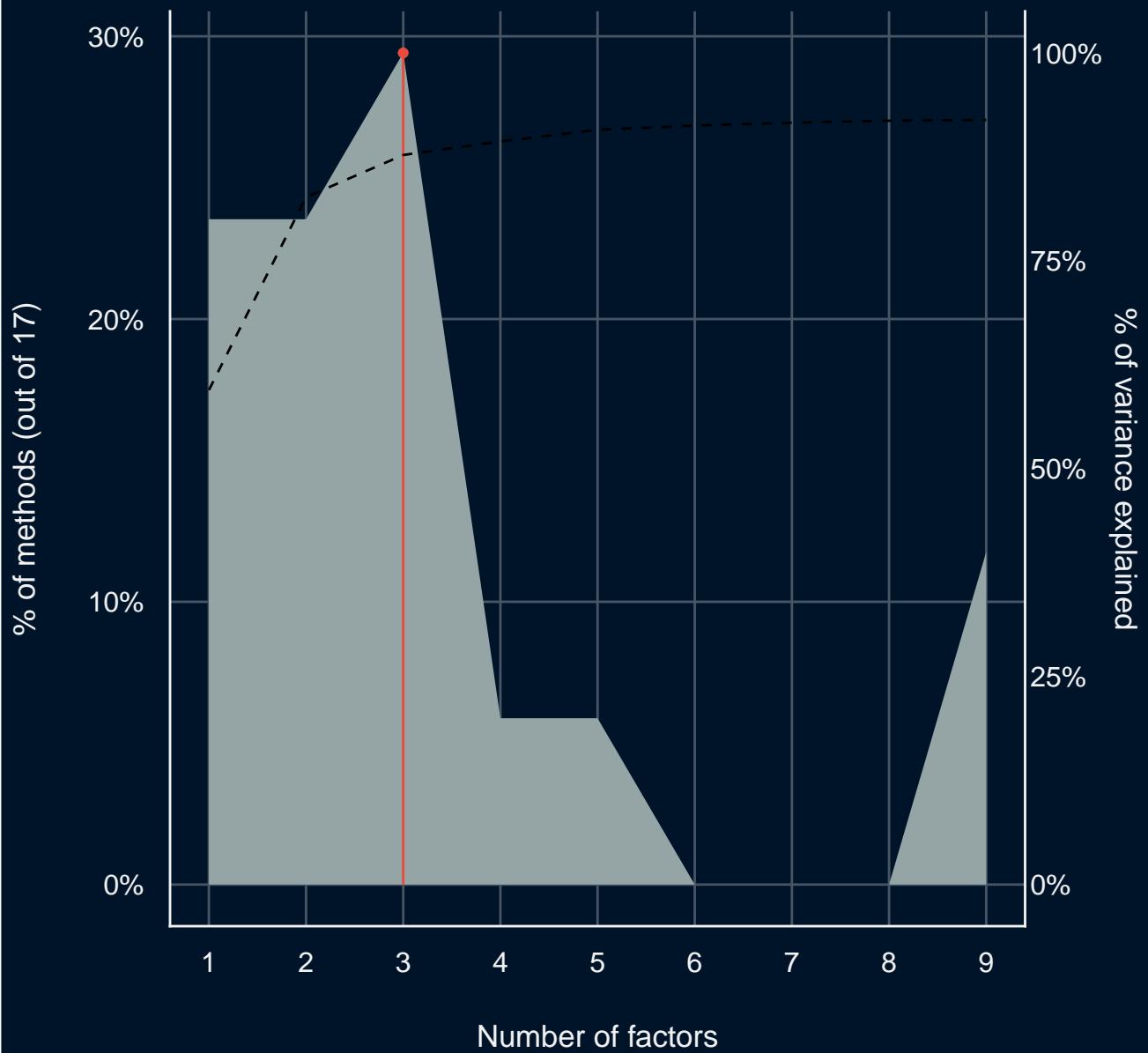
Number of factors considered optimal by various algorithm



help("plot.see\_n\_factors")

# How many factors to retain

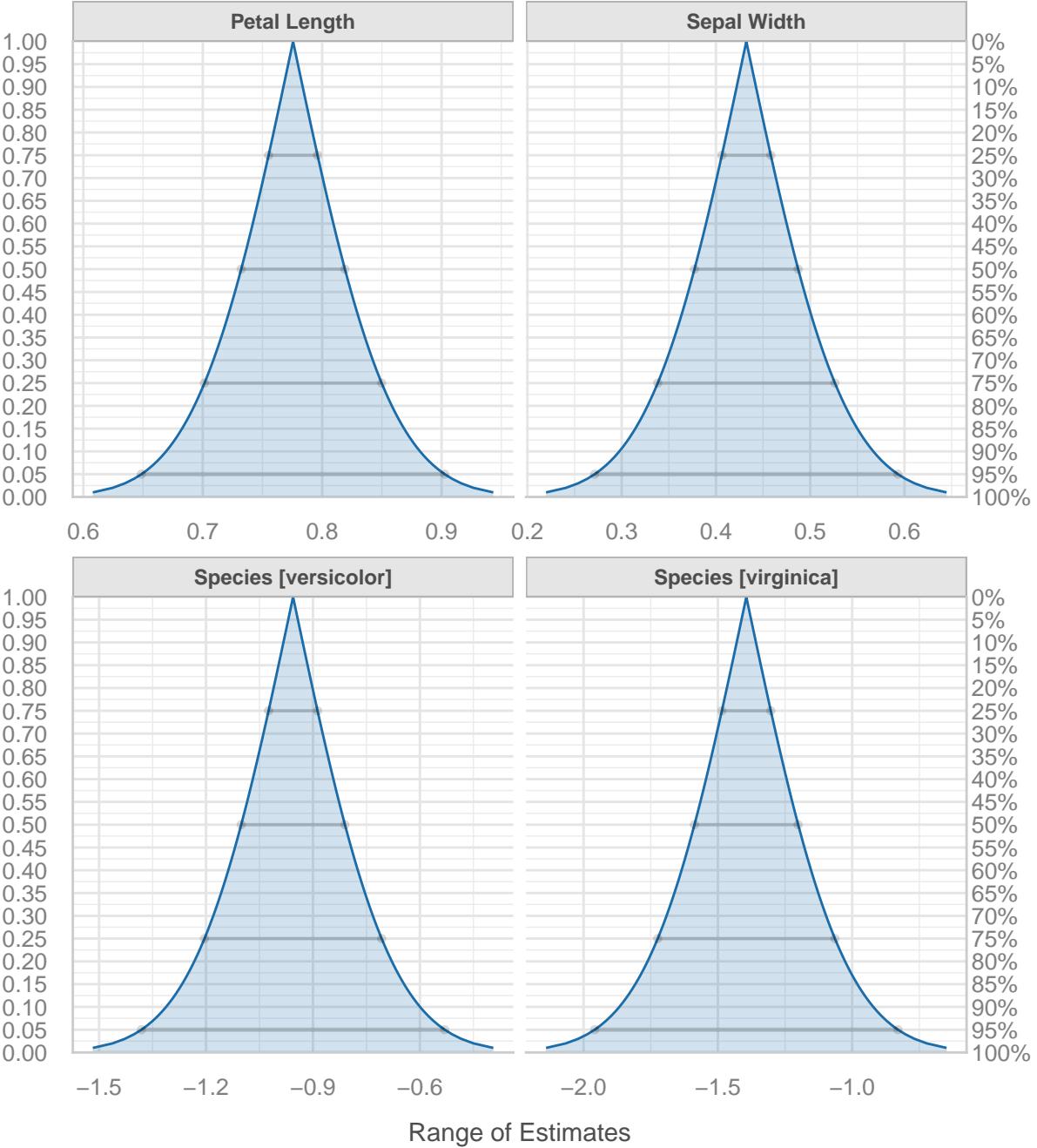
Number of factors considered optimal by various algorithm. The dashed line represent the cumulative variance explained.

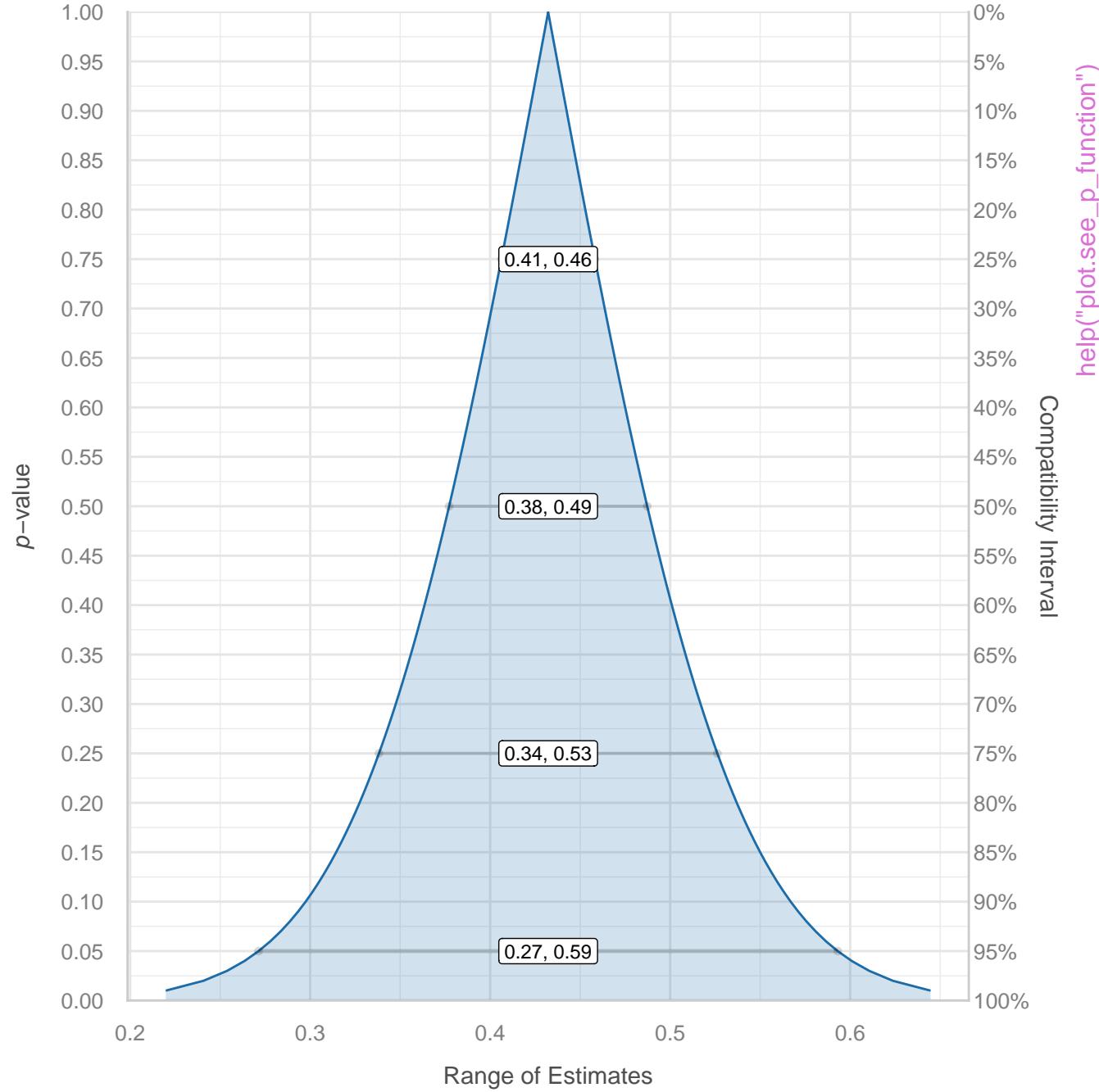


help("plot.see\_n\_factors")

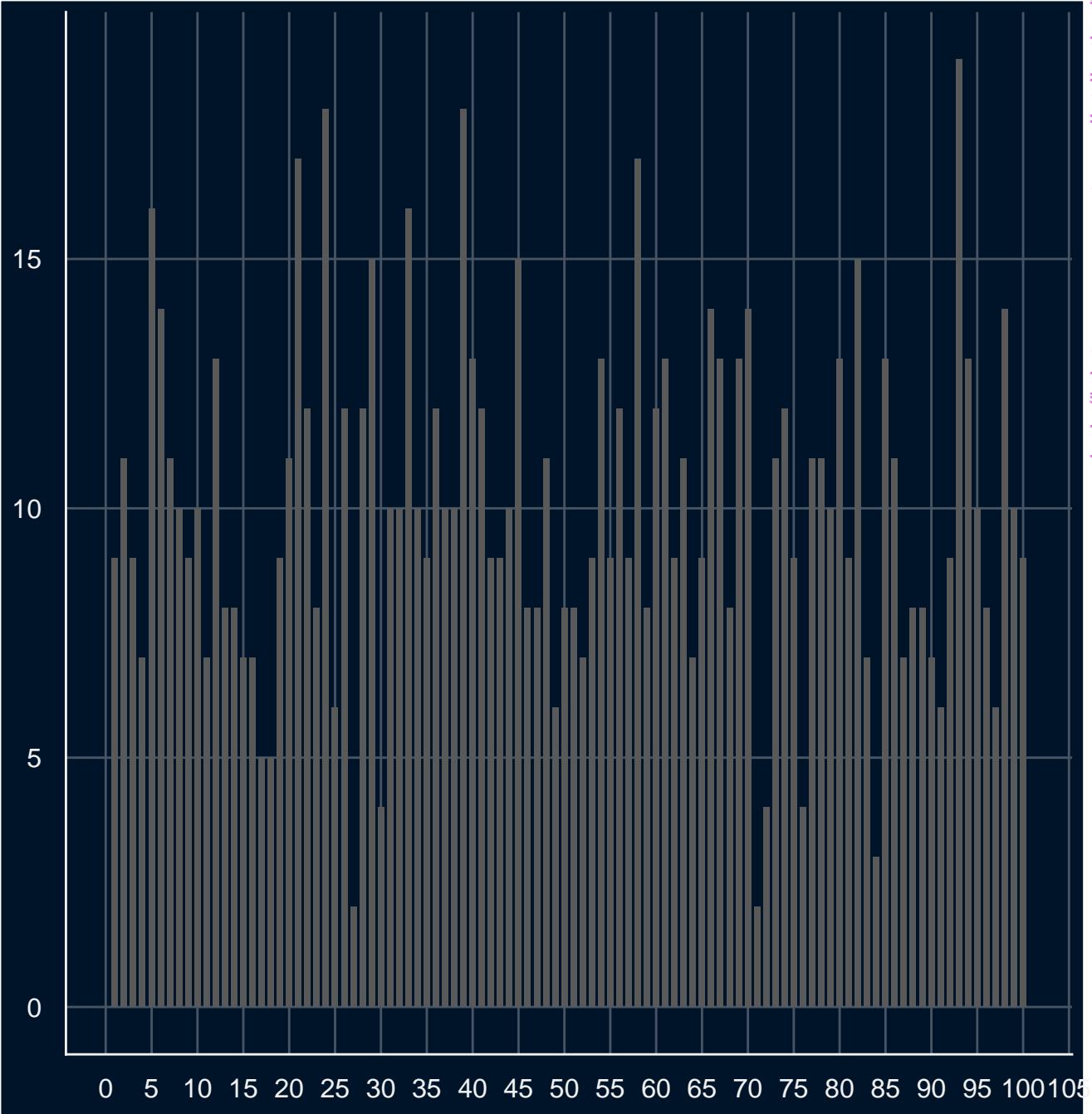
help("plot.see\_p\_function")

p-value

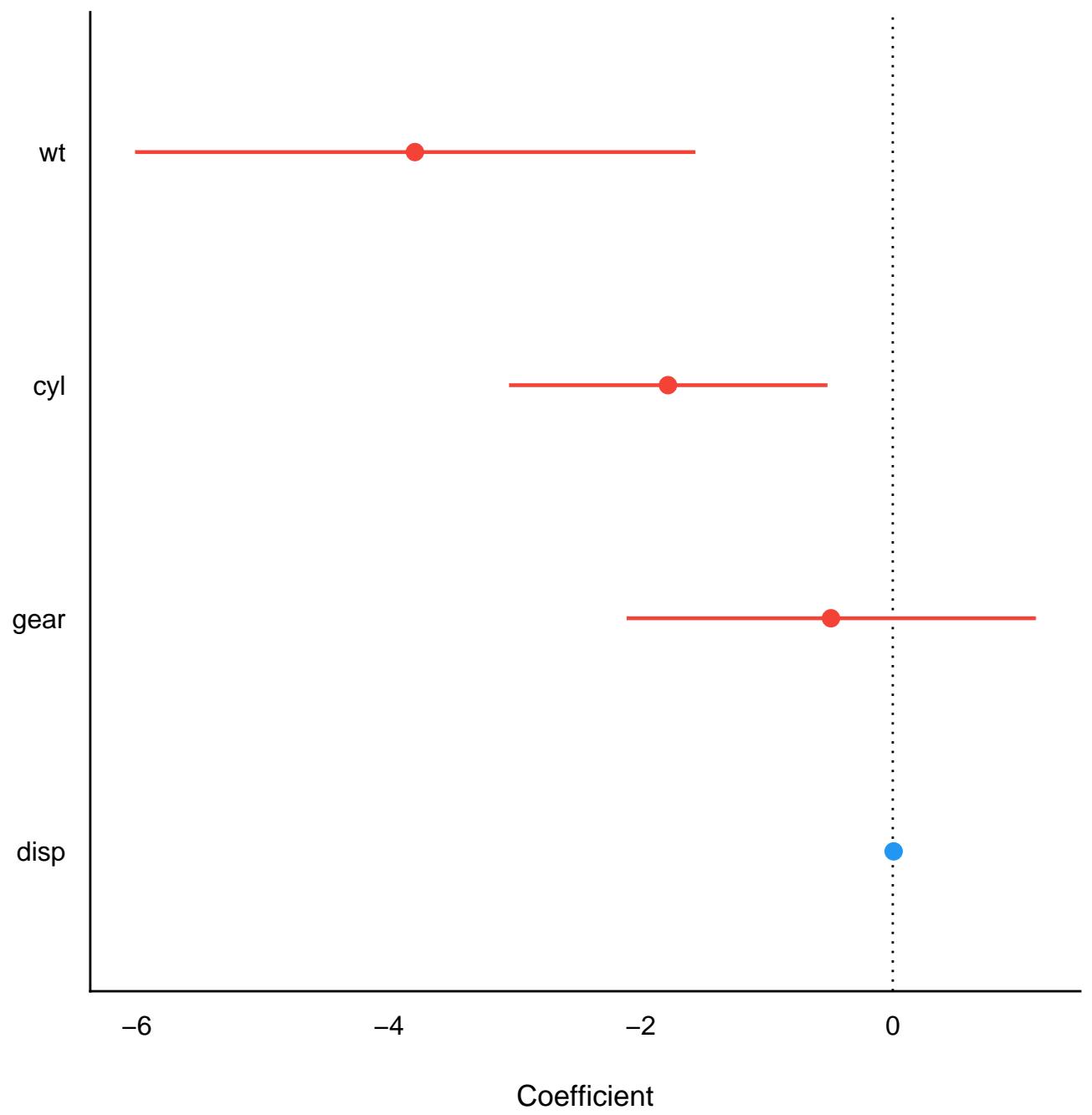




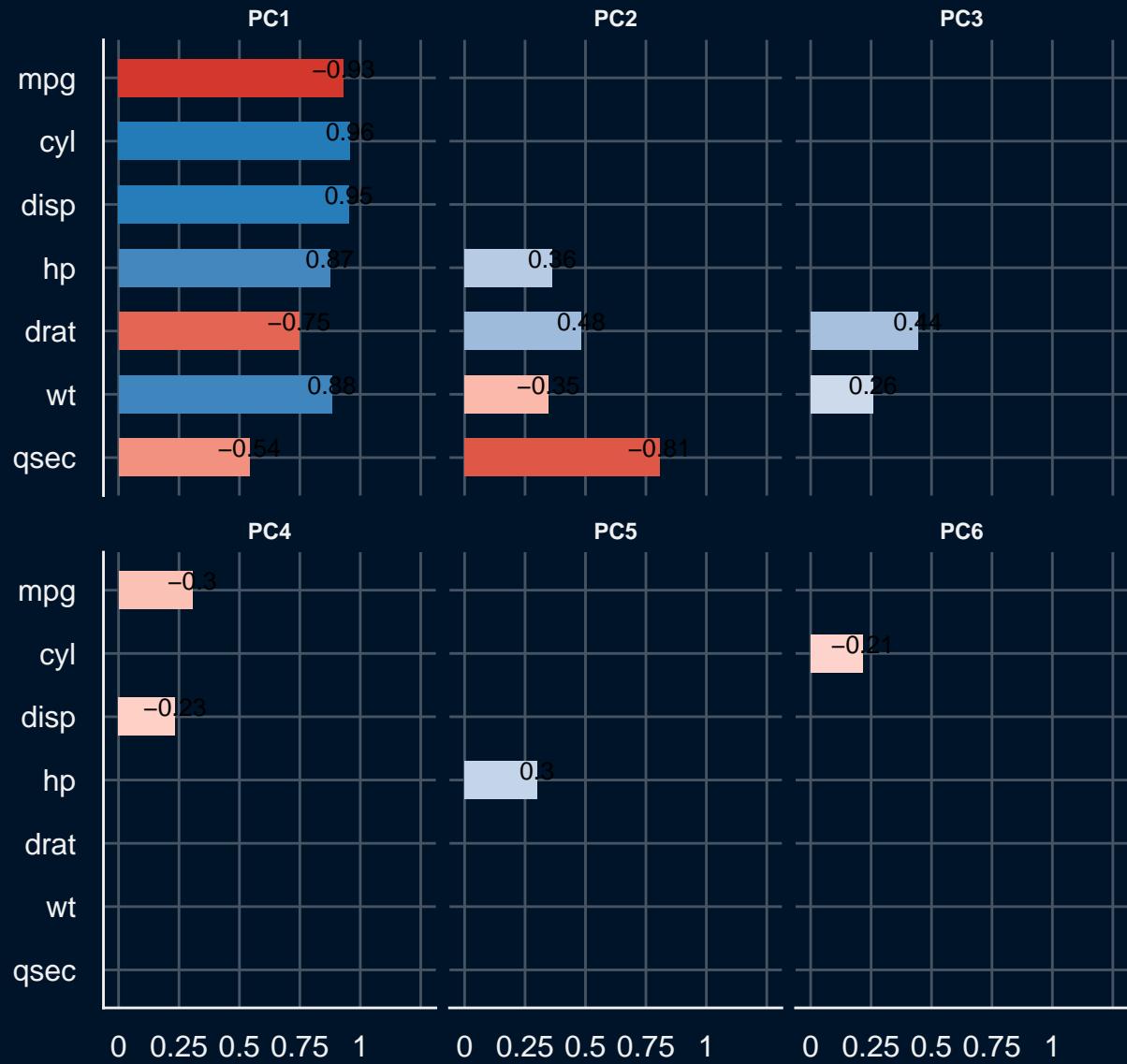
```
help("plot.see_parameters_distribution")
```



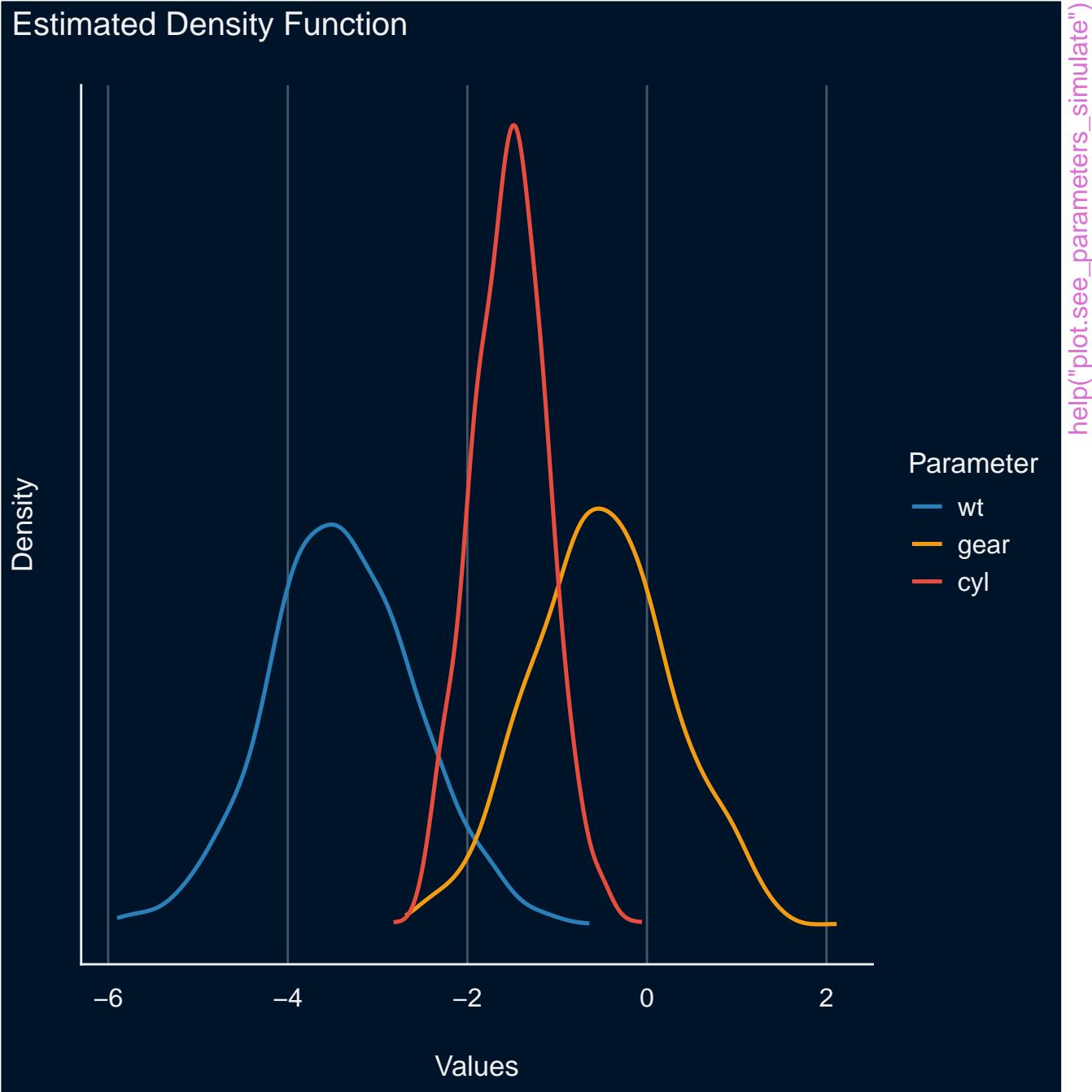
```
help("plot.see_parameters_model")
```



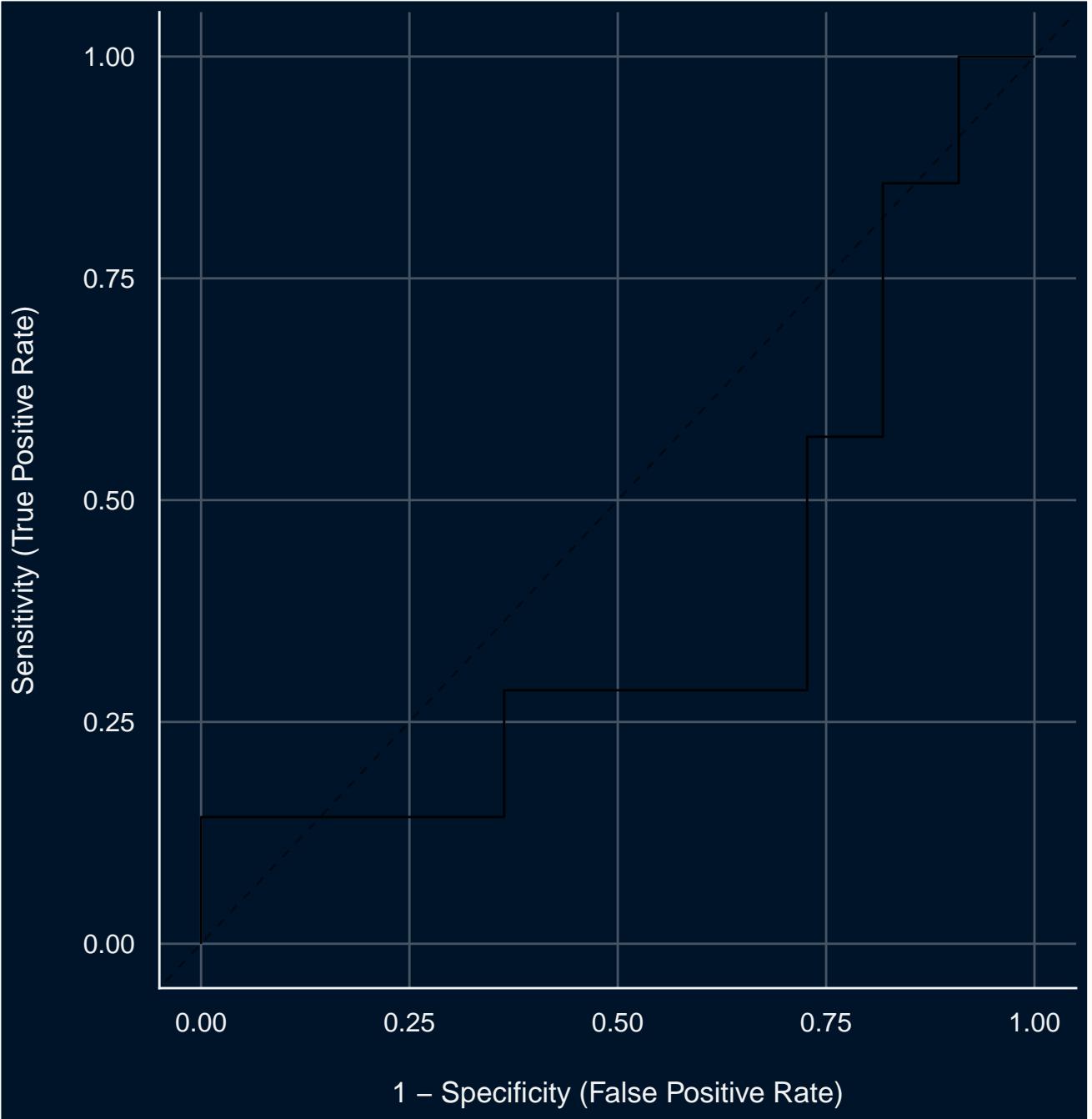
# Loadings from Principal Component Analysis (no rotation)



help("plot.see\_parameters\_pca")



```
help("plot.see_performance_roc")
```



# Distribution of Quantile Residuals

Dots should fall along the line

Sample Quantiles

1.00

0.75

0.50

0.25

0.00

0.00

0.25

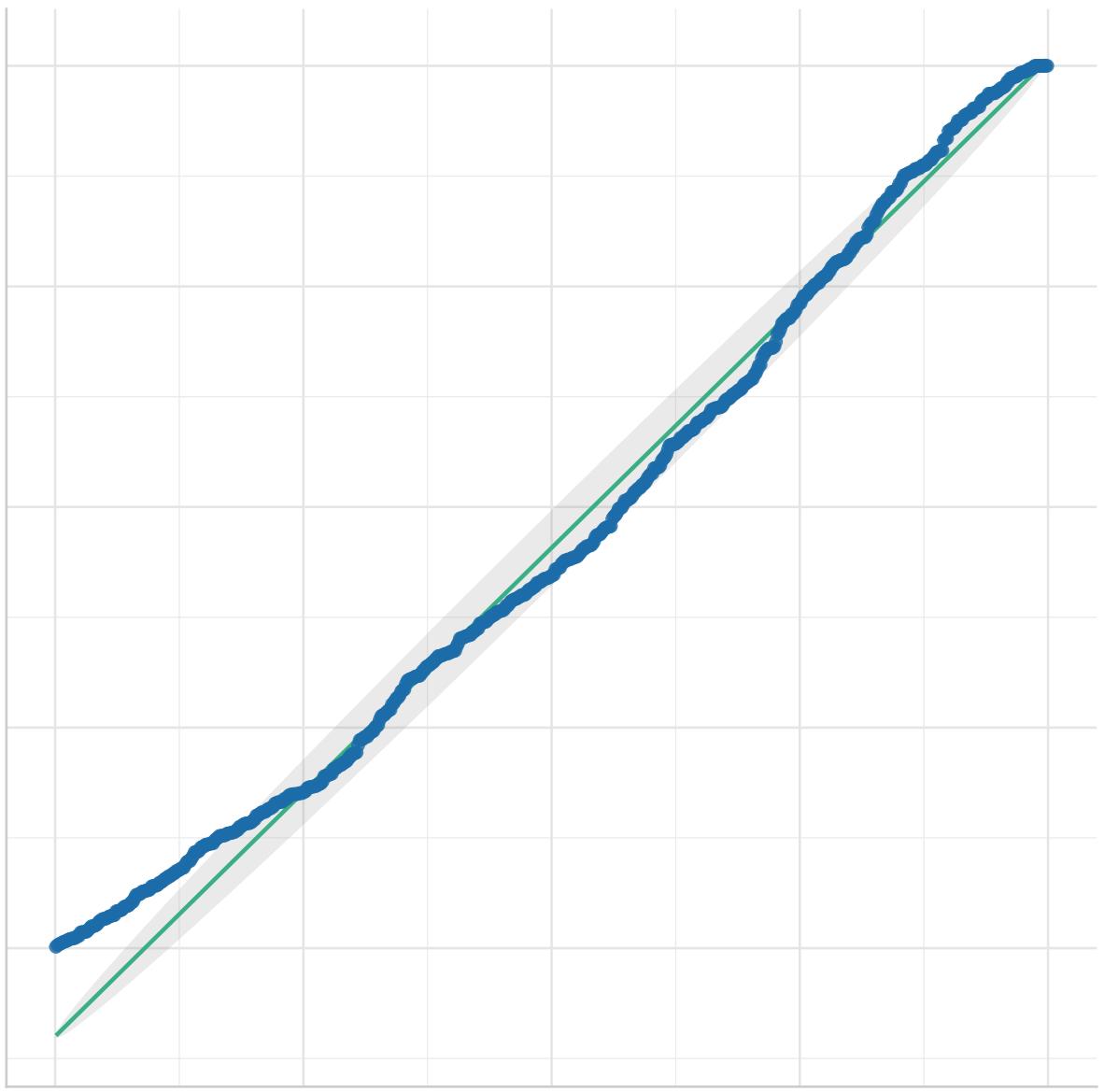
0.50

0.75

1.00

Standard Uniform Distribution Quantiles

help("plot.see\_performance\_simres")



# Distribution of Quantile Residuals

Dots should fall along the line

Sample Quantiles

1.00

0.75

0.50

0.25

0.00

0.00

0.25

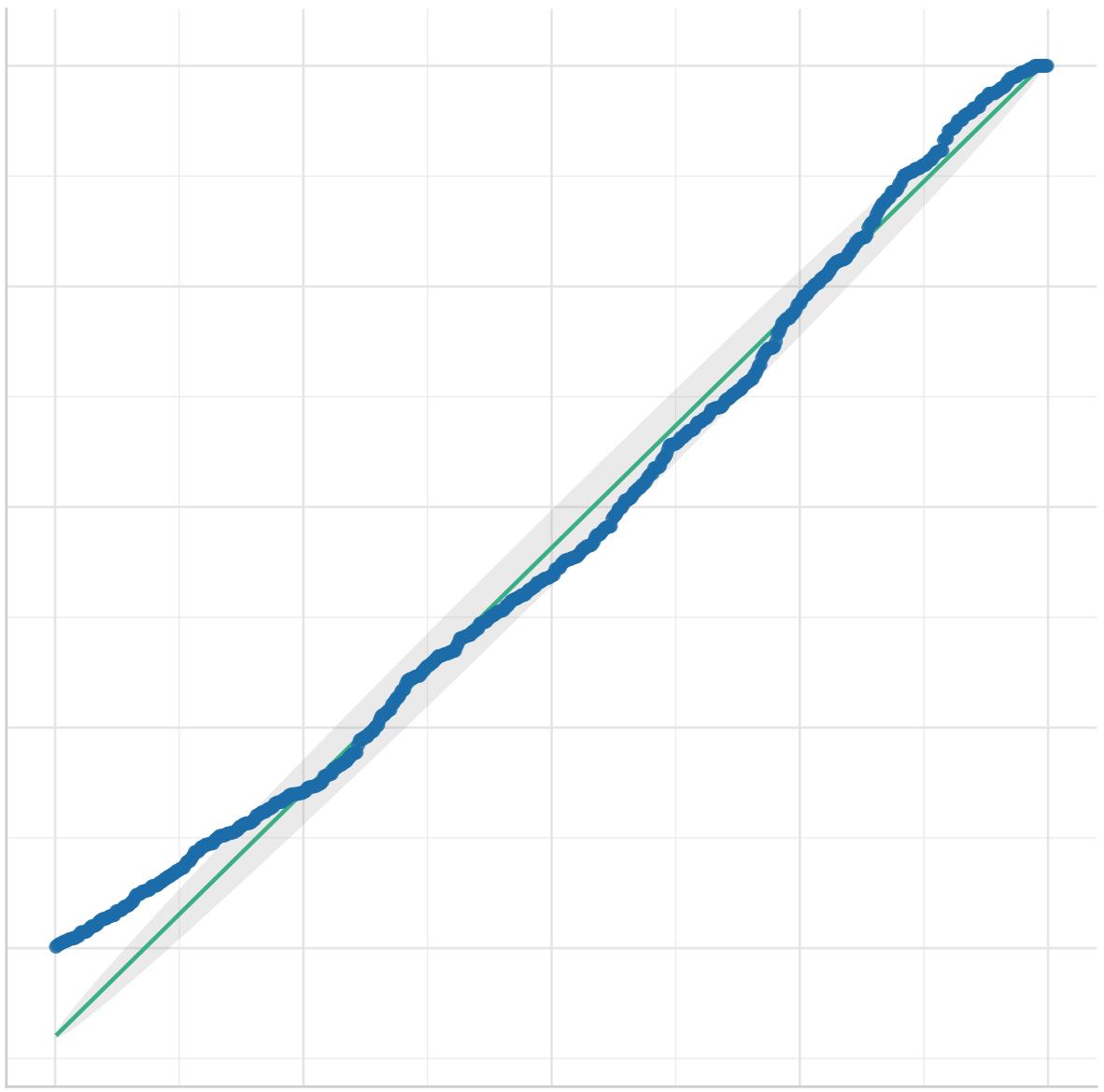
0.50

0.75

1.00

Standard Uniform Distribution Quantiles

help("plot.see\_performance\_simres")



help("plots")

mpg

35

30

25

20

15

10

100 200 300 400

disp

density

0.06

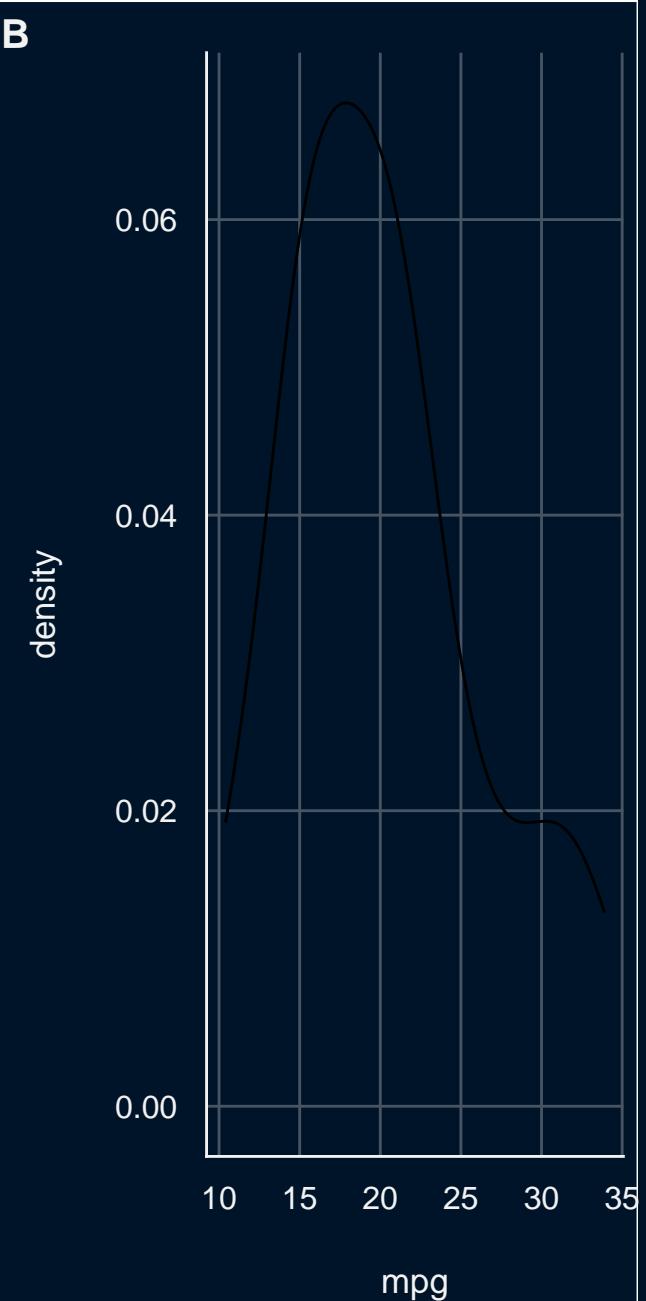
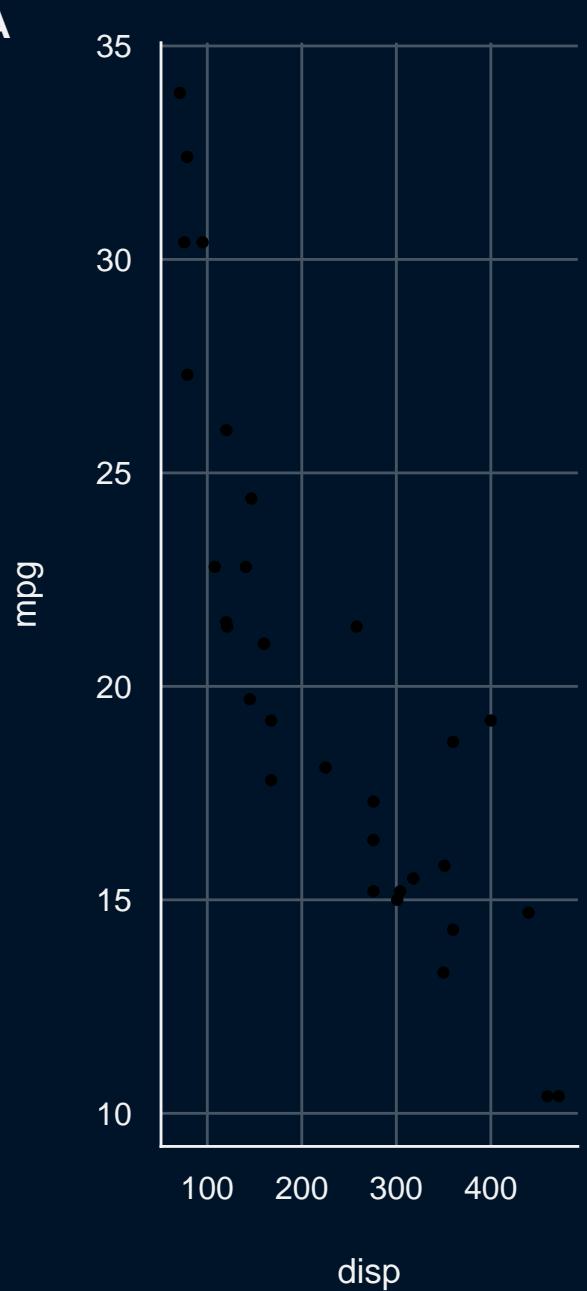
0.04

0.02

0.00

10 15 20 25 30 35

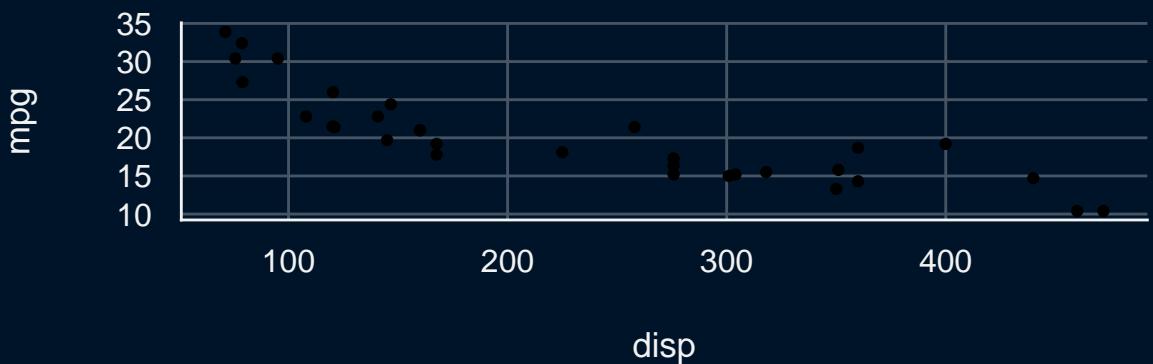
mpg



```
help("plots")
```

# The surprising truth about mtcars

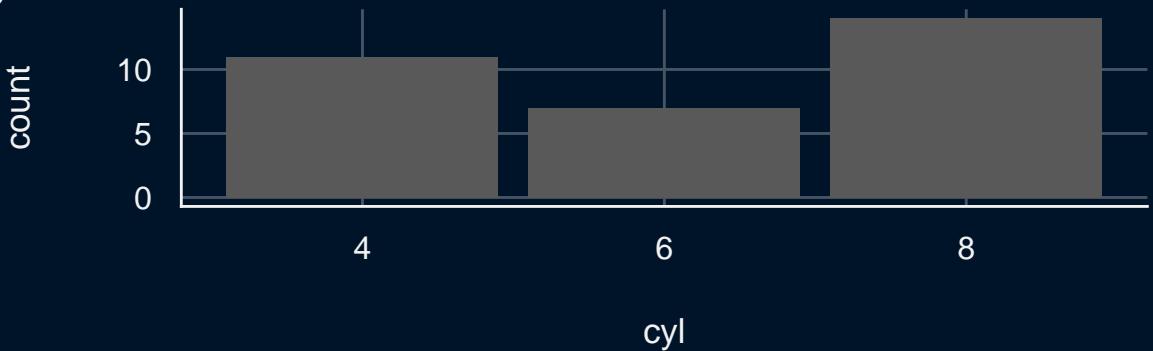
**Fig. 1**



**Fig. 2**



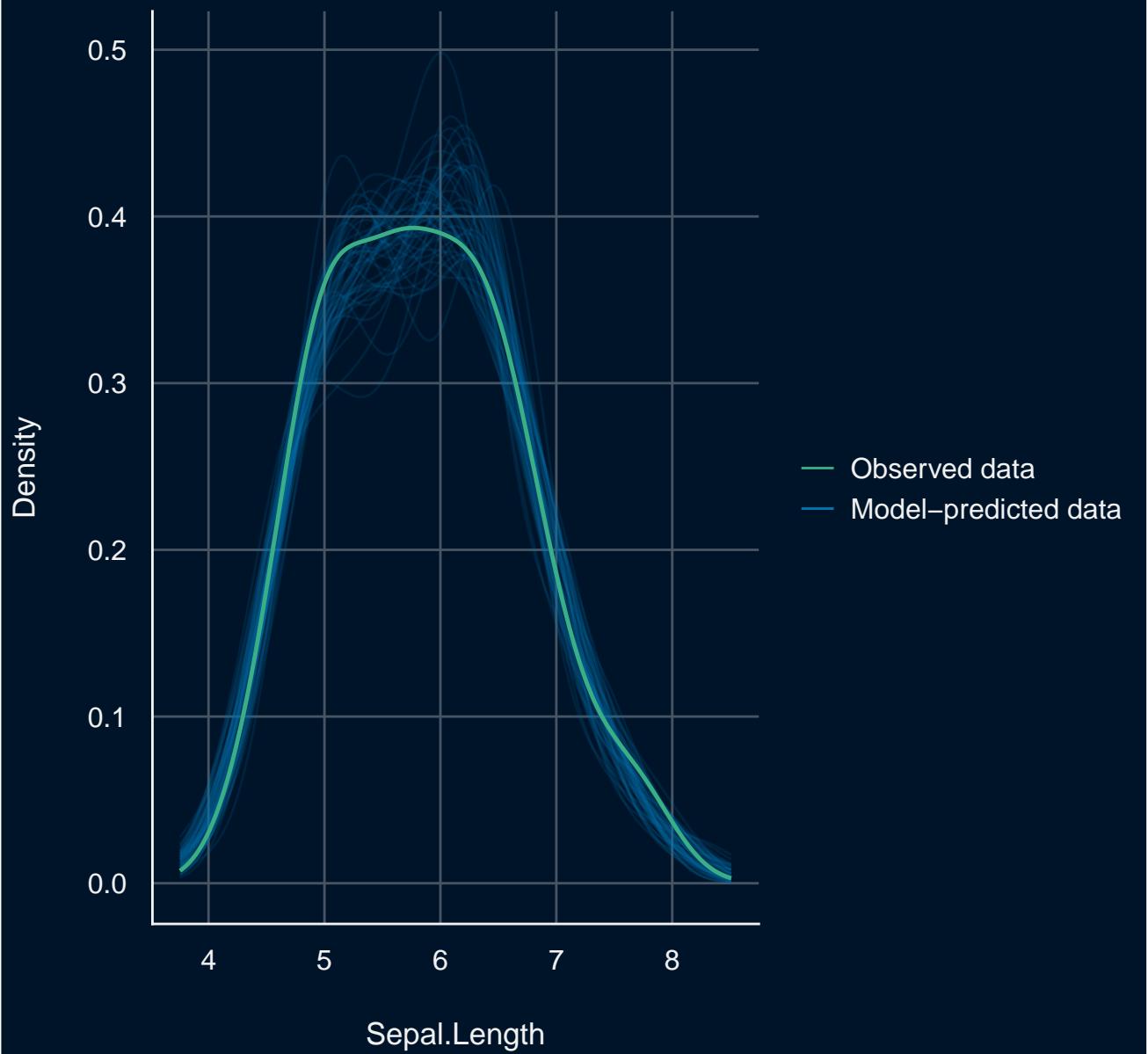
**Fig. 3**



help("plots")

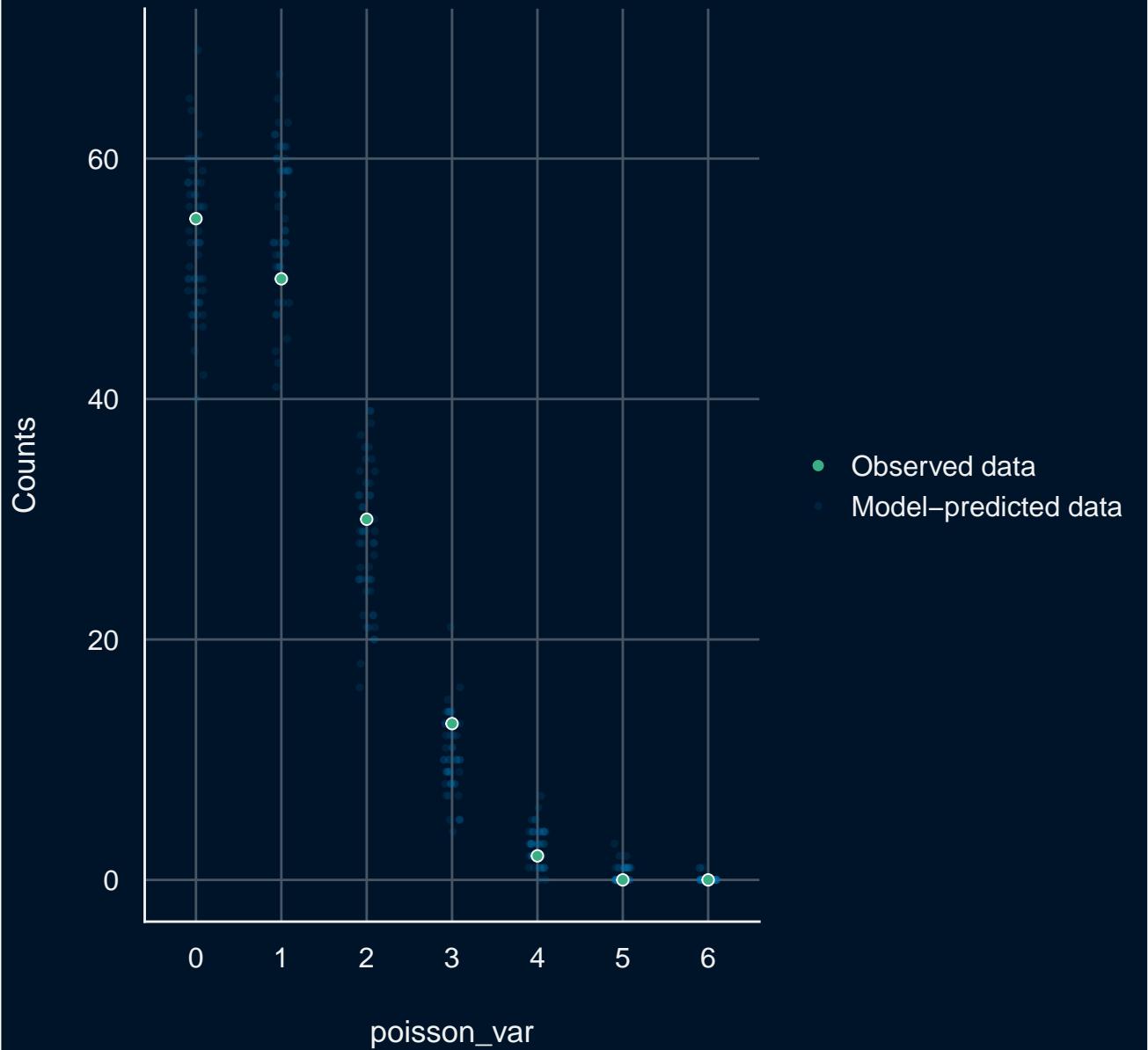
# Posterior Predictive Check

Model-predicted lines should resemble observed data line



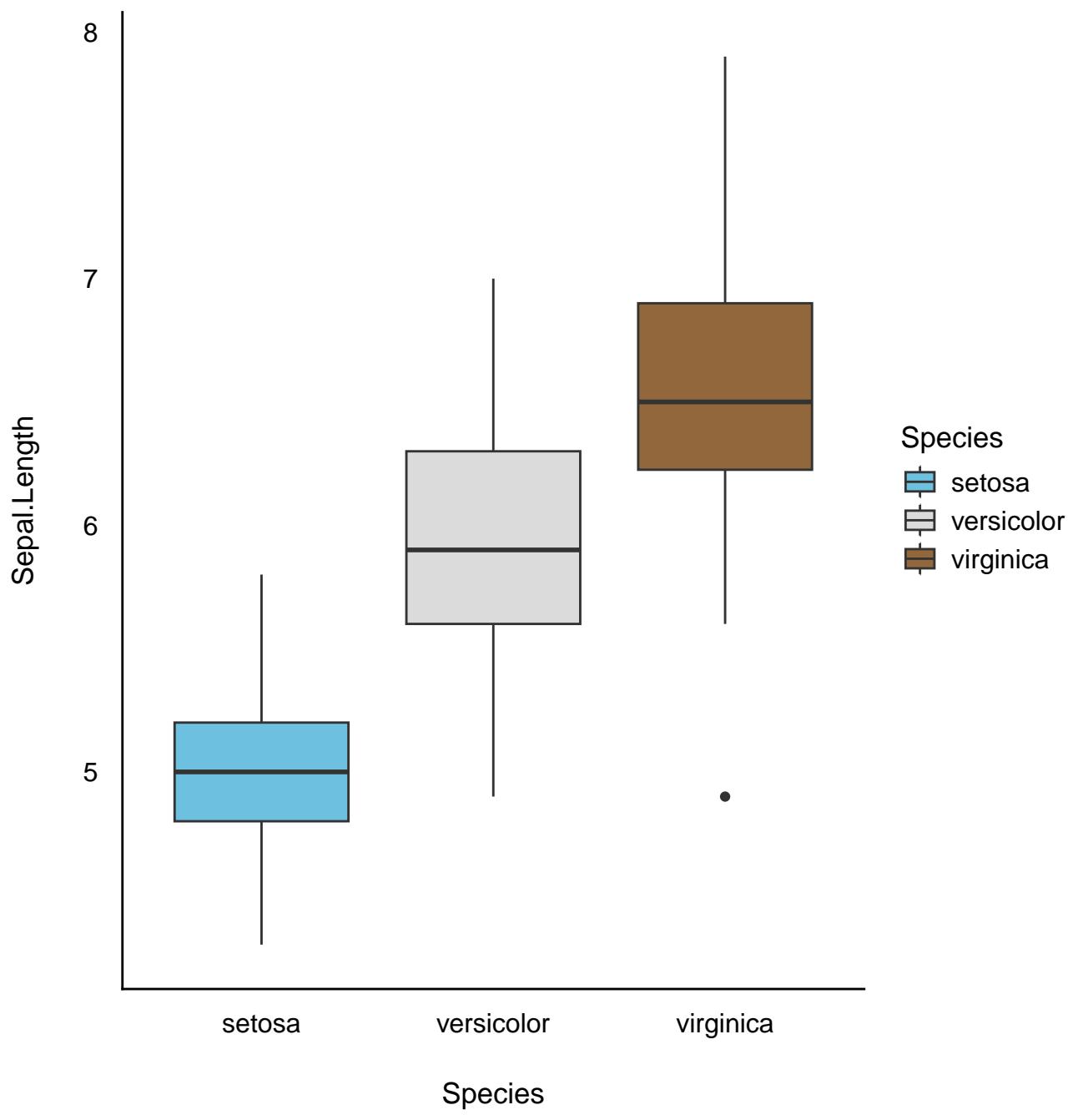
# Posterior Predictive Check

Model-predicted points should be close to observed data points



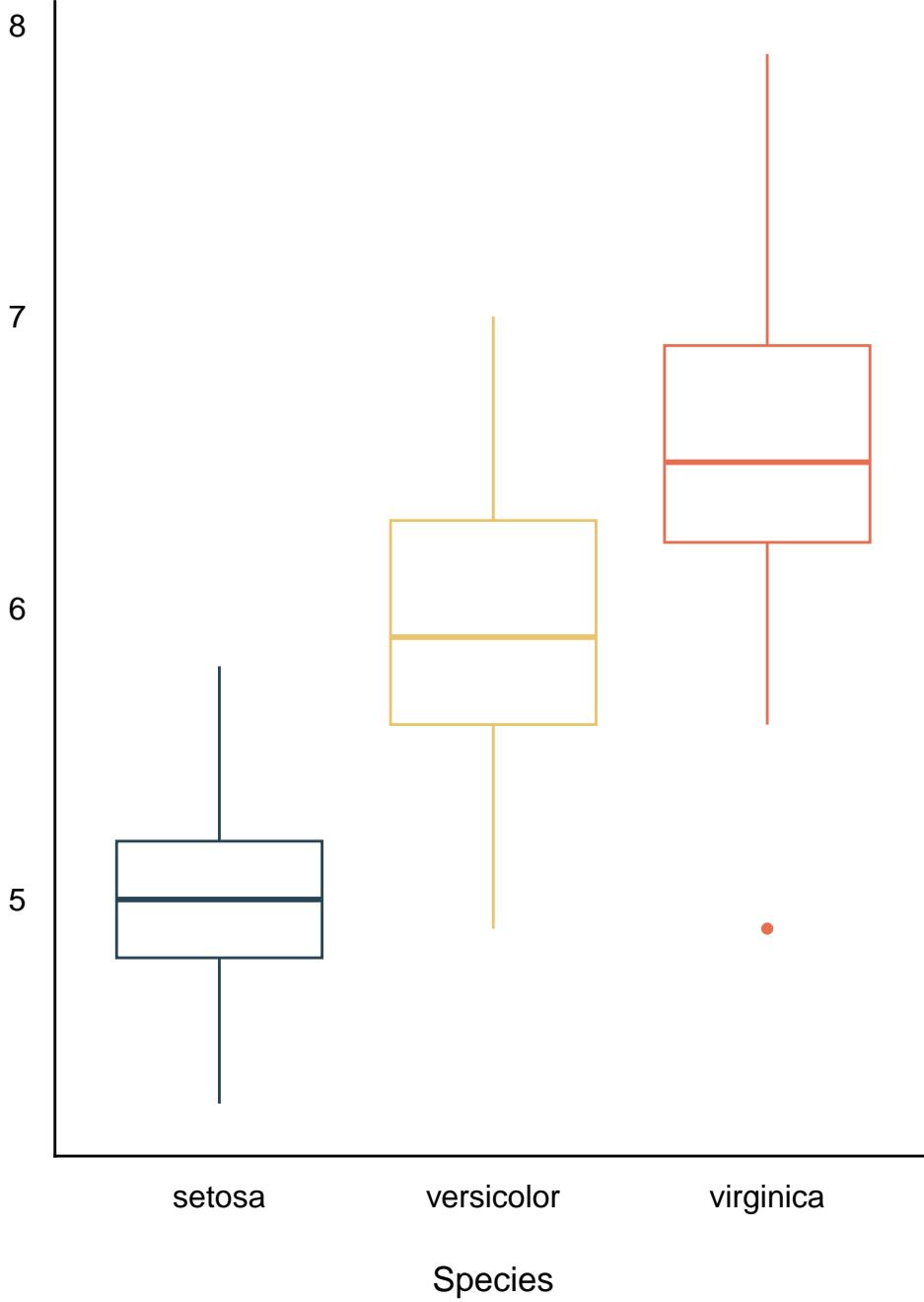
help("print.see\_performance\_pp\_check")

help("scale\_color\_bluebrown")

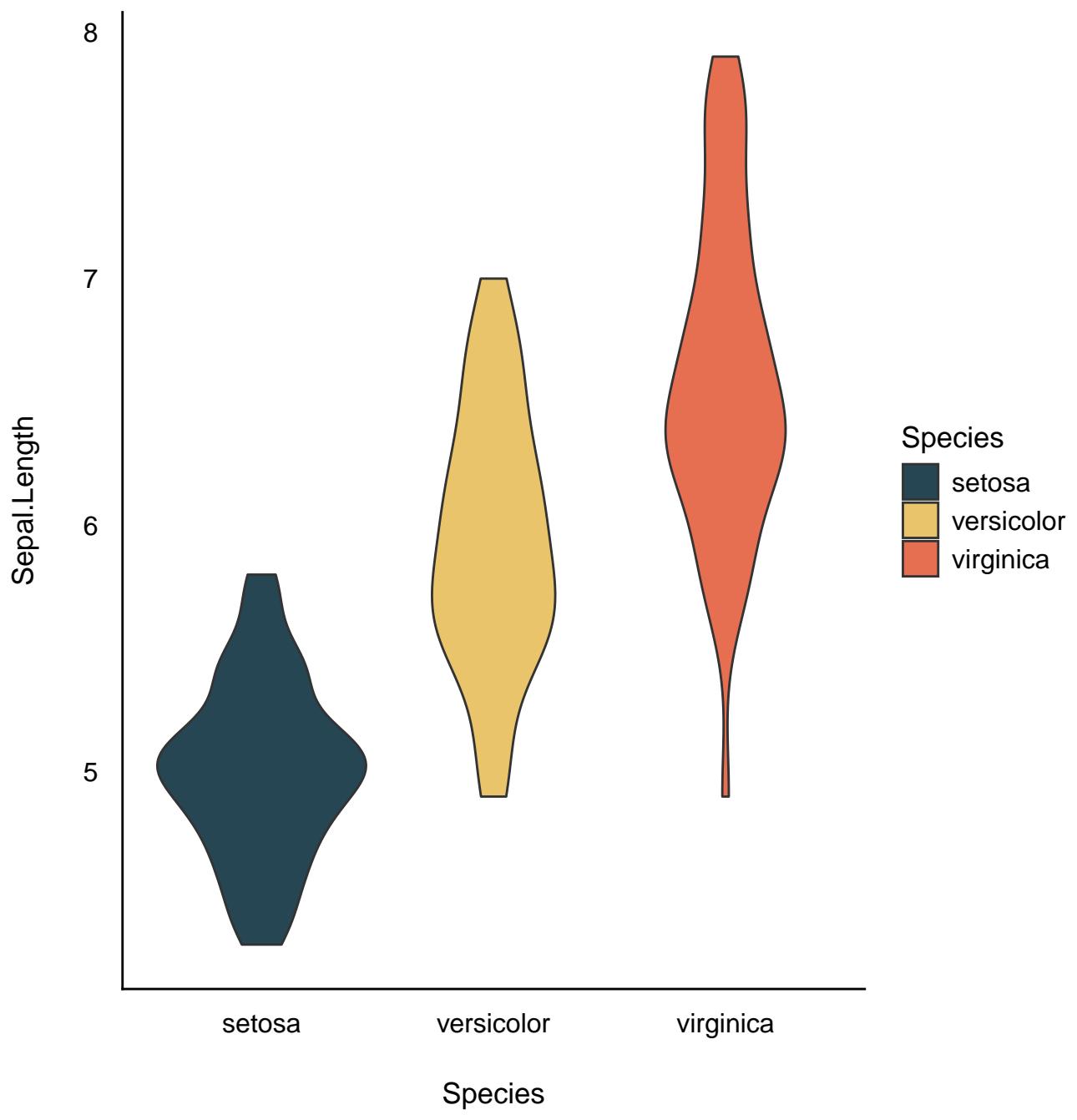


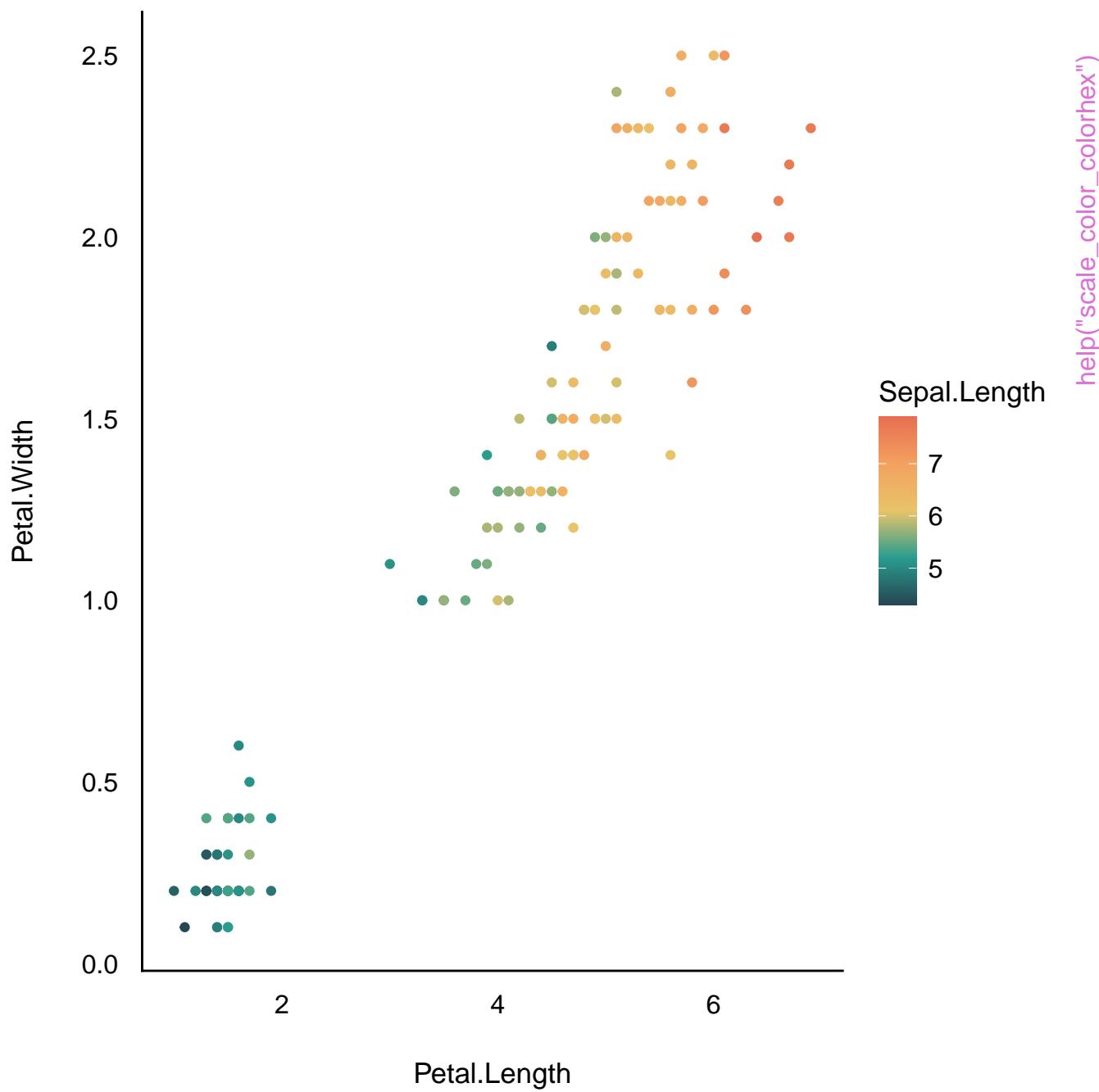
help("scale\_color\_hex")

Sepal.Length



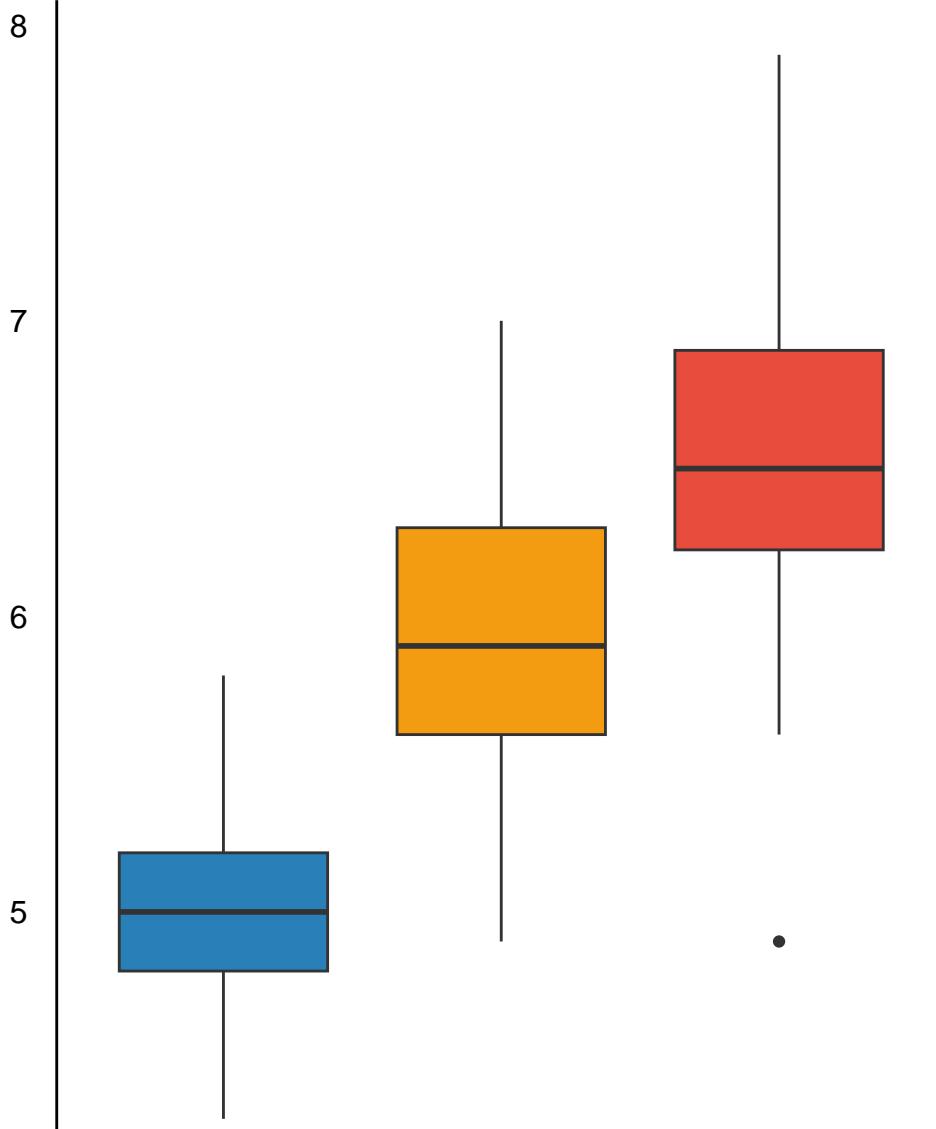
help("scale\_color\_hex")





```
help("scale_color_flat")
```

Sepal.Length

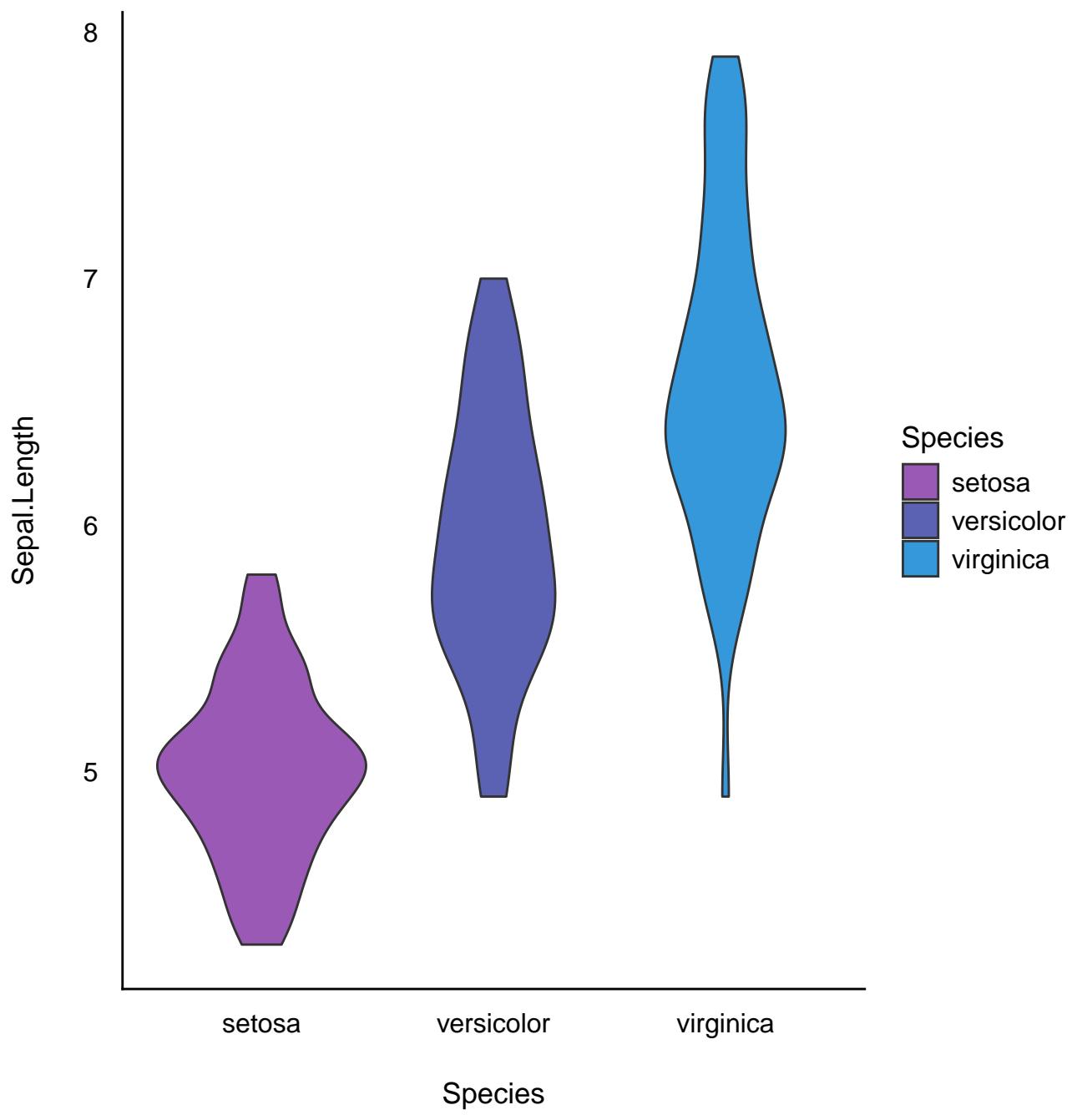


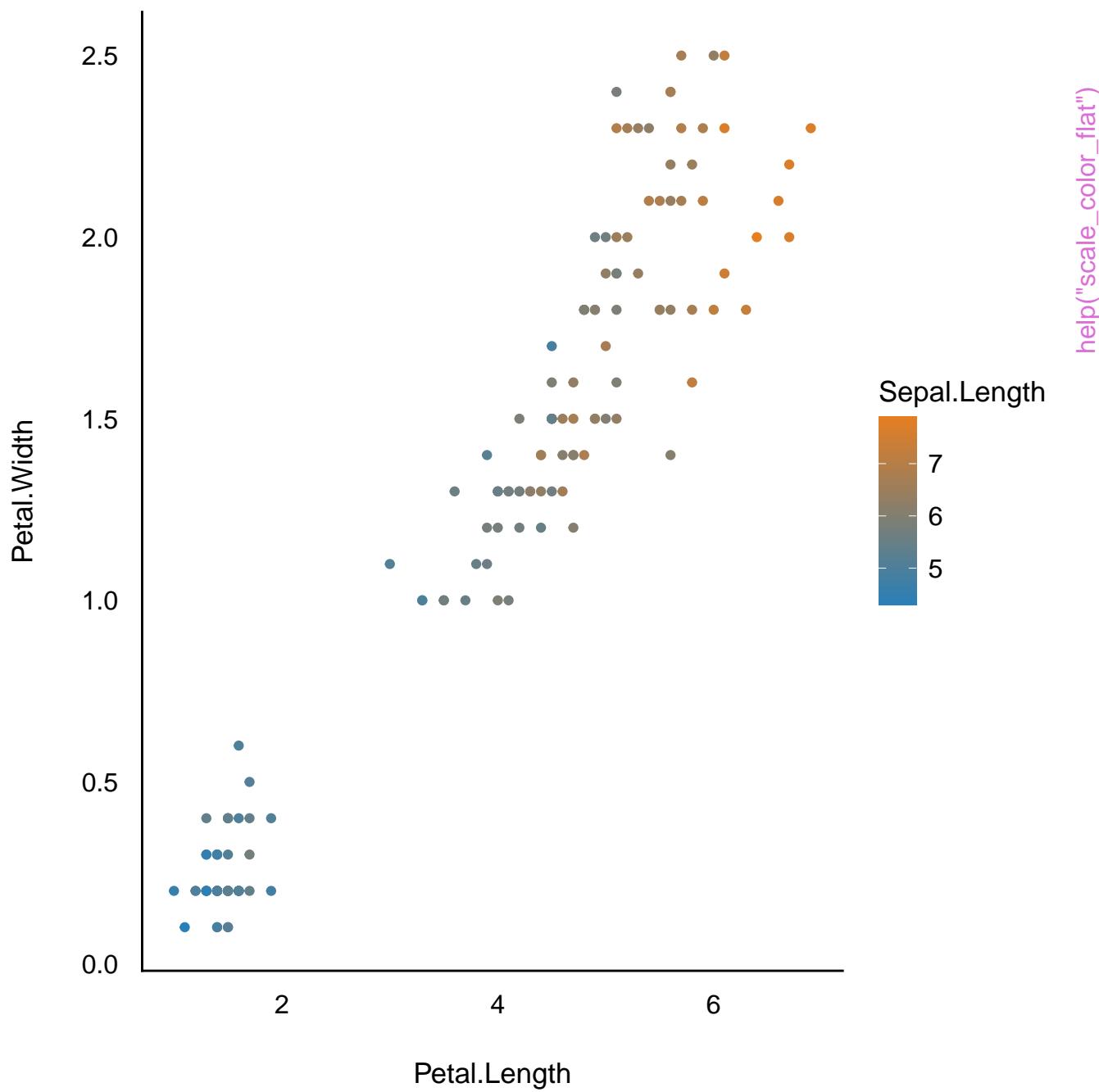
Species

Species

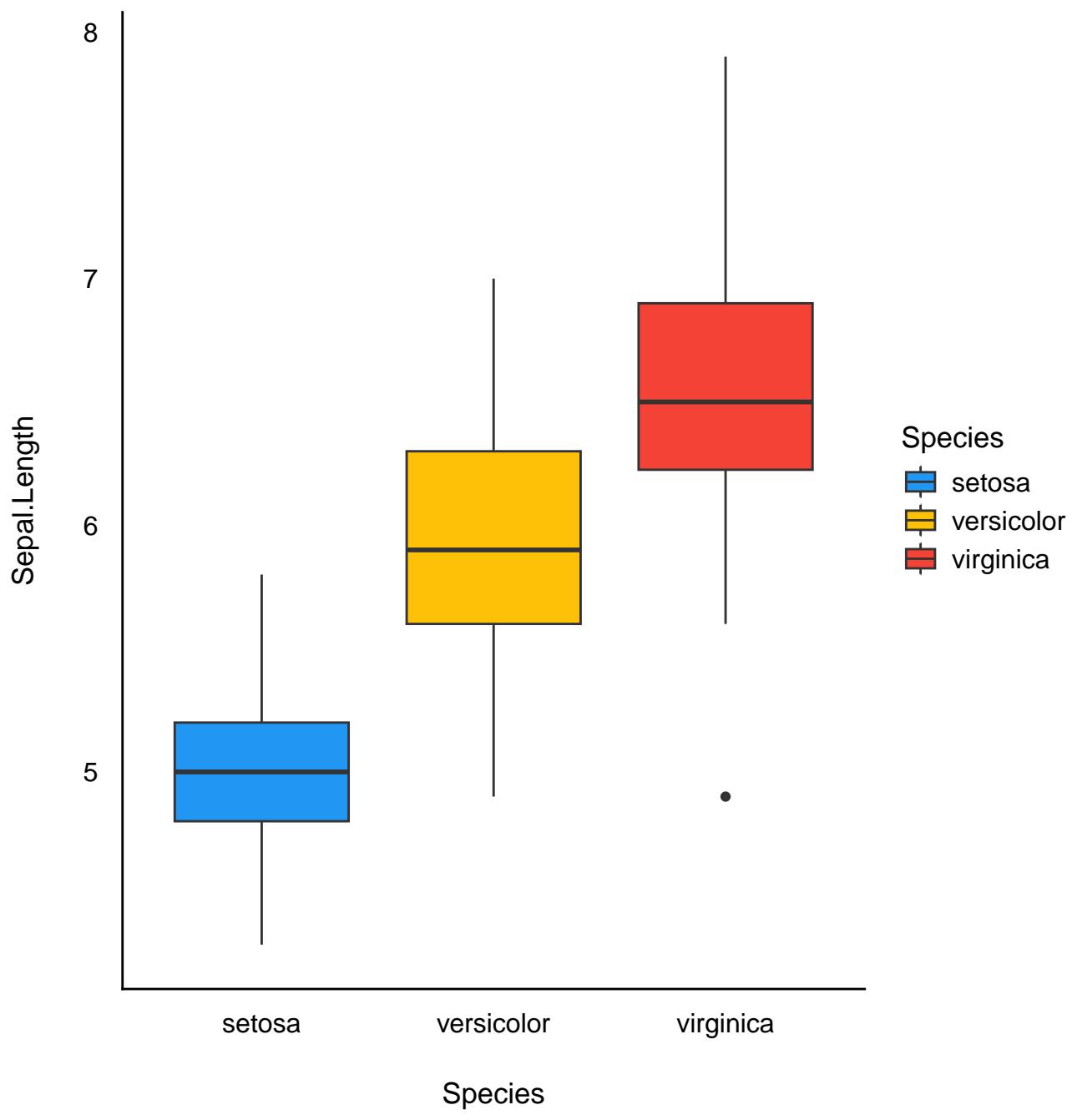
- setosa
- versicolor
- virginica

```
help("scale_color_flat")
```

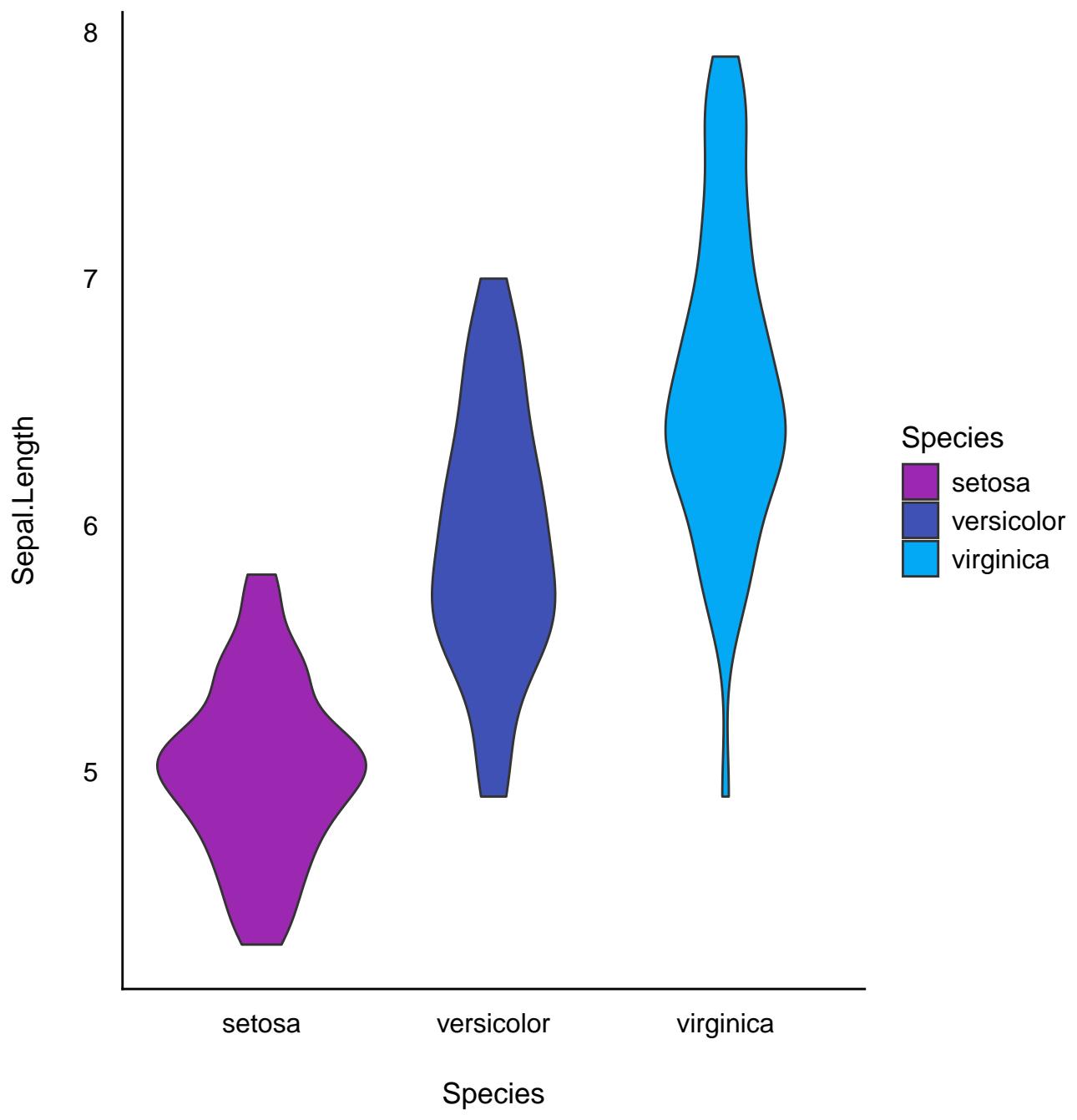


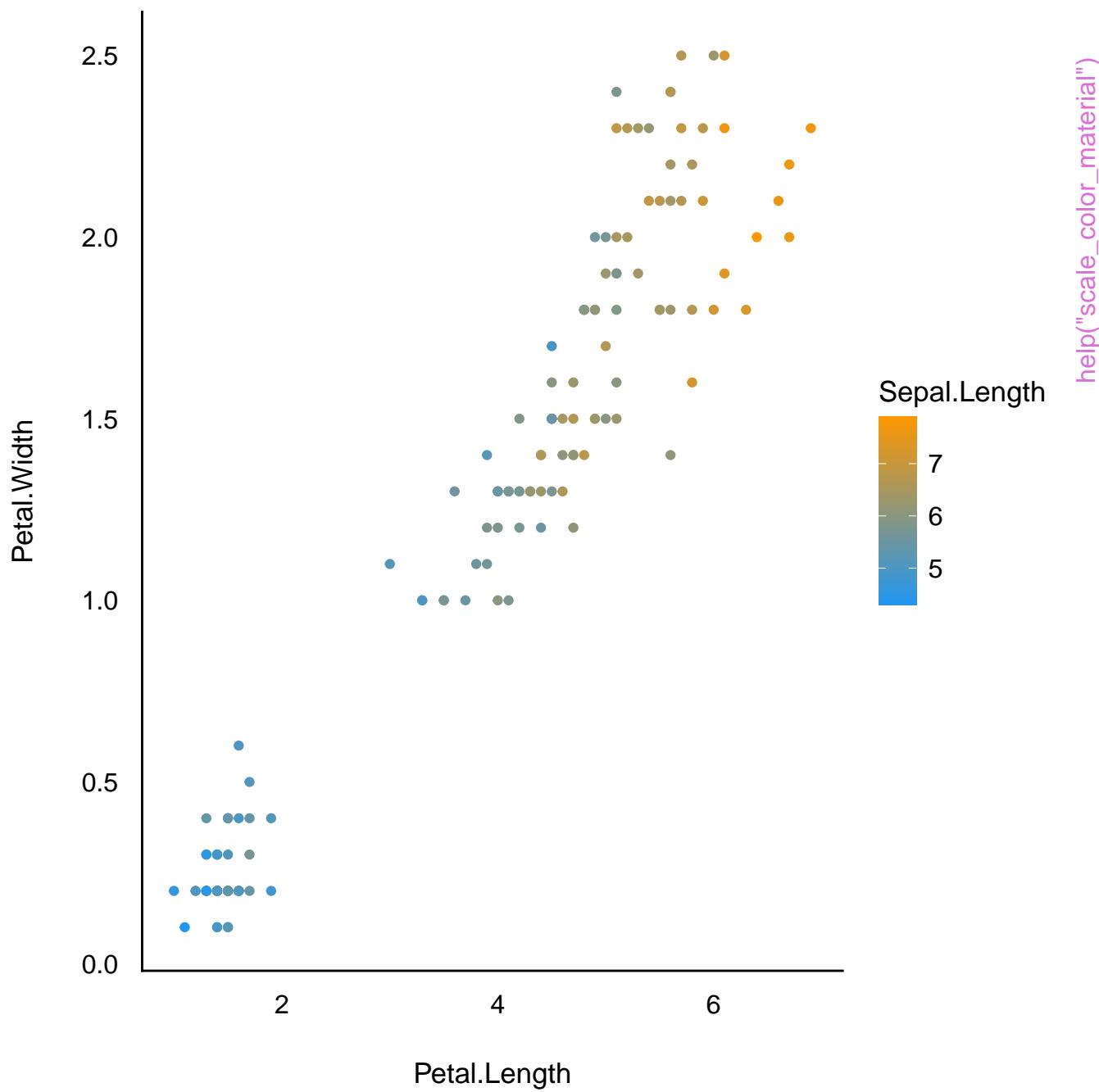


help("scale\_color\_material")



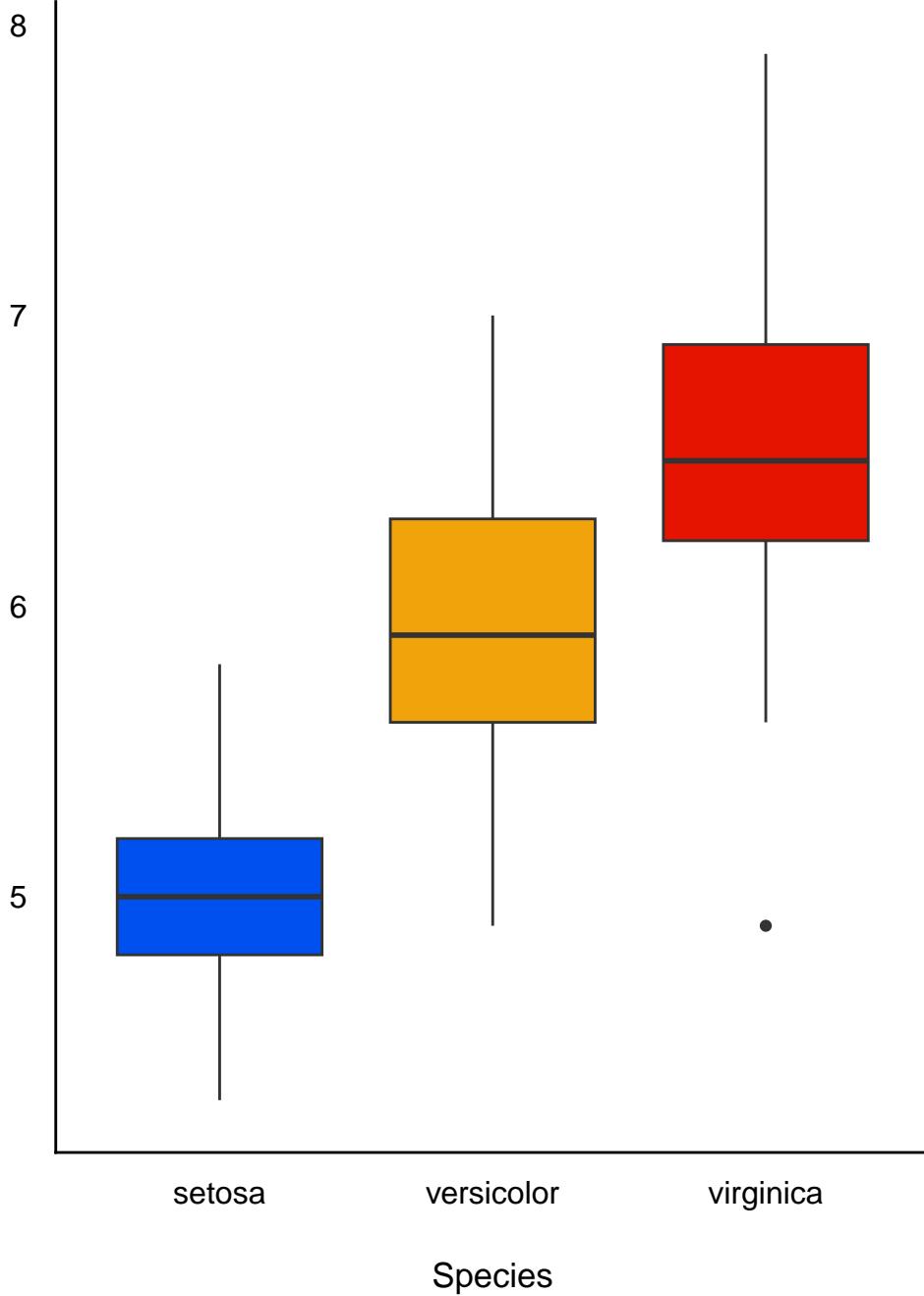
```
help("scale_color_material")
```





help("scale\_color\_metro")

Sepal.Length

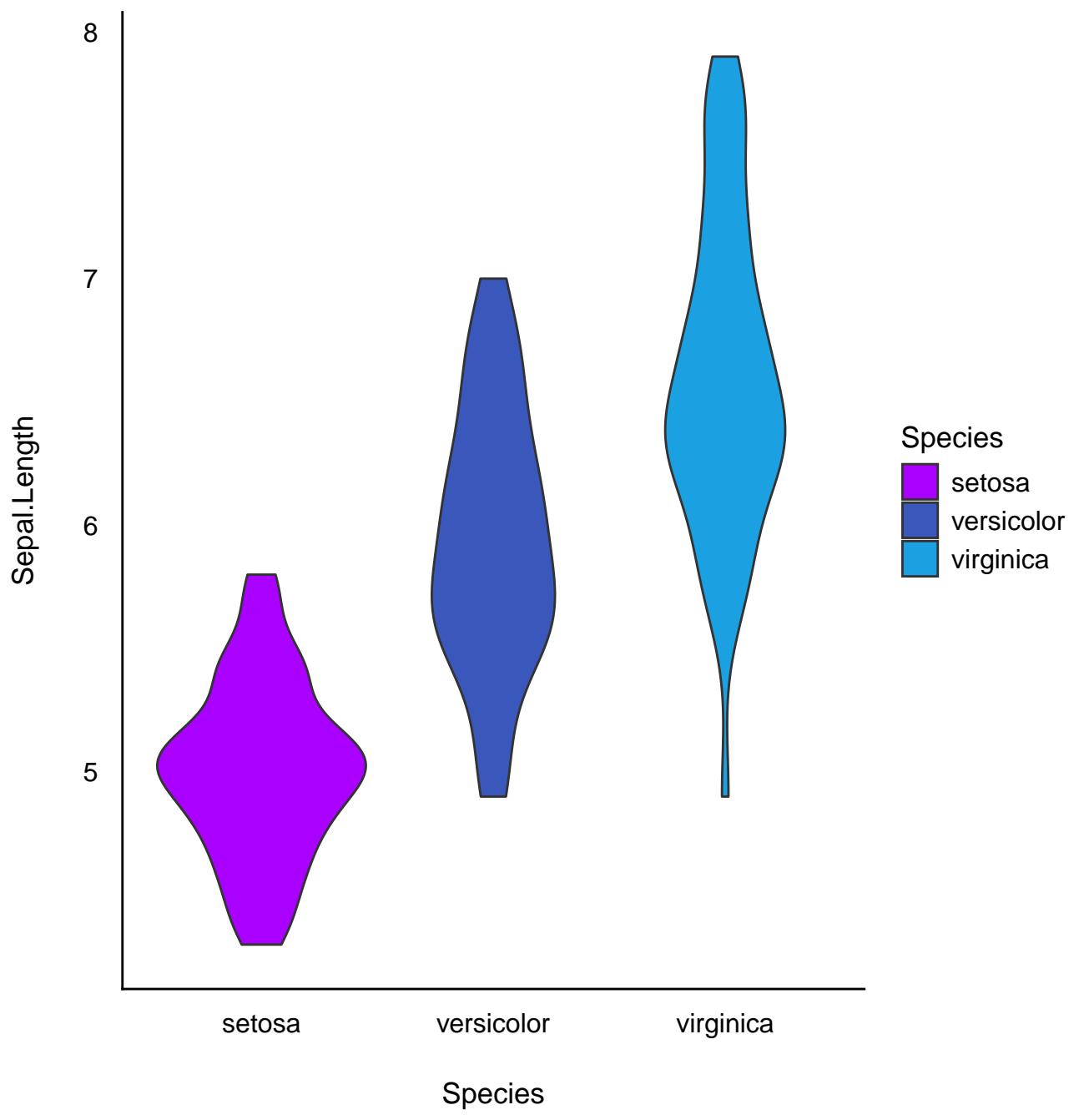


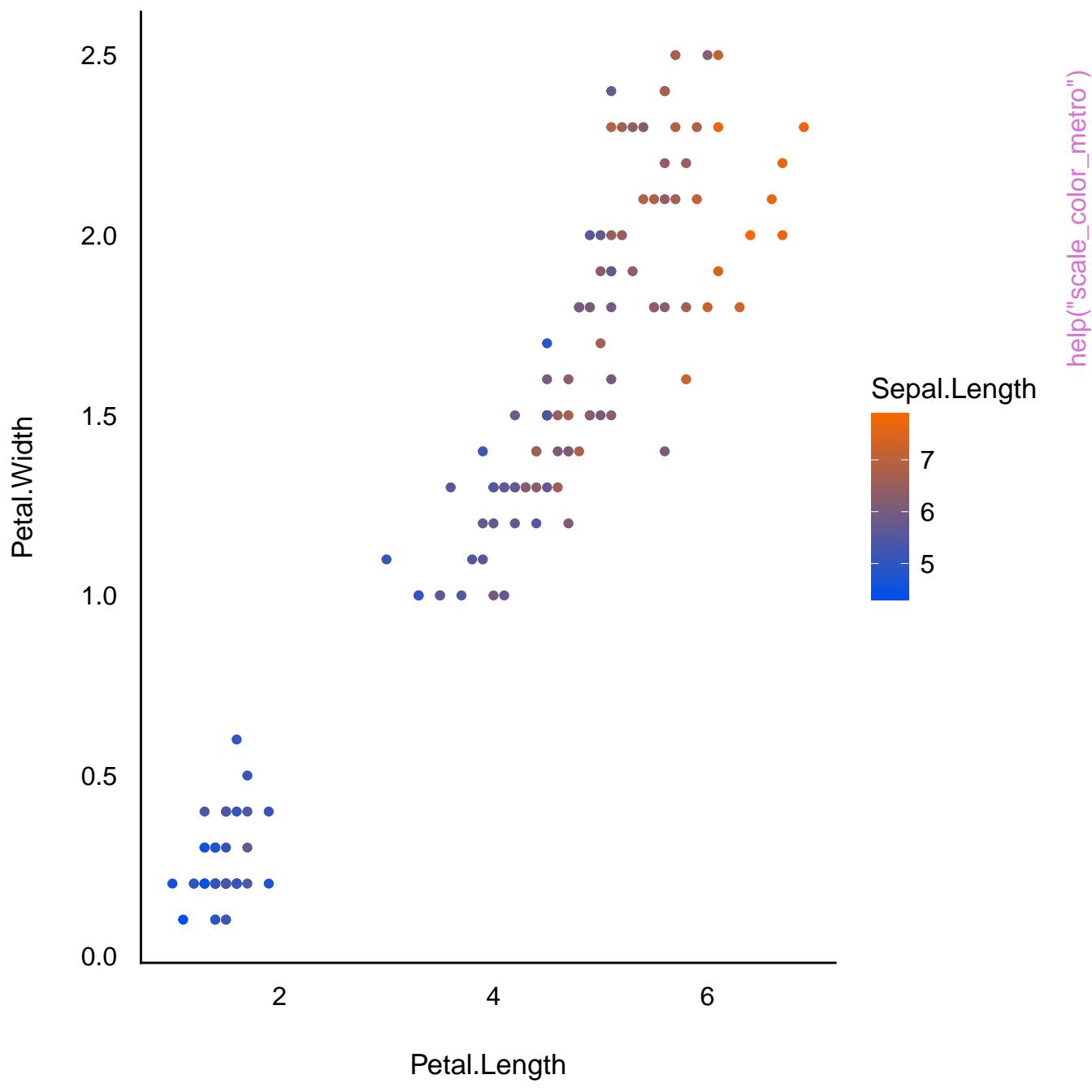
Species

Species

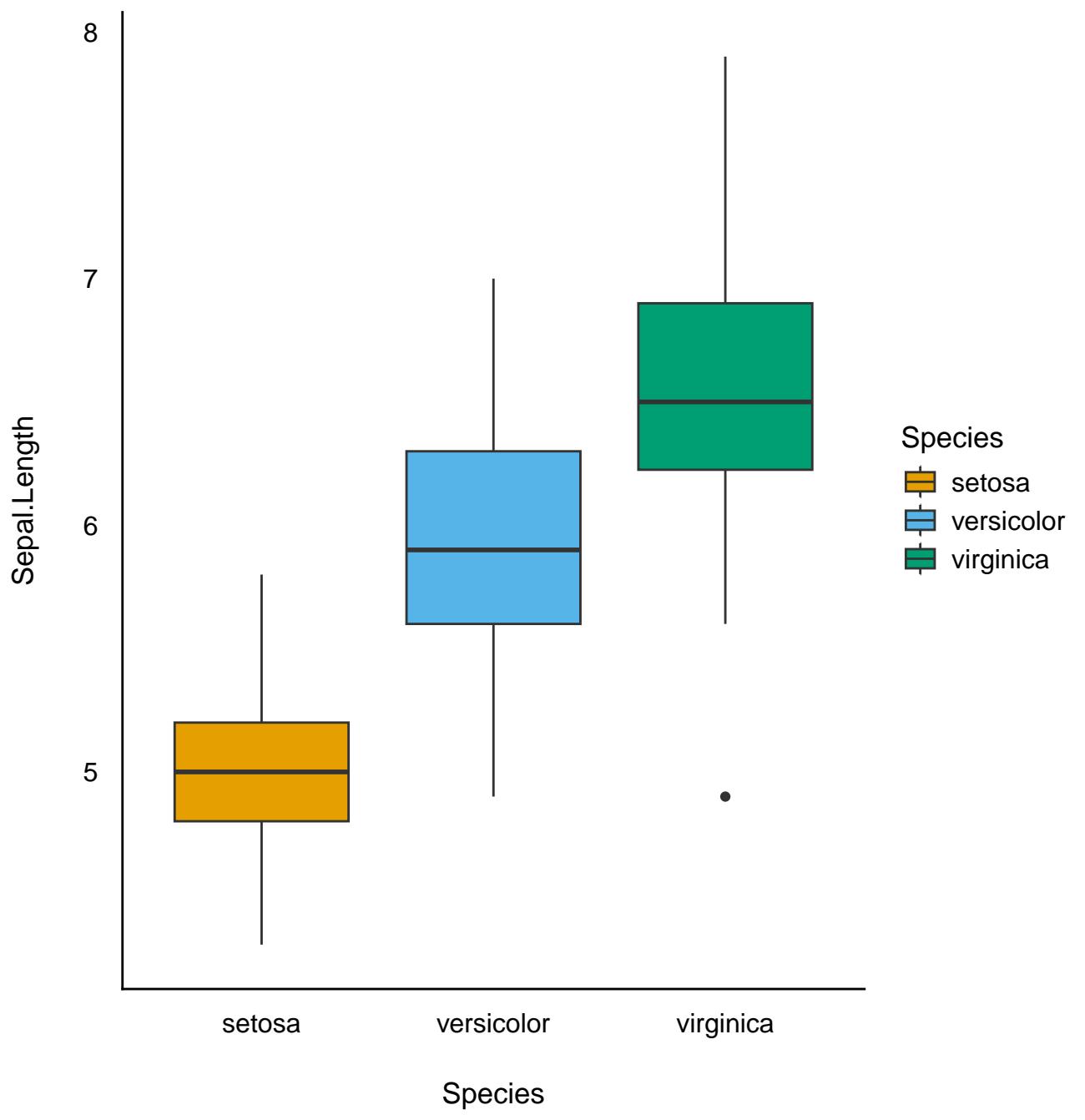
- setosa
- versicolor
- virginica

help("scale\_color\_metro")

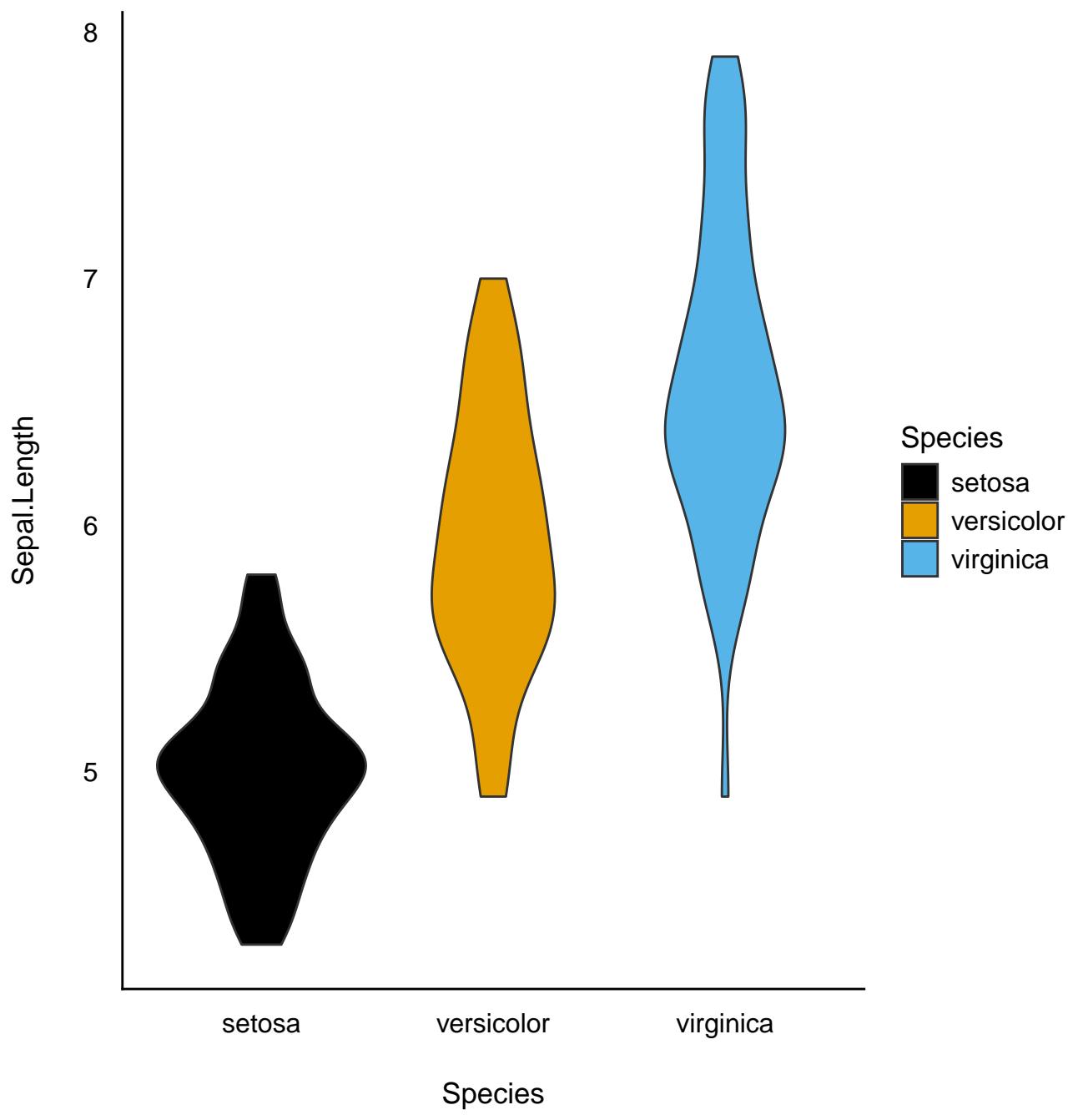




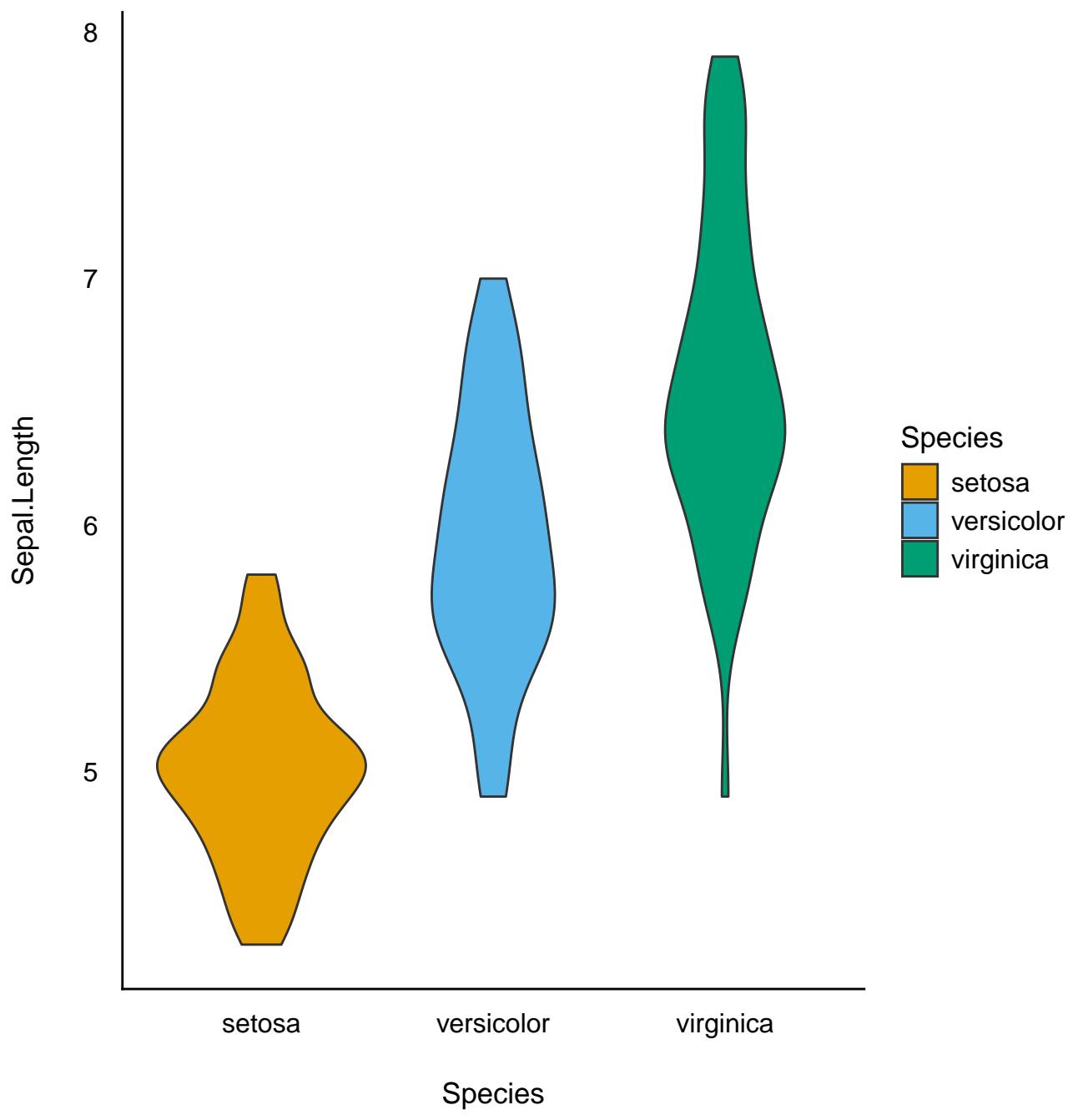
```
help("scale_color_okabeito")
```



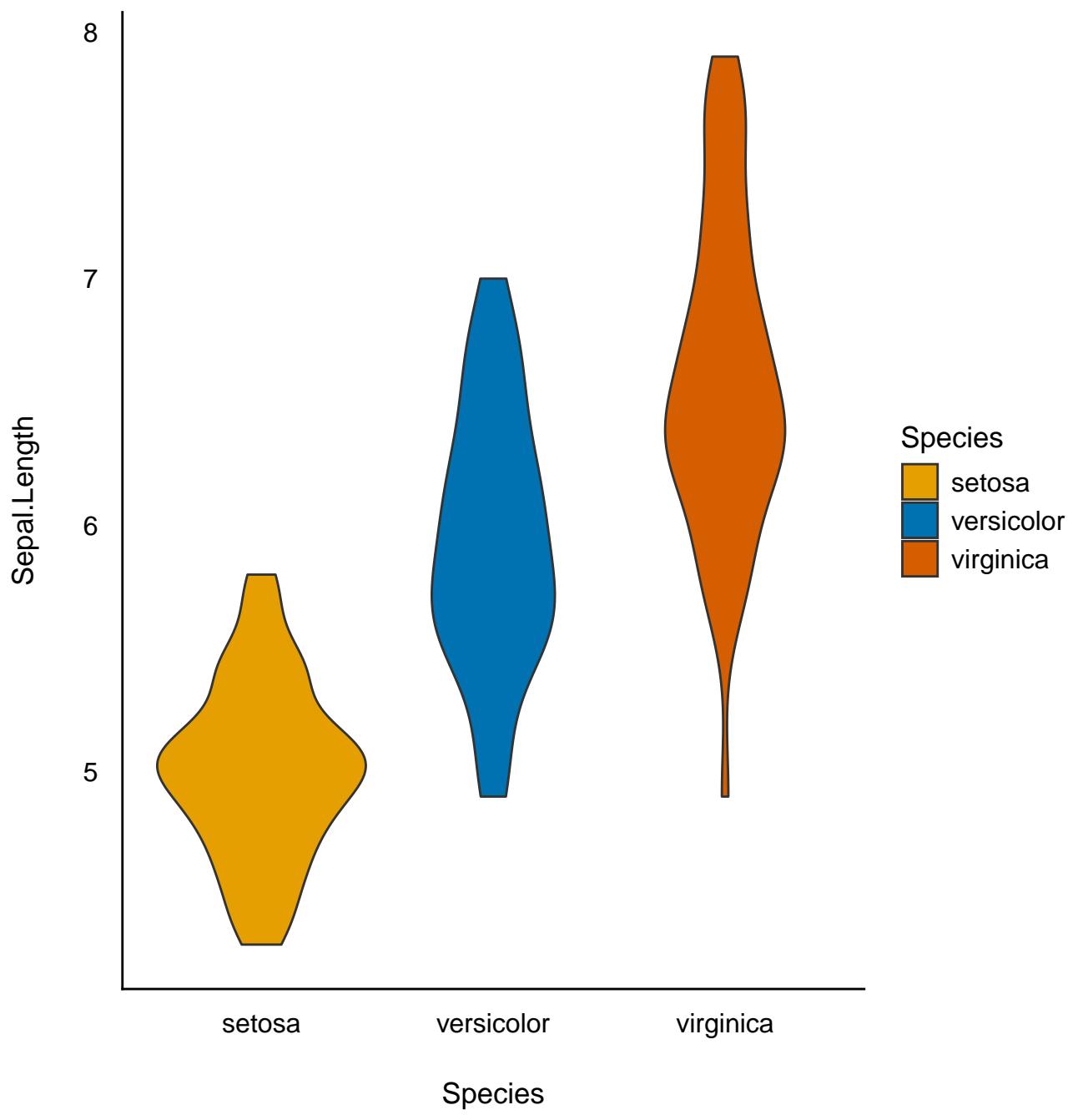
```
help("scale_color_okabeito")
```



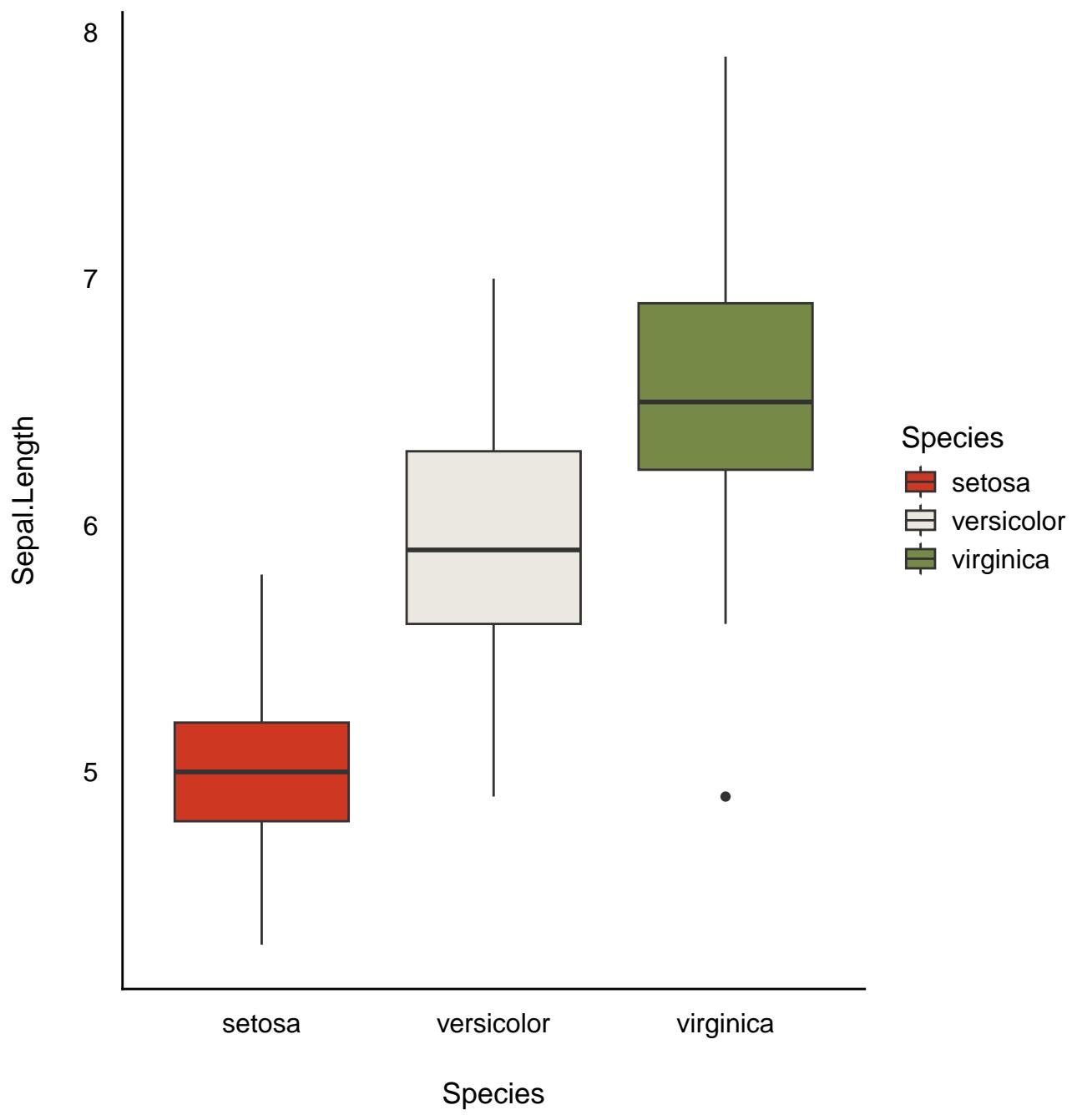
```
help("scale_color_okabeito")
```

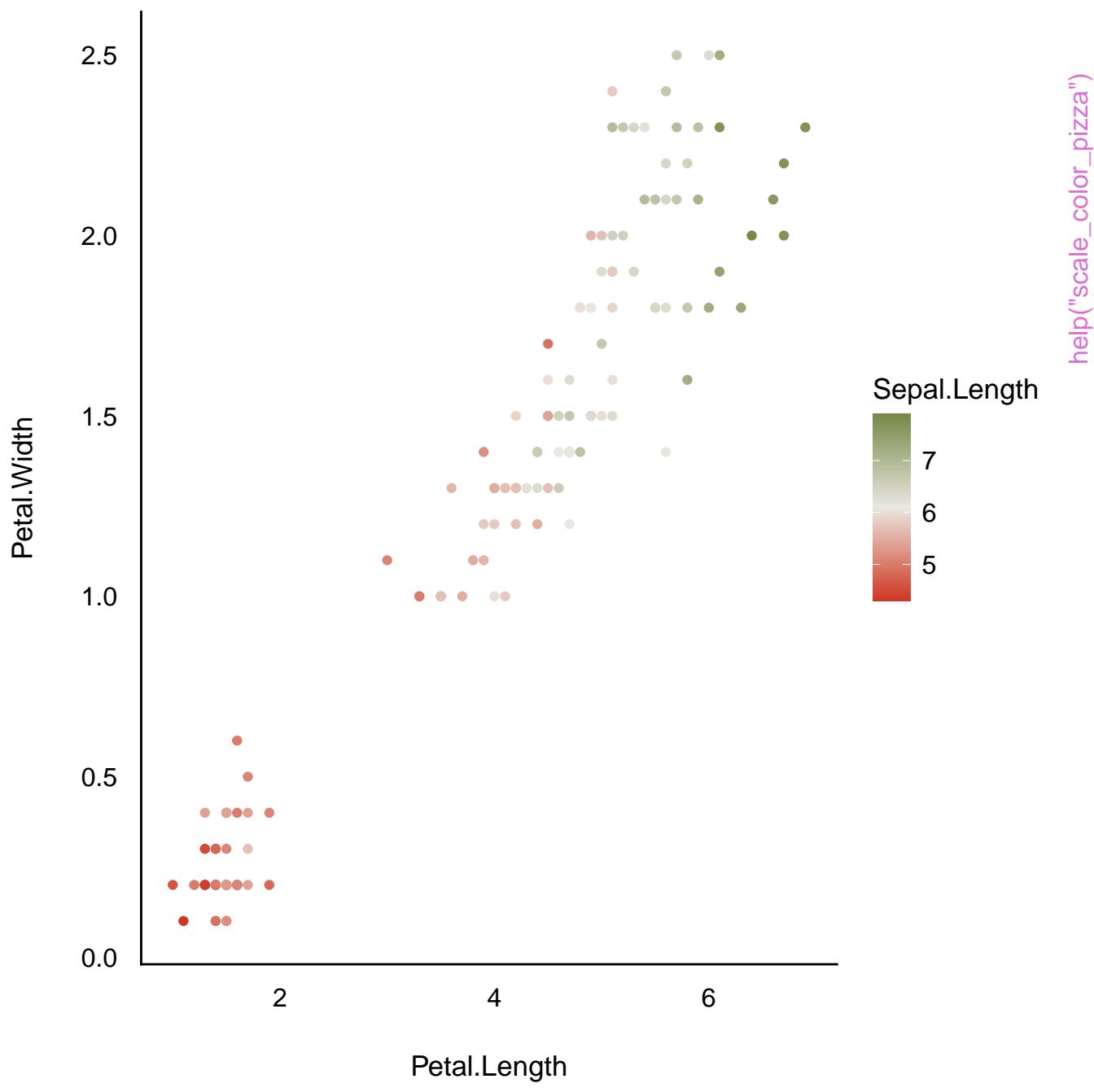


```
help("scale_color_okabeito")
```



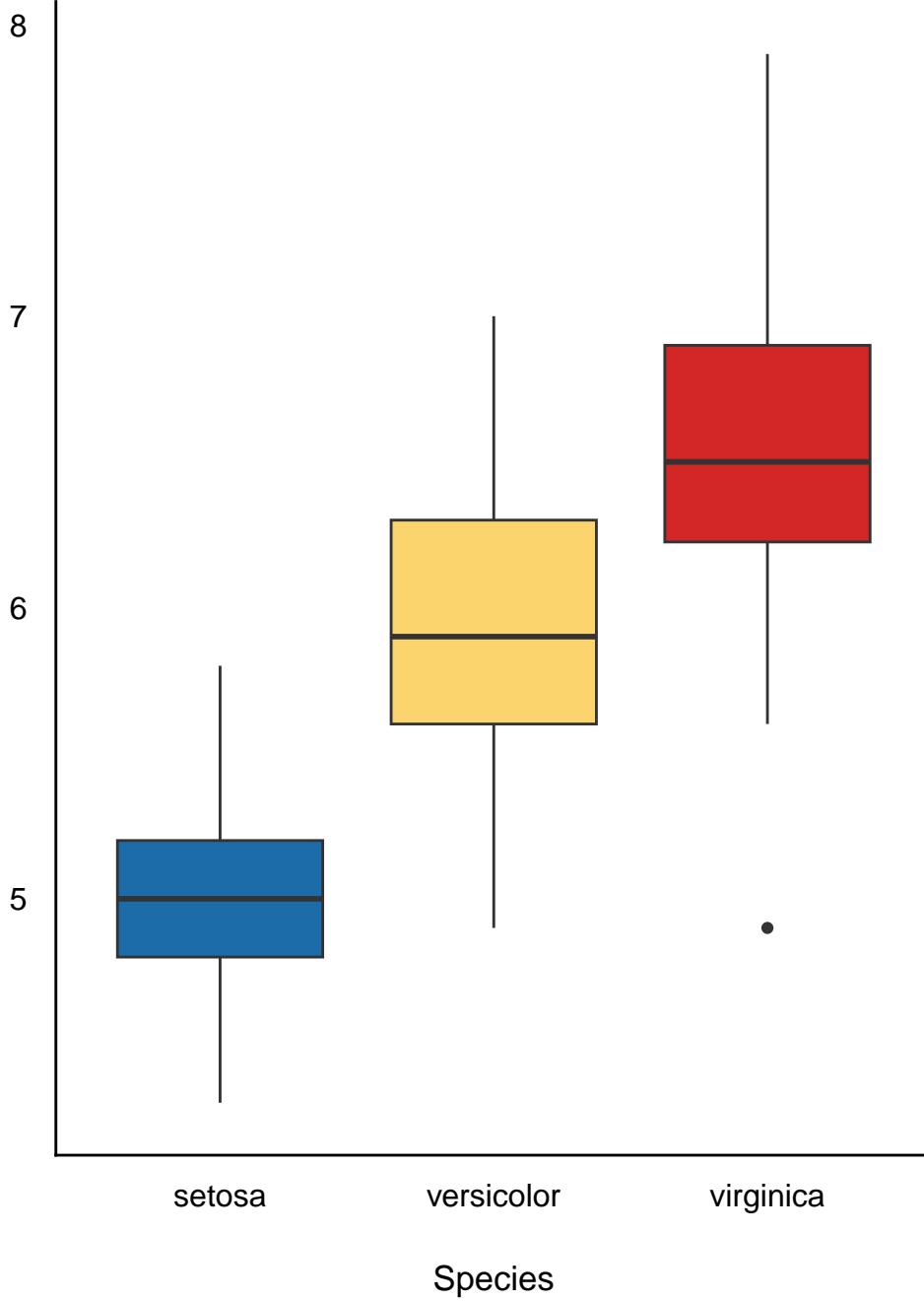
```
help("scale_color_pizza")
```





```
help("scale_color_see")
```

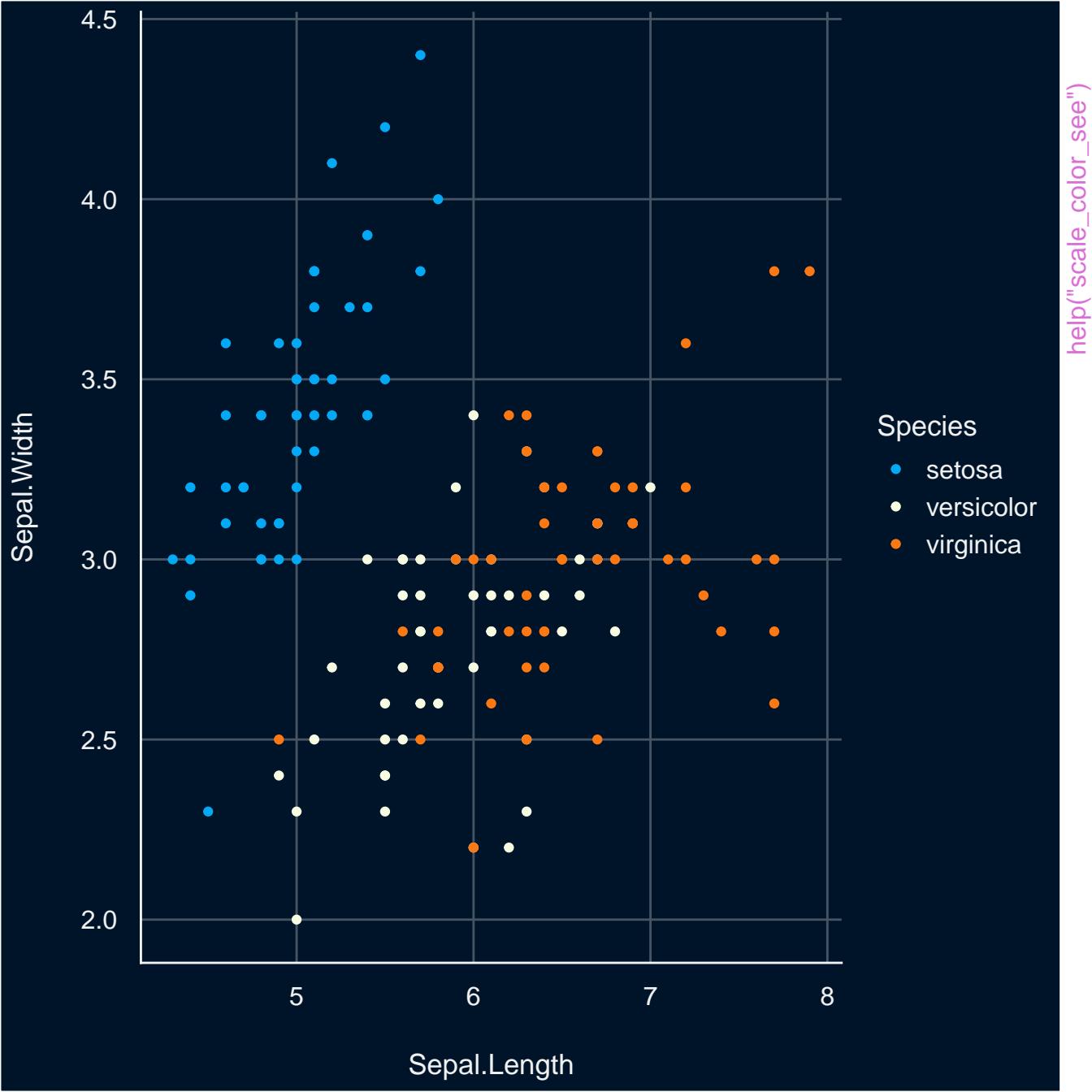
Sepal.Length

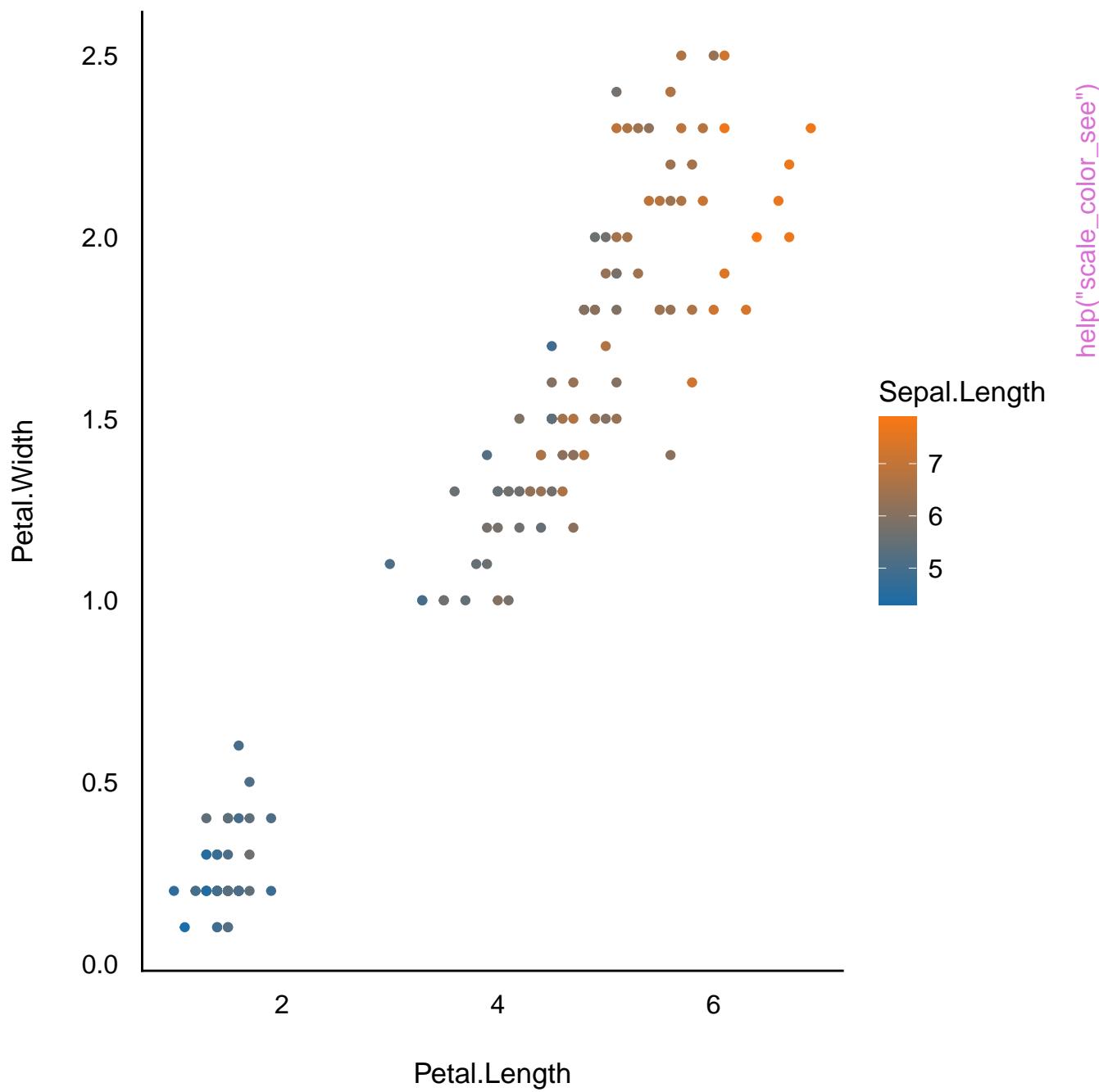


Species

Species

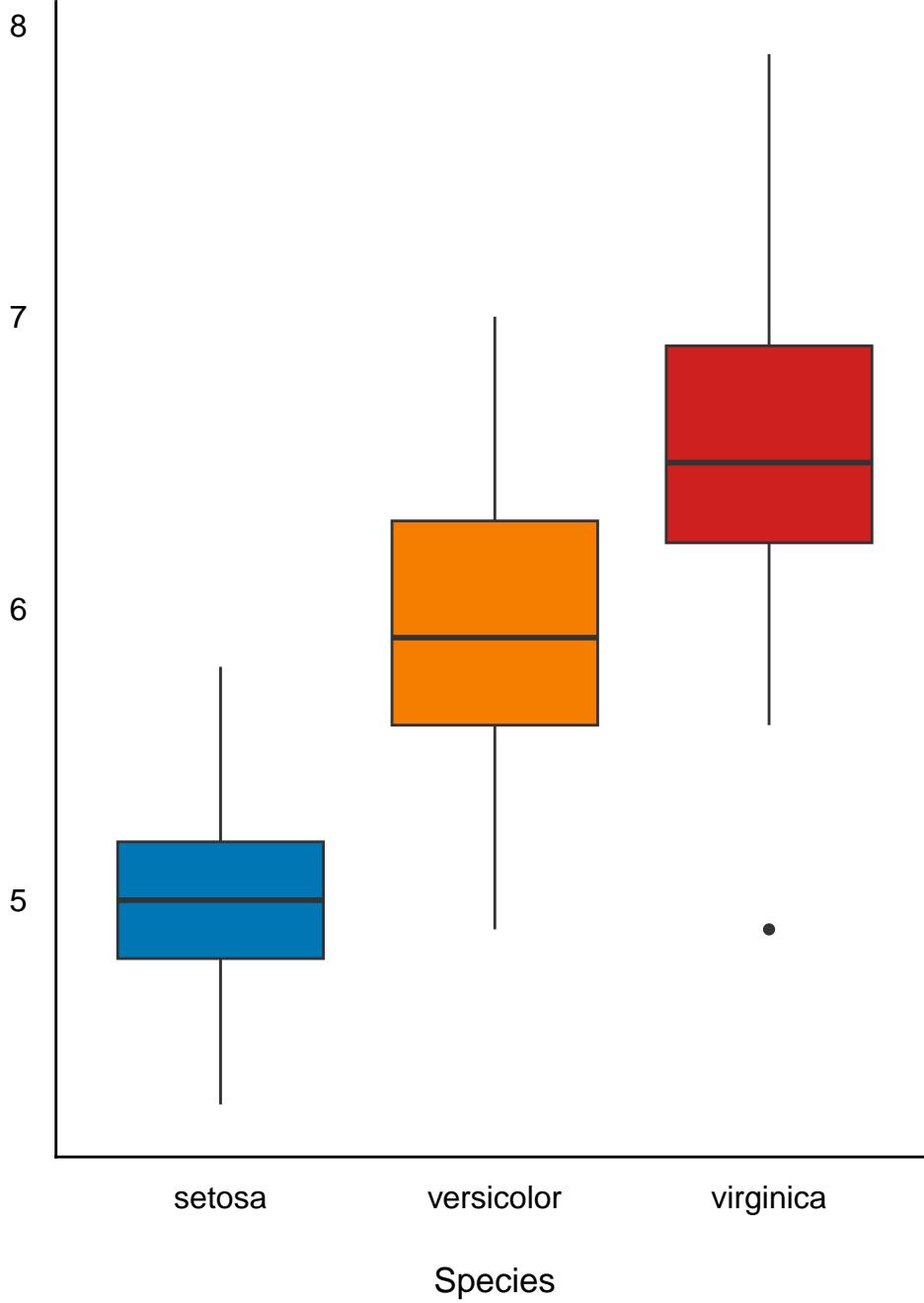
- setosa
- versicolor
- virginica





help("scale\_color\_social")

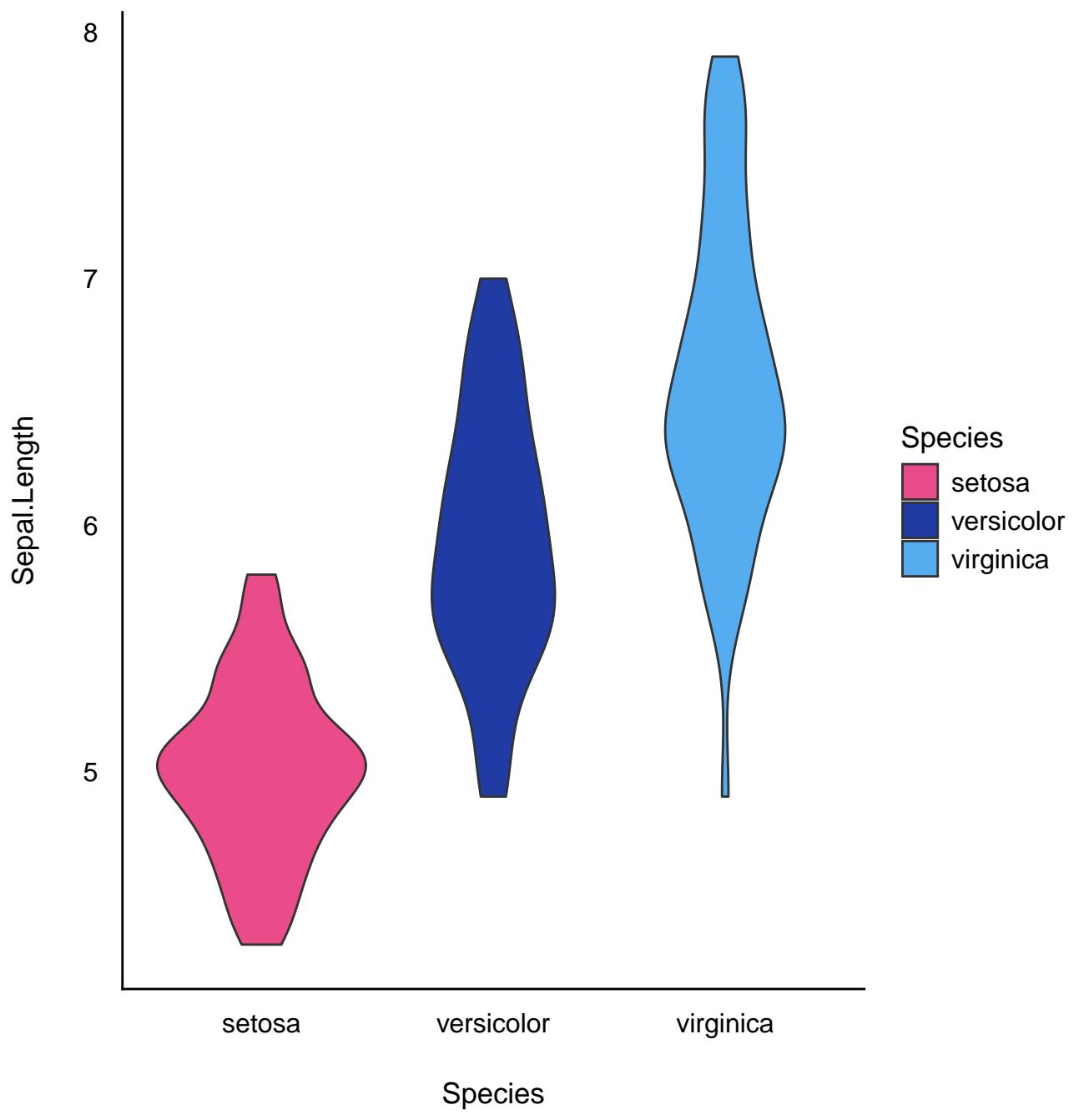
Sepal.Length

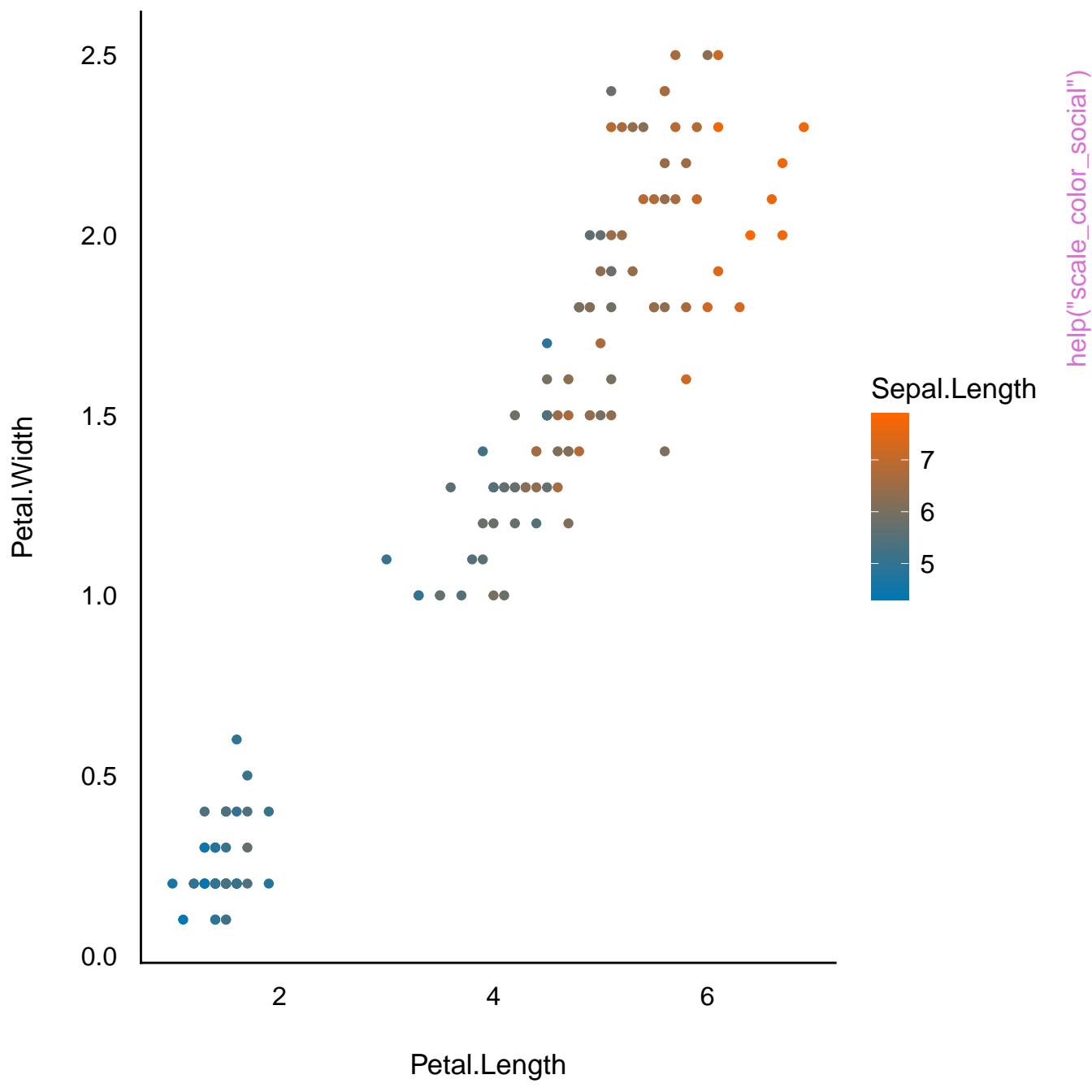


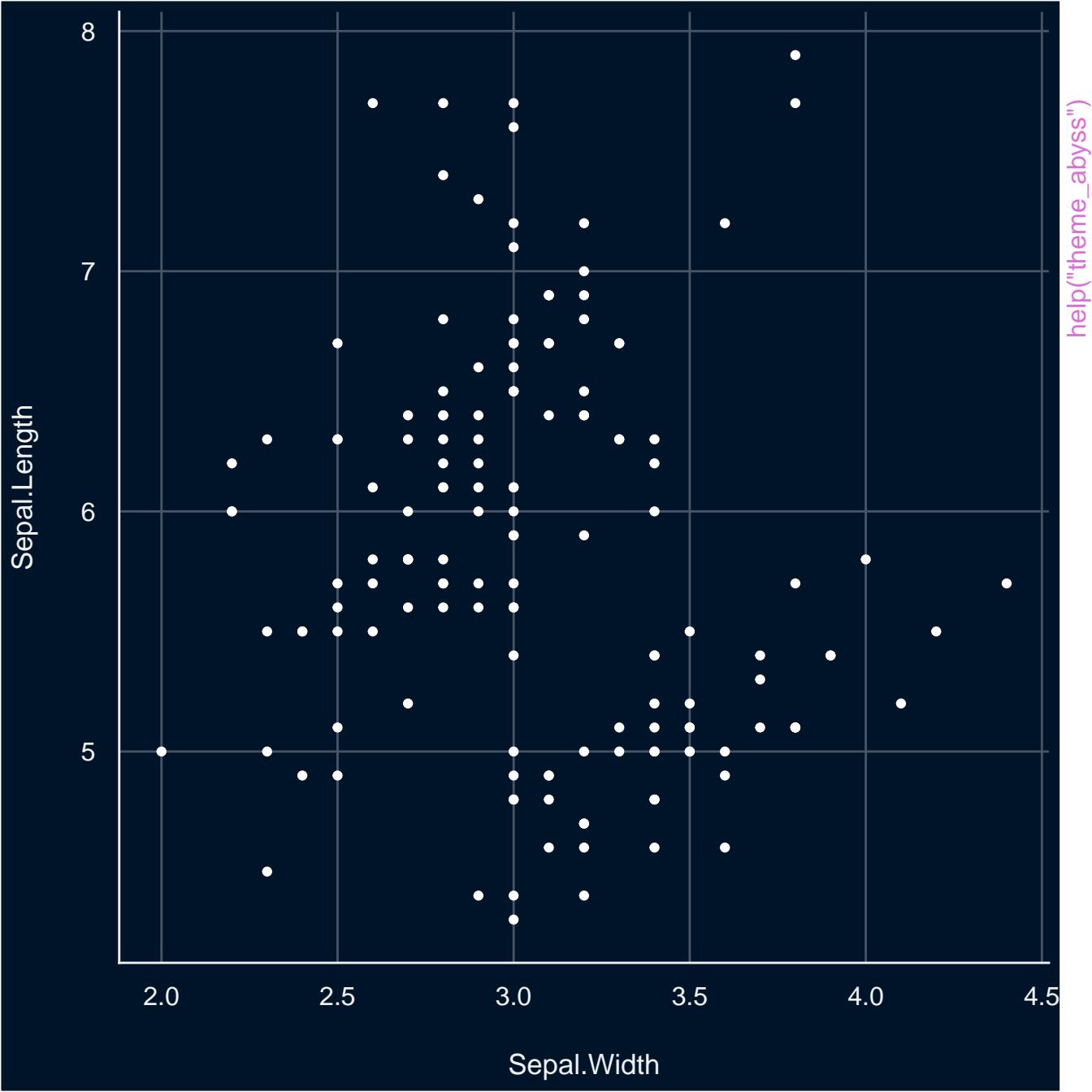
Species

Species  
setosa  
versicolor  
virginica

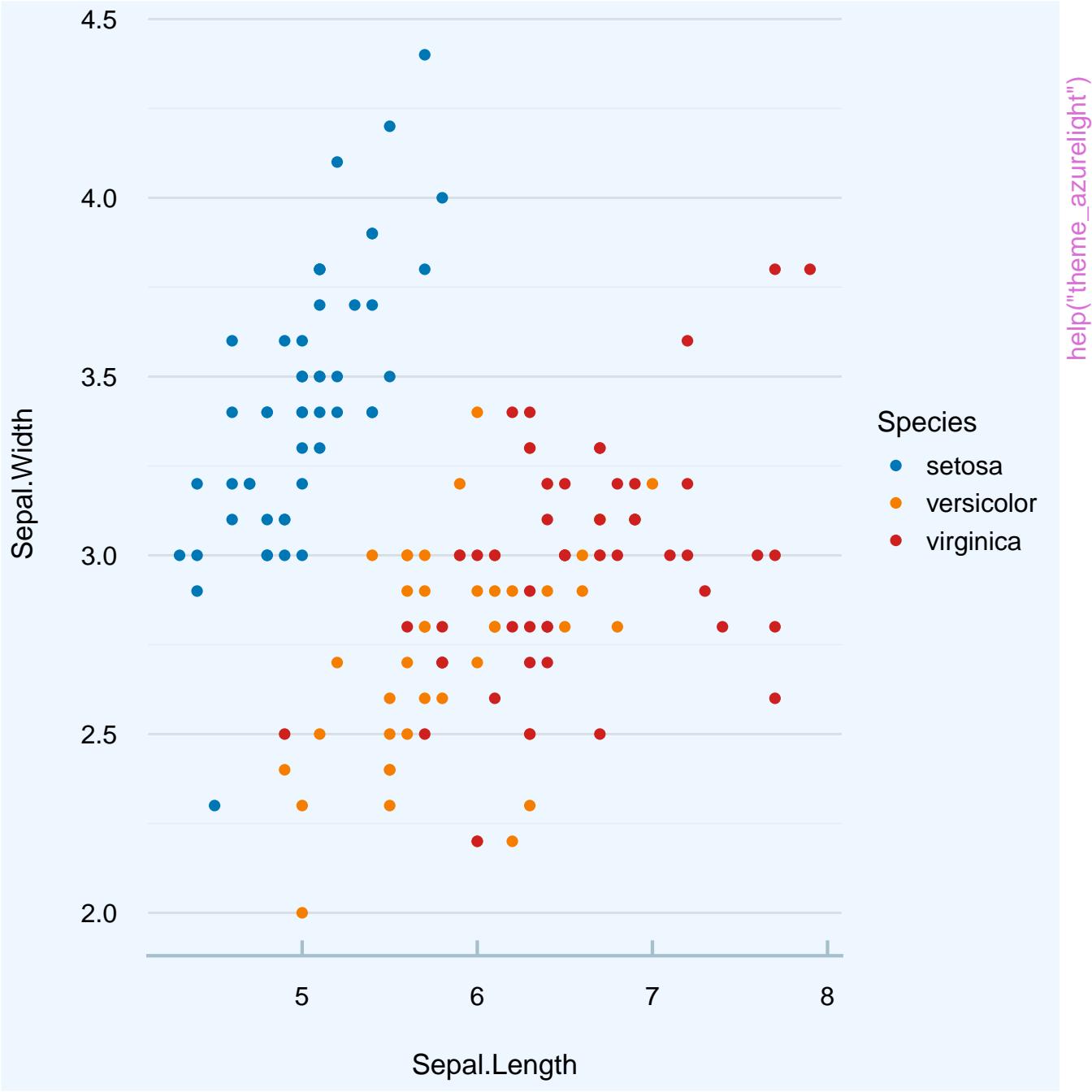
help("scale\_color\_social")



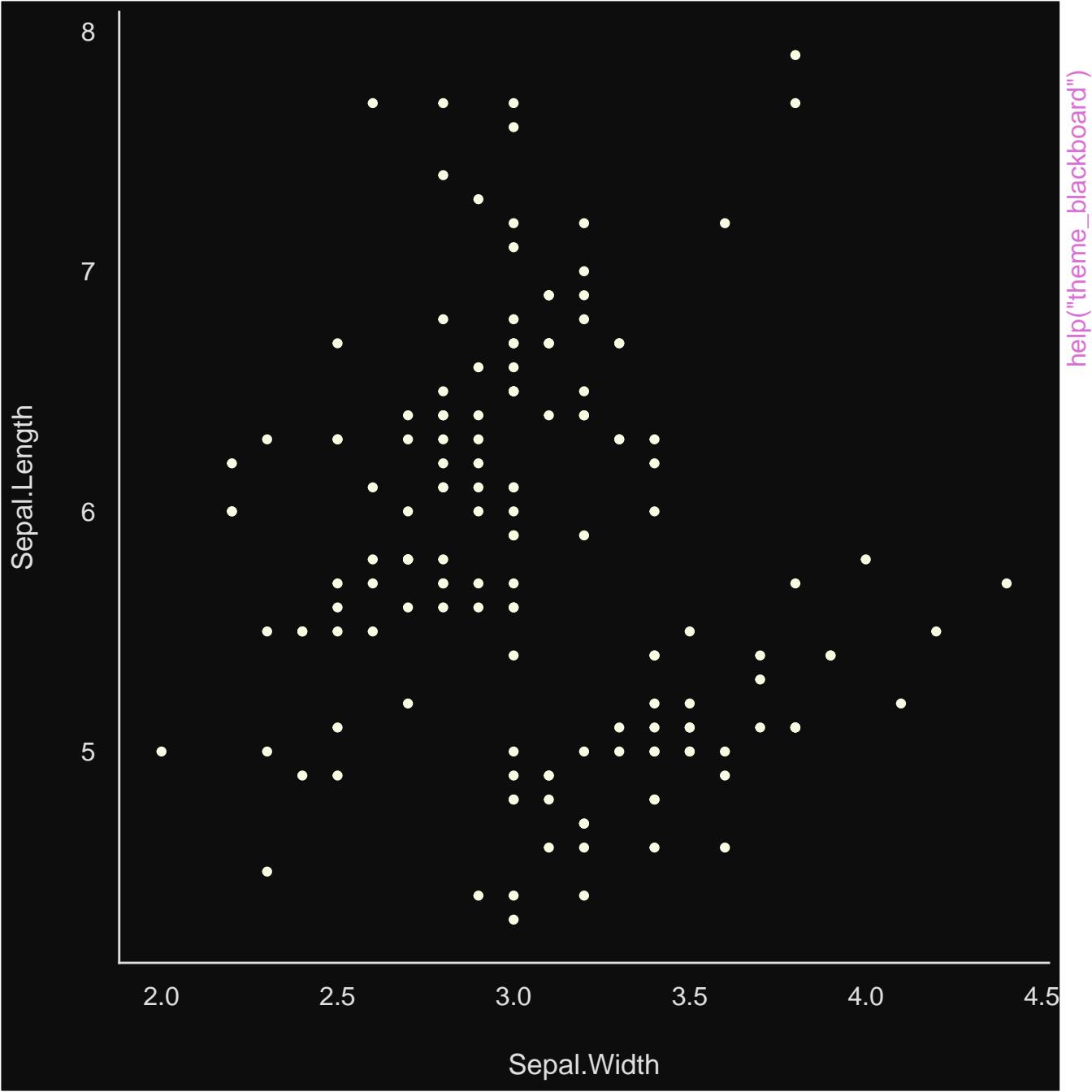


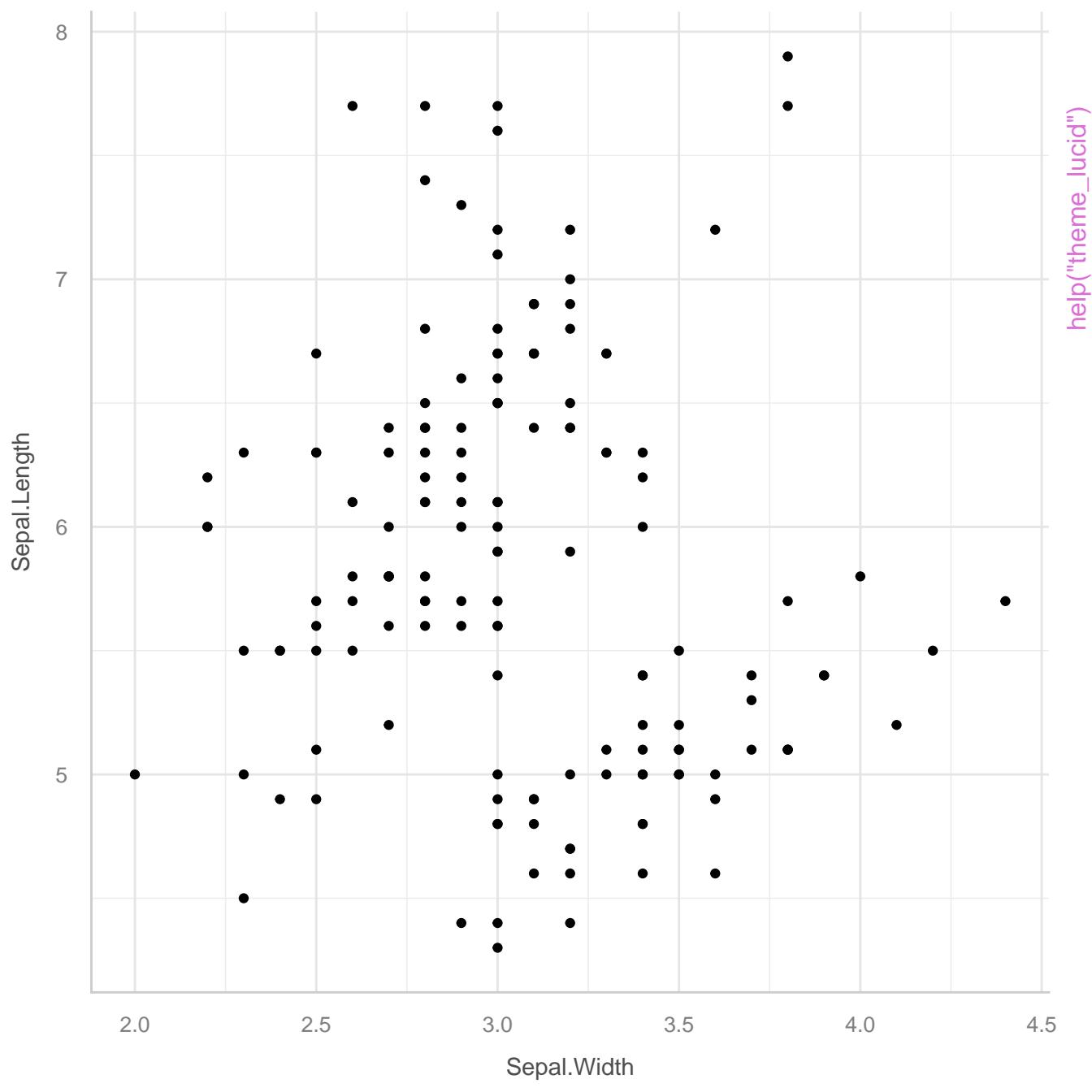


```
help("theme_azurelight")
```



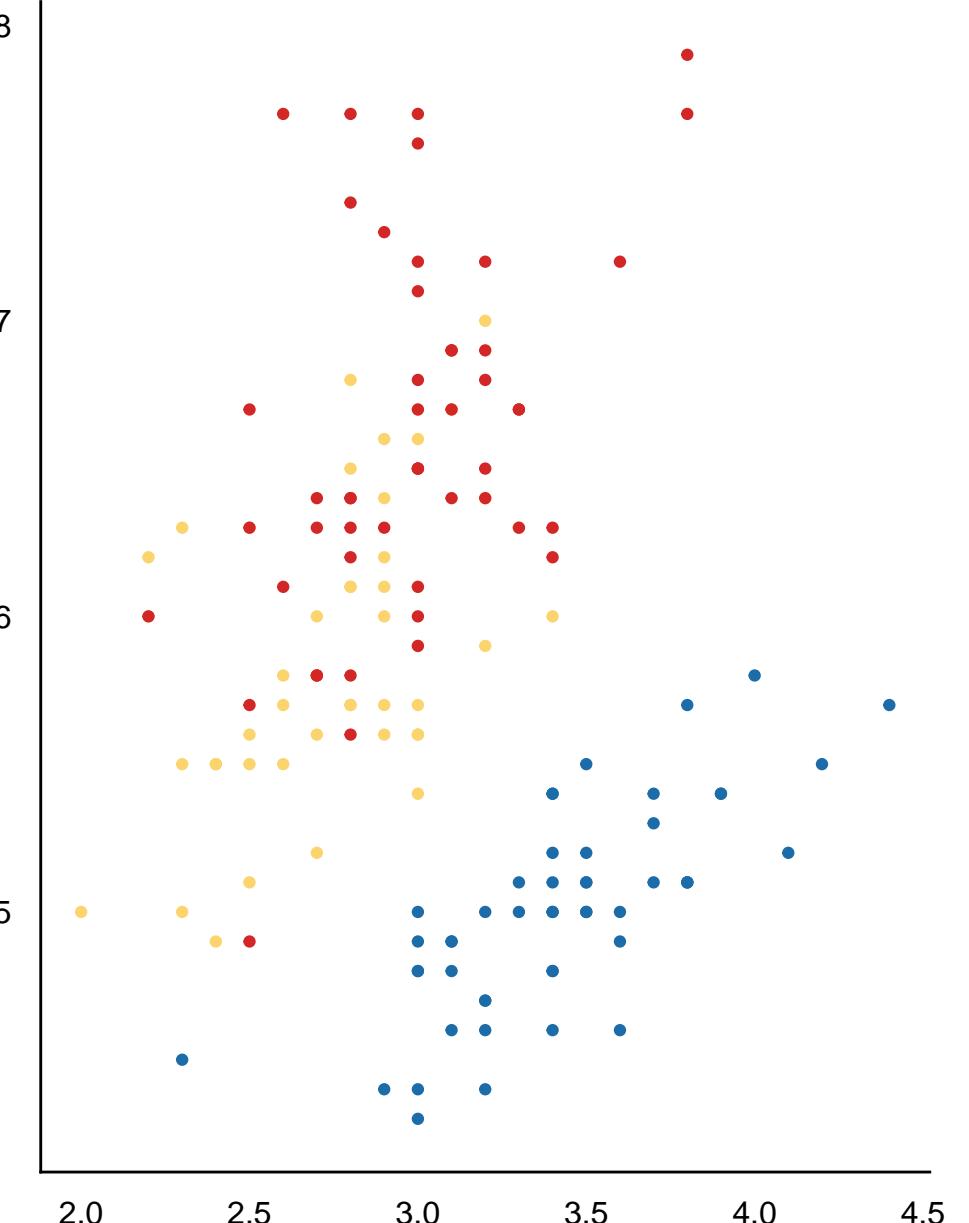
```
help("theme_blackboard")
```





help("theme\_modern")

Sepal.Length



Sepal.Width

help("theme\_modern")

Sepal.Length

2.0 2.5 3.0 3.5 4.0 4.5

Sepal.Width

Species  
● setosa  
● versicolor  
● virginica

help("theme\_radar")

