## **SLUcolors**

SLUcolors is a R a package that tries to make the use of officially defined SLU-colors in R easy. The use of the SLU color palette can give a coherant SLU-look presentations, fact-sheets and other communication, especially combined with official templates for PowerPoint etc. For more info see https://internt.slu.se/en/support-services/administrative-support/communication/brand-guidelines/visual-identity/slu-colours/palette/

#### Installation

The easiest way to install package *SLUcolors* is to use *install\_github()* from package *remotes*.

```
if (!require(remotes)) {
  install.packages(remotes)
}
remotes::install_github("kagervall/SLUcolors")
```

#### Getting color palettes

The function SLUpalette() is used to get variants of the SLU color palette (or all 26 available colors). A color palette is a vector of color codes that can be used in other functions. The vector returned by SLUpalette() is named using the swedish names of the color as defined by "Communication & marketing". SLUpalette(palette) takes one parameter, palette, that can be either a character or an integer. When palette is a character the allowed strings are: "red", "green", "blue", "yellow", "grey" or "all", this will return columns from the official palette. When palette is an integer it can take the values 1 to 5, this will return rows from the official palette.

```
library(colorspace) # For swatchplot()
library(SLUcolors)
# Get colomn from the palette = "Shades of color"
reds <- SLUpalette("red") # Get a palette with 5 "Shades of red"
reds # The retuned value is a (by default) named vector.
                                      Korall
              Plommon
                           Hallon
                                               Aprikos
#> "#502B3A" "#672146" "#CE0037" "#FF585D" "#FBD7C9"
# Get rows from palette
row1 <- SLUpalette(1)
row2 <- SLUpalette(2)</pre>
row3 <- SLUpalette(3)</pre>
row4 <- SLUpalette(4)</pre>
row5 <- SLUpalette(5)</pre>
swatchplot("Deep 1" = row1,
           "Deep 2" = row2,
           "Clear1" = row3,
           "Clear2" = row4,
           "Light" = row5)
```

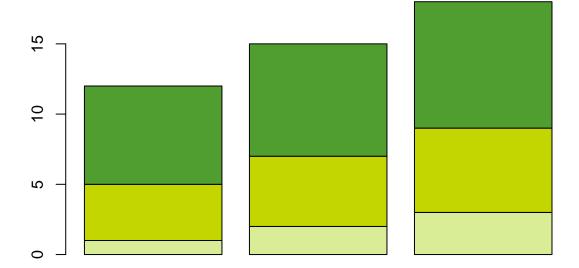


#### Base graphic

Here are some simple examples of how to use the SLU colors in base plot.

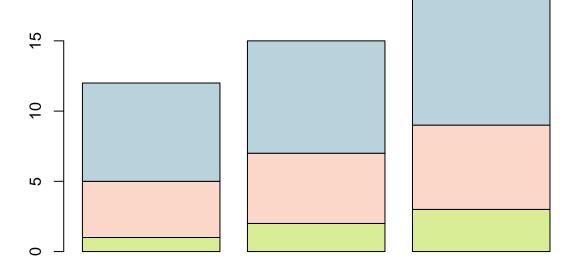
```
h <- matrix(data = 1:9, nrow = 3, byrow = TRUE)
# Bar plot using the green palette for the bars. Reverse the palette to get the lightest colors
barplot(h, col = rev(SLUpalette("green")), main = "Palette green")</pre>
```

# Palette green



```
# Bar plot using row 5 (light colors) from the palette.
barplot(h, col = SLUpalette(5), main = "Row 5 (Light)")
```

### Row 5 (Light)

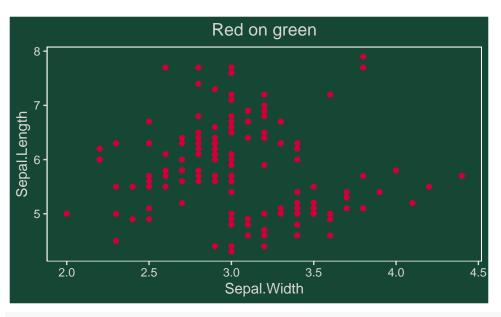


#### Theme for ggplot2

The function theme\_SLU(palette, dark) returns a theme that can be applied to a plot created with ggplot2. When the parameter dark is TRUE (the default) the theme will have a dark background and light foreground. Set dark to FALSE to get a light background and dark foreground. This function probably work best with the color based ("red", "green", "blue" or "yellow") themes. The goal of the theme is to get a plot that blends well with the official SLU templates for PowerPoint. Feedback on the design is welcome as I am a decent programmer and a lousy designer.

```
library(ggplot2)
p1 <- ggplot(iris, mapping = aes(x = Sepal.Width, y = Sepal.Length))

p1 + labs(title = "Red on green") +
   geom_point(color = SLUpalette("red")["Hallon"]) +
   theme_SLU("green")</pre>
```



```
cols <- SLUpalette(3)
names(cols) <- NULL # Must remove names for scale_color_manual()
p1 + labs(title = "Light blue, grouped by species") +
  geom_point(aes(colour = Species)) +
  scale_color_manual(values = cols) +
  theme_SLU("blue", dark = FALSE)</pre>
```

