

# Package ‘sanzo’

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**Title** Color Palettes Based on the Works of Sanzo Wada

**Version** 0.1.0

**Description** Inspired by the art and color research of Sanzo Wada (1883-1967), his ``Dictionary Of Color Combinations" (2011, ISBN:978-4861522475), and the interactive site by Dain M. Blodorn Kim <<https://github.com/dblodorn/sanzo-wada>>, this package brings Wada's color combinations to R for easy use in data visualizations. This package honors 60 of Wada's color combinations: 20 duos, 20 trios, and 20 quads.

**License** GPL-3

**Encoding** UTF-8

**LazyData** true

**URL** <https://github.com/jmaasch/sanzo>

**BugReports** <https://github.com/jmaasch/sanzo/issues>

**RoxygenNote** 7.0.2

**Suggests** datasets, graphics, stats, knitr, rmarkdown

**VignetteBuilder** knitr

**NeedsCompilation** no

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duos	<i>List of duos</i>
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### Description

List containing all 20 duo palettes, defined by hexadecimal values.

### Usage

duos

### Format

An object of class `list` of length 20.

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quads	<i>List of quads</i>
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### Description

List containing all 20 quad palettes, defined by hexadecimal values.

### Usage

quads

### Format

An object of class `list` of length 20.

---

sanzo.demo.all      *Print demo plots for all palettes*

---

**Description**

Print demo base R plots for all 60 sanzo palettes to illustrate their use and display hexadecimal values.

**Usage**

```
sanzo.demo.all()
```

**Examples**

```
sanzo.demo.all()
```

---

sanzo.demo2      *Print demo plots for all duo palettes*

---

**Description**

Print demo base R plots for all 20 duo palettes to illustrate their use and display hexadecimal values.

**Usage**

```
sanzo.demo2()
```

**Examples**

```
sanzo.demo2()
```

---

sanzo.demo3      *Print demo plots for all trio palettes*

---

**Description**

Print demo base R plots for all 20 trio palettes to illustrate their use and display hexadecimal values.

**Usage**

```
sanzo.demo3()
```

**Examples**

```
sanzo.demo3()
```

`sanzo.demo4`*Print demo plots for all quad palettes*

---

**Description**

Print demo base R plots for all 20 quad palettes to illustrate their use and display hexadecimal values.

**Usage**

```
sanzo.demo4()
```

**Examples**

```
sanzo.demo4()
```

---

`sanzo.duo`*Generate two-colored palettes*

---

**Description**

Generate two-colored palettes.

**Usage**

```
sanzo.duo(palette_name)
```

**Arguments**

`palette_name` The short ID for the palette, e.g. "c006". For full list of duo IDs, use `sanzo.info2()`.

**Value**

A vector of hexademicals of length 2.

**Examples**

```
# Assign palette to a name.
my_palette <- sanzo.duo("c229")

# Concatenate two duos for a custom quad.
c033 <- sanzo.duo("c033")
c095 <- sanzo.duo("c095")
custom_quad <- c(c033, c095)
```

```
# Use with base R.
plot(iris$Sepal.Width,
      iris$Sepal.Length,
      col = sanzo.duo("c085"))

# For examples of use with ggplot2, see https://github.com/jmaasch/sanzo.

# For examples of use as a gradient, see https://github.com/jmaasch/sanzo.
```

---

sanzo.info.all      *See metadata for all palettes*

---

### Description

Create data frame containing long-form names, short-form IDs, hexadecimal values, and links to Dain M. Blodorn Kim's <https://sanzo-wada.dmbk.io> for all sanzo palettes.

### Usage

```
sanzo.info.all()
```

### Value

Return data frame containing long-form names, short-form IDs, hex values, and URLs for all sanzo palettes.

### Examples

```
info_df <- sanzo.info.all()
print(sanzo.info.all())
```

---

sanzo.info2      *See metadata for all duo palettes*

---

### Description

Create data frame containing long-form names, short-form IDs, hexadecimal values, and links to Dain M. Blodorn Kim's <https://sanzo-wada.dmbk.io> for all duo palettes.

### Usage

```
sanzo.info2()
```

### Value

Return data frame containing long-form names, short-form IDs, hex values, and URLs for all duos.

**Examples**

```
duo_info_df <- sanzo.info2()
print(sanzo.info2())
```

---

sanzo.info3                    *See metadata for all trio palettes*

---

**Description**

Create data frame containing long-form names, short-form IDs, hexadecimal values, and links to Dain M. Blodorn Kim's <https://sanzo-wada.dmbk.io> for all trio palettes.

**Usage**

```
sanzo.info3()
```

**Value**

Return data frame containing long-form names, short-form IDs, hex values, and URLs for all trios.

**Examples**

```
trio_info_df <- sanzo.info3()
print(sanzo.info3())
```

---

sanzo.info4                    *See metadata for all quad palettes*

---

**Description**

Create data frame containing long-form names, short-form IDs, hexadecimal values, and links to Dain M. Blodorn Kim's <https://sanzo-wada.dmbk.io> for all quad palettes.

**Usage**

```
sanzo.info4()
```

**Value**

Return data frame containing long-form names, short-form IDs, hex values, and URLs for all quads

**Examples**

```
quad_info_df <- sanzo.info4()
print(sanzo.info4())
```

---

sanzo.quad	<i>Generate four-colored palettes</i>
------------	---------------------------------------

---

**Description**

Generate four-colored palettes.

**Usage**

```
sanzo.quad(palette_name)
```

**Arguments**

`palette_name` The short ID for the palette, e.g. "c263". For full list of quad IDs, use `sanzo.info4()`.

**Value**

A vector of hexademicals of length 3.

**Examples**

```
# Assign palette to a name.
my_palette <- sanzo.quad("c252")

# Concatenate two quads for a custom eight-colored palette.
c348 <- sanzo.quad("c348")
c341 <- sanzo.quad("c341")
custom_eight <- c(c348, c341)

# Use with base R.
plot(iris$Sepal.Width,
     iris$Sepal.Length,
     col = sanzo.quad("c341"))

# For examples of use with ggplot2, see https://github.com/jmaasch/sanzo.

# For examples of use as a gradient, see https://github.com/jmaasch/sanzo.
```

---

sanzo.trio	<i>Generate three-colored palettes</i>
------------	--

---

**Description**

Generate three-colored palettes.

**Usage**

```
sanzo.trio(palette_name)
```

**Arguments**

`palette_name` The short ID for the palette, e.g. "c121". For full list of trio IDs, use `sanzo.info3()`.

**Value**

A vector of hexademicals of length 3.

**Examples**

```
# Assign palette to a name.
my_palette <- sanzo.trio("c223")

# Concatenate two trios for a custom six-colored palette.
c207 <- sanzo.trio("c207")
c226 <- sanzo.trio("c226")
custom_six <- c(c207, c226)

# Use with base R.
plot(iris$Sepal.Width,
     iris$Sepal.Length,
     col = sanzo.trio("c343"))

# For examples of use with ggplot2, see https://github.com/jmaasch/sanzo.

# For examples of use as a gradient, see https://github.com/jmaasch/sanzo.
```

---

trios

*List of trios*

---

**Description**

List containing all 20 trio palettes, defined by hexadecimal values.

**Usage**

```
trios
```

**Format**

An object of class `list` of length 20.



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