

## Dataset Ornamental Horticulture Color Codes 2.0

### Description dataset Ornamental Horticulture Color Codes

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**Amendment sheet**

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## 1. Introduction

Several standardized schemes of color codes are used in international ornamental horticulture. The most detailed scheme is that of the Royal Horticultural Society (RHS) consisting of 922 different color codes. The RHS also publishes the so-called color range of these. Floricode uses this scheme in product registration to determine and record the color(s) of flowers and/or leaves as accurately as possible.

A somewhat less detailed color scheme is that of "The International Union for the Protection of New Varieties of Plants (UPOV)" consisting of 73 color codes and descriptions.

In the Netherlands, the VBN has established a list of the VBN colors consisting of 11 main colors, which in turn are divided into 24 subcolors.

In this data set of ornamental plant cultivation color codes, Floricode has related these different schemes so that the user is able to choose the color scheme suitable for him.

Because the buying and selling of floriculture products is increasingly taking place digitally, Floricode has determined the so-called RGB values of all RHS colors and added these RGB values to the color file. This makes it possible to display and RHS color code very accurately on a computer screen.

The detailed RHS colors of flowers in particular are of great importance to florists for mourning and wedding arrangements.

This document contains the definitions and descriptions of the code lists of the Ornamental Horticulture Color Codes dataset.

### 1.1 Intended for ...

This document is intended for the subscribers of the dataset Ornamental Horticulture Color Codes.

### 1.2 Starting points

This document is based upon the starting points formulated in the following document available on the Floricode website:

- General implementation Guidelines for Coding 1.4 (coding in accordance with the 'Linnaeus format')

### 1.3 Distributie

The distribution of this dataset takes place in this way:

- Via API : <https://api.floricode.com/v2/#>

To get access to the code lists a subscription is required. Therefore an application form is available on the website of Floricode <https://www.floricode.com/en-us/floricode/application-forms>

### 1.4 Abbreviations

RHS	Royal Horticultural Society
UPOV	The International Union for the Protection of New Varieties of Plants
VBN	Vereniging van Bloemenveilingen Nederland

## **2. Dataset Ornamental Horticulture Color Codes**

A dataset contains one or more code lists. The Floricode release policy applies to this dataset. The datasets themselves and their documentation are therefore provided with a release and version number in the file name.

The code lists of the Floriculture Color Codes dataset made available by Floricode via the API service contain the so-called FULL files, i.e. both current, modified and closed records. Closed records older than 7 years are no longer distributed.

To be able to make use of translations of the color descriptions in this dataset to different languages it's also necessary to make use of the Floricode API of the dataset GPC Horticulture!

## 2.1 CSV example

Here are some lines in CSV where the relation between the different color schemes are shown:

code_list_id	RHS_color_id	VBN_color_name	VBN_color_name NL	VBN_sub_color_name	RGB	red	green	blue	UPOV_color_group_id	UPOV_color_description	UPOV_color_description NL
20	001A	yellow	Geel	yellow	235-224-58	235	224	58	6	medium yellow green	midden geelgroen
20	001B	yellow	Geel	light yellow	232-226-81	232	226	81	6	medium yellow green	midden geelgroen
20	001C	yellow	Geel	light yellow	237-233-139	237	233	139	5	light yellow green	licht geelgroen
20	001D	yellow	Geel	light yellow	240-233-159	240	233	159	16	light yellow	lichtgeel
20	027A	pink	Roze	light pink	249-207-173	249	207	173	25	light orange pink	licht oranjeroze
20	027B	pink	Roze	light pink	254-217-190	254	217	190	25	light orange pink	licht oranjeroze
20	027C	pink	Roze	light pink	248-221-200	248	221	200	25	light orange pink	licht oranjeroze
20	027D	pink	Roze	light pink	245-224-203	245	224	203	25	light orange pink	licht oranjeroze



### 3. COLOR

#### 3.1 Definition

COLOR is an ever present characteristic of any product traded within the horticultural industry and identified with a color code. There exists more than one system for expressing colors. This entity helps in converting between the color-systems that are widely used in horticulture such as the VBN, the RHS code systems and the UPOV color classification and the much used computer/TV coloring system of RGB.

#### 3.2 Relationships

COLOR has one relevant relationship within the dataset of the GPC entities:

- any horticultural product may have a GPC brick that is linked to a GPC brick attribute type expressing color

#### 3.3 Contents

The code list COLOR has the following contents:

field	field_name	M/C	format	key	contents
1	code_list_id	M	N..3		'20'
2	RHS_color_id	M	AN..6	P#	RHS COLOR identifier
3	VCN_color_name	M	AN..6		VCN COLOR name
4	VCN_sub_color_name	M	AN..12		VCN sub-COLOR name
5	RGB	M	AN11		RGB COLOR code (999-999-999)
6	red	M	N3		R component
7	green	M	N3		G component
8	blue	M	N3		B component
9	UPOV_color_group_id	M	N..2		UPOV COLOR identifier
10	UPOV_color_description	M	AN..50		UPOV COLOR description
11	entry_date	M	N8		ccyyymmdd
12	expiry_date	C	N8		ccyyymmdd
13	change_date_time	M	N12		ccyyymmddhhmm

#### 3.4 Explanation

- code\_list\_id '20' is for COLOR. This ID allows for the possibility to make an explicit reference to this list from code list NAME\_GPC (E.G. for translations)
- RHS publishes their own Color Coding Classification System in a book with color cards, each with a specific code. Since they publish new versions very rarely, they decided to add an "N" or an "NN" in front of new codes. For this reason you will find different entry\_dates for codes starting with a numeric, with "N" or with "NN". The last position always is A, B,C or D, denoting



slight nuances in intensity of the color. RHS does not provide names for their codes, since these detailed variations do not translate into normal recognizable color names.<sup>1</sup>

- 3: VBN\_color\_name is a classification system of the Dutch Auction System and used for a very broad color grouping system used (amongst others) for their auctioning systems.
- 4: VBN\_sub\_color\_name is a slightly more granular coloring classification of the VBN, where colors are split in a Dark, Normal or Light variation of the normal VBN Color. Since VBN sub color names are very basic, no translations have been included in this distribution.
- 5: the well-known RGB system for Screens like PC's or Televisions where colors are expressed as Intensities of the colors Red, Green and Blue. This code defines all these three color intensities (expressed in a number of 000 through 255) separated by '-' characters.
- 6,7 and 8: the three color intensities each ranging from 000 through 255 and expressed in three digits with possible leading zeros, for convenience purpose also provided separately.
- 9: UPOV\_color\_group\_id defines a color classification system of "The International Union for the Protection of New Varieties of Plants" (UPOV) often called Color Groups, based on the same RHS coloring system, but slightly more detailed than that of the VBN coloring systems.<sup>2</sup>
- 10: UPOV\_color\_description contains the textual description of the UPOV\_color\_id. For practical purposes these descriptions are included in this entity, although they could have been normalized in a separate entity. The UPOV color description can be translated to Dutch (NL), Spanish (SP), German (DT) and French (FR) using the NAME\_GPC code list.

### 3.5 Example

```
{
  "@odata.context": "string",
  "value": [
    {
      "rhs_id": "N066B",
      "vbn_name": "pink",
      "vbn_sub_name": "dark pink",
      "rgb_code": "213-021-112",
      "red_value": 213,
      "green_value": 21,
      "blue_value": 112,
      "upov_group_id": 23,
      "upov_description": "purple red",
      "entry_date": "2001-01-01",
      "expiry_date": null,
      "change_date_time": "2015-07-01T00:00:00+02:00"
    }
  ]
}
```

<sup>1</sup> For info on RHS and a color chart see : <http://www.rhsshop.co.uk/category.aspx?id=10000006>

<sup>2</sup> See the ANNEX in the following pdf for UPOV colors: [http://www.upov.int/edocs/tgpdocs/en/tgp\\_14.pdf](http://www.upov.int/edocs/tgpdocs/en/tgp_14.pdf)

## 4. NAME\_GPC

The translation from the UPOC color description in different languages can be found in the NAME\_GPC table, part of the API GPC Horticulture.

### 4.1 Definition

NAME\_GPC is the translation code list for some description and definition fields. This code list has (beside other content in relation to the GPC code lists) the translations for the UPOV to 4 other languages:

Code list_id	Object of translation	Language(s)	code_list_item_id	name_type_id
20	UPOV color description	Dutch, French, German, Spanish	10	1

With code\_list\_id and involved\_code\_list\_item\_id a link to a code list and a field within that code list can be indicated.

### 4.2 Relationships

- NAME\_GPC has a link to every code list that is included in the involved\_code\_list\_id. The involved\_code\_list\_item\_id defines for which field of each record in that code list a translation is available. language\_id defines what language(s) is (are) available and name\_type\_id defines the purpose of the translated name within the code list.

### 4.3 Contents

The code list NAME\_GPC has the following contents:

field	field_name	M/C	format	key	contents
1	code_list_id	M	N..3		'21'
2	involved_code_list_id	M	N..3	P#	
3	code_list_item_id	M	N..8	P#	
4	name_type_id	M	N..2	P#	
5	language_id	M	AN2	P#	
6	name_or_translation	M	AN..1024		
7	entry_date	M	N8		ccyymmdd
8	expiry_date	C	N8		ccyymmdd
9	change_date_time	M	N12		ccyymmddhhmm

### 4.4 Explanation

- code\_list\_id '21' is for NAME\_GPC. The main reason for this code list is to provide translations or added reference data.
- involved\_code\_list\_id tells you for which code list a translation is available with this record.
- involved code\_list\_item\_id tells you what the value of the primary key of the given code list is, for which a translation is available in this record. *(In the example the 23 indicates the UPOV\_color\_group\_id 23, the item\_id of the UPOV group where the translation of the UPOV\_color\_description belongs to)*
- name\_type\_id defines what the meaning of this translated text is.

- 5: language\_id defines the language of the translated text. Currently the following languages are presented
- 6: name\_or\_translation holds the actual translated text for the referenced field in the language specified by the language\_id

language_id	language name
DE	German (Duits)
FR	French (Frans)
NL	Dutch (Nederlands)
ES	Spanish (Spaans)
EN	English (Engels)

#### 4.5 Example

```
{
  "@odata.context": "string",
  "value": [
    {
      "involved_code_list_id": 20,
      "code_list_item_id": 23,
      "name_type_id": 1,
      "language_id": "ES",
      "name_or_translation": "rojo purpúreo",
      "entry_date": "1986-01-01",
      "change_date_time": "2016-03-03T00:00:00+01:00",
      "expiry_date": null
    }
  ]
}
```