



TWO/48/19 Add.

ORIGINAL: English

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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
Geneva

TECHNICAL WORKING PARTY FOR ORNAMENTAL PLANTS AND FOREST TREES

Forty-Eighth Session
Cambridge, United Kingdom, September 14 to 18, 2015

ADDENDUM TO
DEFINITION OF COLOR GROUPS FROM RHS COLOUR CHARTS

Document prepared by the Office of the Union

Disclaimer: this document does not represent UPOV policies or guidance


1. The Annexes to this document contain the following presentations on definition of color groups from RHS Colour Charts made at the forty-eighth session of the Technical Working Party for Ornamental Plants and Forest Trees (TWO):

- ANNEX I Definition of color groups from RHS Colour Charts: implementation for the purpose of variety denominations (Community Plant Variety Office of the European Union – CPVO)
- ANNEX II How varieties were allocated to color groups (Japan)
- ANNEX III Color: gaps in the RHS Colour Chart? (United Kingdom)
- ANNEX IV RHS Colour Chart (Royal Horticultural Society - RHS)

[Annexes follow]

ANNEX I

Presentation by the Community Plant Variety Protection Office of the European Union (CPVO)



Definition of colour groups from RHS colour charts :
implementation for the purpose of variety denominations

TWO 2015
Cambridge, 14-18 September 2015
Jean Maisson, CPVO

Colour groups from RHS colour charts

- The legal basis

Article 63.3 (f) of EU Council Regulation 2100/94

There is an impediment for the designation of a variety denomination where :

...

it is liable to mislead or to cause confusion concerning the characteristics, the value or the identity of the variety, ...

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Colour groups from RHS colour charts

- The denomination rules


Comment:

Descriptive characteristics of the variety are frequently indicated or suggested in the variety denomination. Such indications or suggestions are not suitable if they cannot be attributed to the variety, especially if the characteristics are mentioned in the technical DUS protocol for the species in question and do not match the description established for the variety.

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Colour groups from RHS colour charts

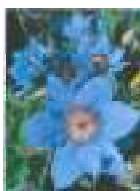
- Application documents, annexed photograph



Digital picture

Denomination proposal

'Blue Sky'




Printout

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Colour groups from RHS colour charts

- Reference: colour grouping of the RHS colour chart




- If the colour (mentioned in the TQ or observed in the DUS trial in case of doubt) is in a RHS group named 'Blue', denomination suitable
- RHS color groups subjective but clear reference for all stakeholders

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Colour groups from RHS colour charts

- Remark: different colour grouping systems at UPOV level, for different purposes (description, grouping for the organisation of the trial, denominations)
- E.g. Blue Pink and Light Blue Pink bluish pink but not blue



3. UPOV Color Groups

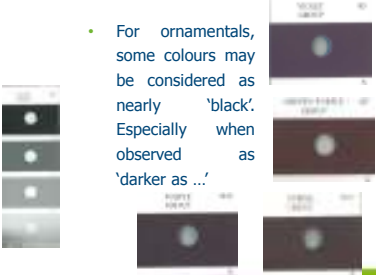
3.1 The UPOV Color Groups are as follows:

UPOV Color Group No.	English	French	German
1	white	blanc	weiss
2	light green	vert clair	hellgrün
3	medium green	vert moyen	mittelgrün
4	dark green	vert foncé	dunkelgrün
5	yellow green	vert jaunâtre	gelbgrün
6	yellow	jaune	gelb
7	orange yellow	jaune orangé	gelblichorange
8	orange	orange	orange
9	red orange	rouge orangé	rotorange
10	red	rouge	rot
11	pink	rose	rosa
12	light pink	rose clair	hellrosa
13	medium pink	rose moyen	mittelrosa
14	dark pink	rose foncé	dunkelrosa
15	purple	pourpre	violett
16	light purple	pourpre clair	hellviolett
17	medium purple	pourpre moyen	mittelviolett
18	dark purple	pourpre foncé	dunkelviolett
19	blue	bleu	blau
20	light blue	bleu clair	hellblau
21	medium blue	bleu moyen	mittelblau
22	dark blue	bleu foncé	dunkelblau

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Colour groups from RHS colour charts

- Some limitations
- What is pink?
- What is black?
- Black group difficult to use in respect of variety denominations
- For ornamentals, some colours may be considered as nearly 'black'. Especially when observed as 'darker as ...'



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Colour groups from RHS colour charts

- Could the 3 current grouping methods be simplified?
- The situation may need a clearer explanation

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Thank you for your attention.

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[Annex II follows]

ANNEX II

Presentation by Japan

How varieties were allocated to color groups

USE of RHS Colour chart

Kenji NUMAGUCHI PVP Office , New Business and Intellectual Property Division, Food Industry Affairs Bureau, MAFF, JAPAN
Sept.15,2015, Cambridge, UK. 48th TWO UPOV

As a examiner

There are two types of color characteristics in TGs.

- a: To describe Color chart reference number
RHS colour chart (indicate reference number)
characteristics : Leaf color, Flower color, etc.
- b: To describe Color name
white, yellow, yellow orange, orange, pink, red

in case of no example varieties

As a examiner

- In case of b, To describe Color name

There are different situations

Case 1 white, red → easy decision

Case 2 white, pink, red → rather easy

Case 3 white, light yellow, yellow, yellow orange
orange, orange red, red →

not easy in some cases

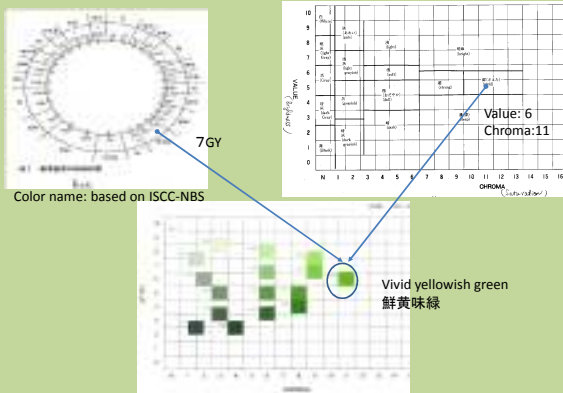
As a examiner

- Until 2007, JHS Color chart was used in Japan
We could decide Color name easily, because the each charts have not only color number and also color names(JP and EN)
- in Case 3
It was not difficult to estimate Color name by allocated color name with each color charts
For poor experienced examiners.

JHS color chart was developed for DUS examination by PVPO MAFF.(published by JP color research Inst.)



Color name allocation in JHS Color Chart



As a examiner

- Since 2007
JHS color chart was replaced by RHS colour chart, because of TGs harmonization with UPOV.
- In Present
As a reference of color name decision
Source: RHS colour groups and UPOV color groups



Color	Group
White	White
Yellow	Yellow
Orange	Orange
Pink	Pink
Red	Red
Green	Green
Blue	Blue
Purple	Purple

For breeder

- TQ characteristics

It is need to chose a color name from color groups in many cases.

How they decide color name

- Choose color name by their experience.
- (but color naming might be different by breeder, crops.)
- In case of less experience, If the color chart have color name, it will be helpful to choose color name.

Color name presence

Benefit

In case there are many color choice in TQ, color chart corroboration is effective for (less experienced) examiners and breeders.



The 100 UPOV 50 Colors	
Label	Sample
1	white
2	light green
3	medium green
4	dark green
5	yellow-green
6	yellow
7	light blue
8	blue
9	dark blue
10	purple

Absent color name in UPOV 50 colors

Example

orange yellow:

Rose Chr.49 Petal: color of basal spot

purple pink, red pink:

Alstroemeria: Chr.8 Flower: main color

brown yellow, red brown:

Lily: Chr.33 Tepal: color of papillae and/or spots

pink purple, blue purple:

Gladiolus: Chr.47 Anther: color of stom

other examples in ornamentals will be there

Absent color name in UPOV 50 colors

Choice of solutions

- These TGs, to consider in future revision
- Color name addition or modification of UPOV 50 colors
- Other possibilities?

Thank you for your attention.

ANNEX III

Presentation by the United Kingdom



- Can more colours be added to the RHS Colour Charts and them still remain easy to use and economical to produce?
- If this can be done, how can we go forward?
- During the Technical visit we would like discuss this.
- Perhaps look at some of the more challenging species?

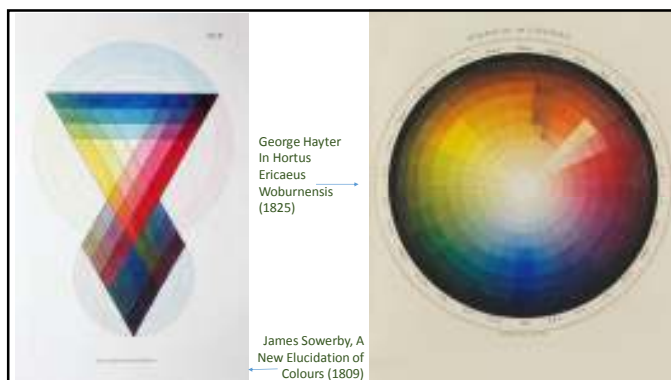
ANNEX IV

Presentation by the Royal Horticultural Society (RHS)



Scope of the presentation

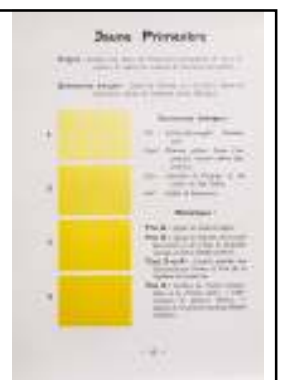
- The origin of a colour chart for plants
- The RHS's role
- How we produced the 6th Edition
- Looking ahead to the next edition



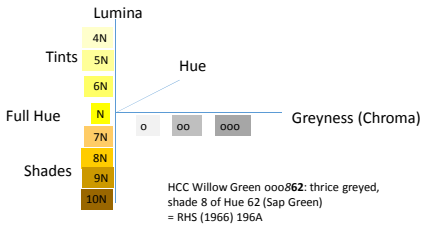
Origin of the Colour Chart



Répertoire de
Couleurs (1905)



HCC numbering system



The RHS Colour Chart

Not just for horticulturists...

- It has also been used for
- Checking the colour of ice cream
 - Colour matching for false eyes
 - Assessing the colour of monkeys' noses

Also used by the Californian Love Bird Society
As well as by designers and decorators



Editions of the RHS Colour Chart

Edition	Date	Number of colours	Price
1 st	1966	808	£4.45
2 nd	1986	808	£28.75
3 rd	1995	808	
4 th	2001	884	£135
5 th	2007	896	£170
6 th	2015	916	£199



The 6th Edition



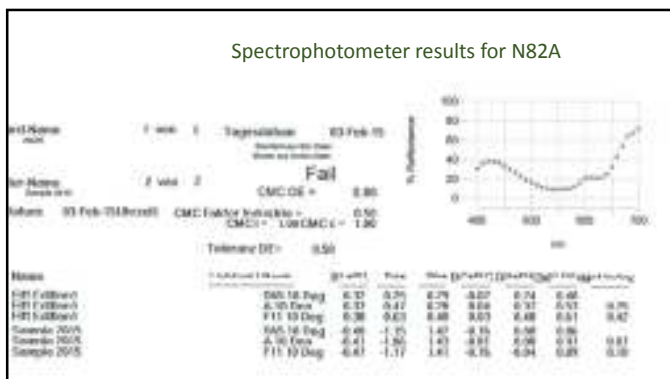
New for this Edition

Colour names added for each colour patch

Six new sheets of colours
N45; NN74; N75; N78; N95 & N147

And one revised sheet
NN137





Looking ahead to the next edition

- Missing colours – we've already started!
- Correct for "colour-drift"
- Re-analyse to check CIE co-ordinates
- Seek user feedback



Colour Groups

- HCC has **18** 'Colour families'
- RHS has **29** colour groups, based on the HCC colour families but adding 14 Greyed groups and Brown, White, Grey and Black
- UPOV has **50** colour groups, including greyed and tonal (light/dark) differences
- UPOV colour groups do not map consistently onto the RHS colour chart

[End of Annex IV, and of document]