

## Horticultural Colour Chart Names with Munsell Key

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A Munsell key is provided for the 800 samples in the two-volume edition of the *Horticultural Colour Chart* (HCC) published 1939/40 by the British Colour Council in cooperation with the Royal Horticultural Council. The charts are known also as the *Wilson Colour Charts*. References are included for keys published for other color charts.

THE Royal Horticultural Society of London, in cooperation with the British Colour Council, produced the *Horticultural Colour Chart* in London, 1939-1940, copyright by Robert F. Wilson. The same charts are published under the name of the *Wilson Colour Charts*. They are printed in two volumes, each volume containing 100 plates, each plate containing, under a single color name, three let-downs from a printed color: full, and 1, 2, 3.

As described by Wilson, the numbering system provides for full hues from 1 to 64; tints are prefixed by 600, lighter tints by 500, shades by 700, and darker shades by 800. For grayed hues the original color number is prefixed by 0. Thus Full Hue 24 once grayed will be 024, twice grayed 0024, and so on.

These color charts have found wide use, not only for horticulture, but for other purposes as well, and for that reason a Munsell key is provided for them in Tables I and II. Table I contains Munsell notations obtained by visual comparison to samples from the *Munsell Book of Color*, made on the basis of two sets of charts with a third set used for occasional check. Table II contains Munsell renotations converted from CIE data based on spectrophotometric curves that were supplied through the courtesy of W. E. K. Middleton of the National Research Council of Canada. These are for comparison to visual results (Table I) for the same HCC sample numbers. This key was used by Judd and Kelly to assign ISCC-NBS color designations to the color names of the *Horticultural Colour Chart* in their recent revision of the ISCC-NBS Color Designations.<sup>1</sup>

Publication of this key will be particularly useful to members of the American Horticultural Council which, with the American Orchid Society, is about to make available a new color chart, designed by Nickerson<sup>2</sup> to be produced by the Munsell Color

Company. (These charts are to be in the form of color fans. The first one, now in production, contains 40 leaves, each a constant hue displaying maximum chromas for value levels 3/ to 8/ or 9/, totaling 260 different colors, with large samples easily accessible for color comparison.) Each sample on the new chart will be identified by Munsell notation and ISCC-NBS name. One important purpose of these new fan charts is to provide users not only with a useful chart for everyday purposes but with one by which they may be led to a better understanding of color organization and specification and thus to a better utilization of whatever color charts may be available to them.

The key provided here, together with Munsell keys already published for Ridgway,<sup>3</sup> Plochere,<sup>4</sup> U. S. Textile Color Card,<sup>5</sup> Ostwald and Maerz and Paul *Dictionary of Color*,<sup>6</sup> and a privately published conversion for Ostwald for both the matte and glossy sides of the third edition of the *Color Harmony Manual*,<sup>7</sup> helps to make it possible for color workers to convert from one to another of these many standard reference works. When color charts are no longer available (as in the case of Ridgway), or are not easily accessible, such keys are particularly useful. CIE conversions for Munsell samples<sup>8-10</sup> and for the smoothed Munsell notation system have been published in this journal.<sup>11</sup>

<sup>3</sup> D. H. Hamly, J. Opt. Soc. Am. 39, 592 (1949).

<sup>4</sup> W. E. K. Middleton, Can. J. Research (F) 27, 1 (1949); Natl. Research Council, No. 1856.

<sup>5</sup> Reimann, Judd, and Keegan, J. Research Natl. Bur. Standards 36, 209 (1946), RP 1700; J. Opt. Soc. Am. 36, 128 (1946).

<sup>6</sup> D. Nickerson, "Interrelation of color specifications," Ostwald (for second edition, *Color Harmony Manual*), Table I; Maerz and Paul (first edition, plates 1-20), Table II. Paper Trade J. 125, 153 (1947); also U. S. Dept. Agriculture (processed), 45 pp., illus. (1947).

<sup>7</sup> Available from Container Corporation of America, 38 South Dearborn Street, Chicago 3, Illinois.

<sup>8</sup> J. J. Glenn and J. T. Killian, J. Opt. Soc. Am. 30, 609 (1940).

<sup>9</sup> Kelly, Gibson, and Nickerson, J. Research Natl. Bur. Standards 31, 55 (1943), RP 1549; also J. Opt. Soc. Am. 33, 355 (1943).

<sup>10</sup> Nickerson, Tomaszewski, and Boyd, J. Opt. Soc. Am. 43, 163 (1953).

<sup>11</sup> Newhall, Nickerson, and Judd, J. Opt. Soc. Am. 33, 385 (1943).

<sup>1</sup> K. L. Kelly and D. B. Judd, "The ISCC-NBS method of designating colors and a dictionary of color names," Natl. Bur. Standards Circ. 553 (1955), illus. (Obtainable from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. \$2.00 per copy.)

<sup>2</sup> D. Nickerson, "Modern color science is the background for a new and useful color chart for horticulture," Proc. Am. Horticultural Council (1956); also U. S. Dept. Agriculture (processed) (1956), 11 pp.

TABLE I. Horticultural Colour Chart (HCC) Names with Munsell Key. These Munsell book notations (HV/C) were obtained by visual comparison to samples in the Munsell Book of Color. For each color name there are three let-downs from the Full printed color: 1, 2, 3.

| No. | Color Name     | Full |   |    | 1  |   |   | 2  |    |   | 3 |    |    | No. | Color Name | Full |    |   | 1 |   |   | 2 |   |   | 3 |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  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