

Determination of soil colour :

Soil colour is described in two complementary parts, viz. Munsell notation and colour name. Munsell notation is a specific form of writing the three variables. The order is hue, value and chroma with a space between the hue letter and the succeeding value number and a virgule between the numbers of value and chroma (Hue value/chroma, i.e. 10 YR 4/5). The colour name for the given soil is read directly from the page on opposite side of the colour chart as per the colour values. For each colour chip, the standard colour names are given on these pages.

Procedure :

1. Take a soil sample and select an appropriate hue chart.
2. Determine the colour chip with which soil colour closely matches by looking through the holes meant for the purpose and moving the soil sample vertically or horizontally.

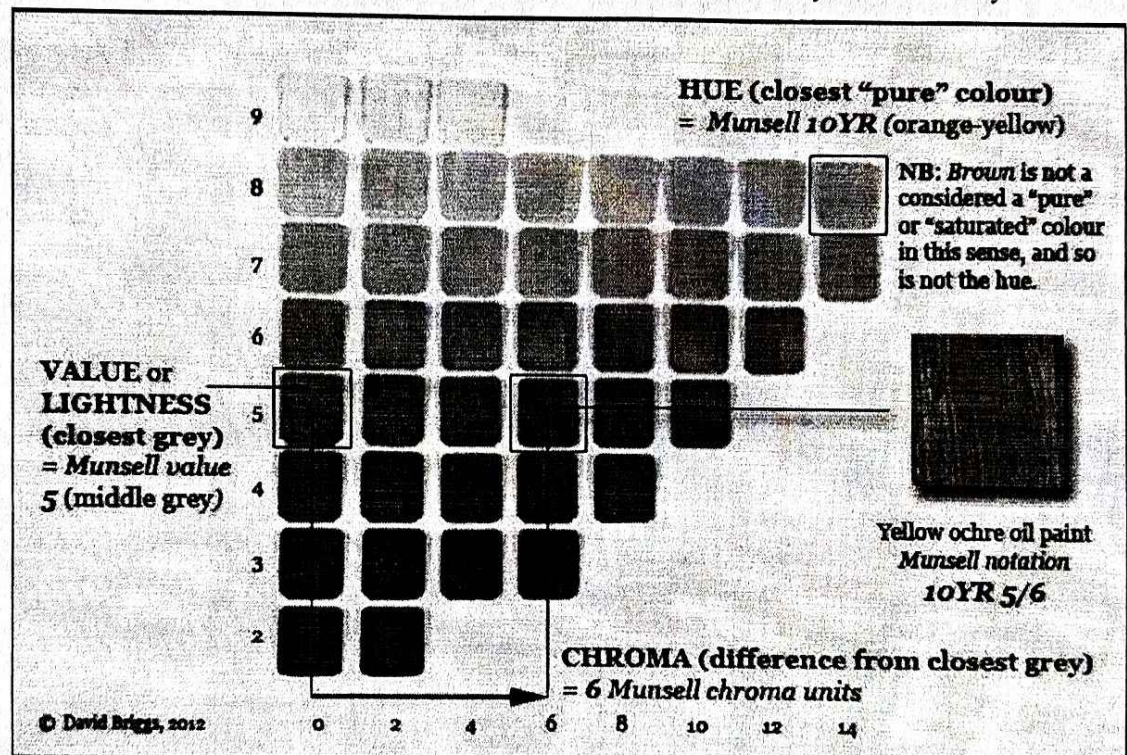


Figure : Description of Munsell colour system by an example

Munsell colour system :

Soil colour should be determined on moist surfaces of freshly broken (not sliced) soil samples. The soil colours are best determined by the comparison with the Munsell colour. This colour chart is commonly used for this purpose the colour of the soil is a result of the light reflected from the soil. In this method, colour is determined by comparing soil with standard colour chips of the Munsell charts. The Munsell soil colour charts include 196 standard colour chips systematically arranged on seven charts. Soil colour rotation is divided into three parts:

- **Hue** - It denotes the dominant spectral (rainbow) colour (red, yellow, blue and green). It is related to the dominant wavelength of light. Hue is indicated by the capital letters, such as R for red, Y for yellow, YR for colour between yellow and red and so on. The variation within a hue band is indicated by a number as prefix to the hue letter. The number varies from 0 to 10 with an equal interval of 2.5, i.e. 2.5 YR, 5.0 YR, 7.5 YR and 10 YR.
- **Value** - It denotes the relative lightness or darkness of a colour (the total amount of absorbed or reflected light) and it can vary from 0 (for pure black) to 10 (pure white).
- **Chroma** - It represents the relative purity of the spectral colour (strength of the colour) and increases with decreasing greyness and can vary from 0 to 8.

