

Supplemental 1 Colorimetric variables extracted from smoothed spectral reflectance curves used in linear discriminant function analyses. Descriptions are based on values extracted using the 'pavo' package (Maia et al., 2019) for color analysis in R and Montgomerie (2006). All colorimetric data extracted and analyzed for each individual are labeled with the shorthand metric indicators 'B2', 'B3', and so on.

Metric	Description
'B2' Mean brightness	Mean relative reflectance over the entire spectral range.
'B3' Intensity	Maximum relative reflectance - reflectance at wavelength of maximum reflectance.
'S1U' Chroma UV	Relative contribution of UV spectral range to the total brightness (UV: 300-400nm)
'S1Y' Chroma Yellow	Relative contribution of yellow spectral range to the total brightness (Yellow: 550nm-625nm)
'S1G' Chroma Green	Relative contribution of green spectral range to the total brightness (Green: 510nm-605nm)
'S1B' Chroma Blue	Relative contribution of blue spectral range to the total brightness (Blue: 400nm-510nm)
'S1R' Chroma Red	Relative contribution of red spectral range to the total brightness (Red: 605nm-700nm)
'S6' Contrast	Reflectance maximum - Reflectance minimum
'S7' Spectral saturation	Difference between the relative reflectance before and after the wavelength at which reflectance is halfway between its minimum and its maximum
'H1' Peak wavelength hue	Wavelength of maximum reflectance