Is Your Image a True Monochrome?

Based on the number of disqualified images submitted to our 2021 Monochrome, we felt that it was necessary to develop this article to help educate photographers on how to ensure their images are, in fact, monochrome.

The majority of monochrome images are created in post processing applications by converting a colour image to monochrome. As the judging panel members discovered not all of these converted images resulted in an image deemed to be truly monochrome.

A monochromatic colour scheme consists of a selected colour (hue) with variations of this colour created using shades (adding black), tones (adding gray results in a less saturated colour) and tints (adding white).

For a black & white image, the selected colour is grayscale with varying shades, tones and tints ranging from black to white.

Any colour can be selected for a monochrome image but must ONLY have variations of this selected colour.

The chart below provides examples of a selected colour with varying shades and tints.

← adding black			gray scale	adding white →		
#000000	#2a2a2a	#555555	#7f7f7f	#aaaaaa	#d4d4d4	#ffffff

← adding black			red	adding white →		
#3f0000	#7f0000	#bf0000	#ff0000	#ff3f3f	#ff7f7f	#ffbfbf

← adding black			blue	adding white →		
#00003f	#00007f	#0000bf	#0000ff	#3f3fff	#7f7fff	#bfbfff

← adding black			yellow	adding white →		
#3f3f00	#7f7f00	#bfbf00	#ffff00	#ffff3f	#ffff7f	#ffffbf

| ← adding black			Sepia	adding white →		
#361f09	#6c3f13	#a25f1c	#d87f26	#e29f5c	#ebbf92	#f5dfc8

An image which contains more than one colour or variation from the selected colour is not considered a monochrome image and for competition purposes would be deemed a colour image.

An unskilled eye may not detect the all the possible different colors and/or variations in a monochrome image. Whereas, a skilled and experienced judge is more able to detect deficiencies within an image.

Therefore, photographers are encouraged to consider to use one of the many colour extraction applications available on internet. The more website applications are: Adobe Color (https://color.adobe.com/create/color-wheel), TinEyeye Color Extraction (https://labs.tineye.com/color/) and Colormind extraction (http://colormind.io/image/)
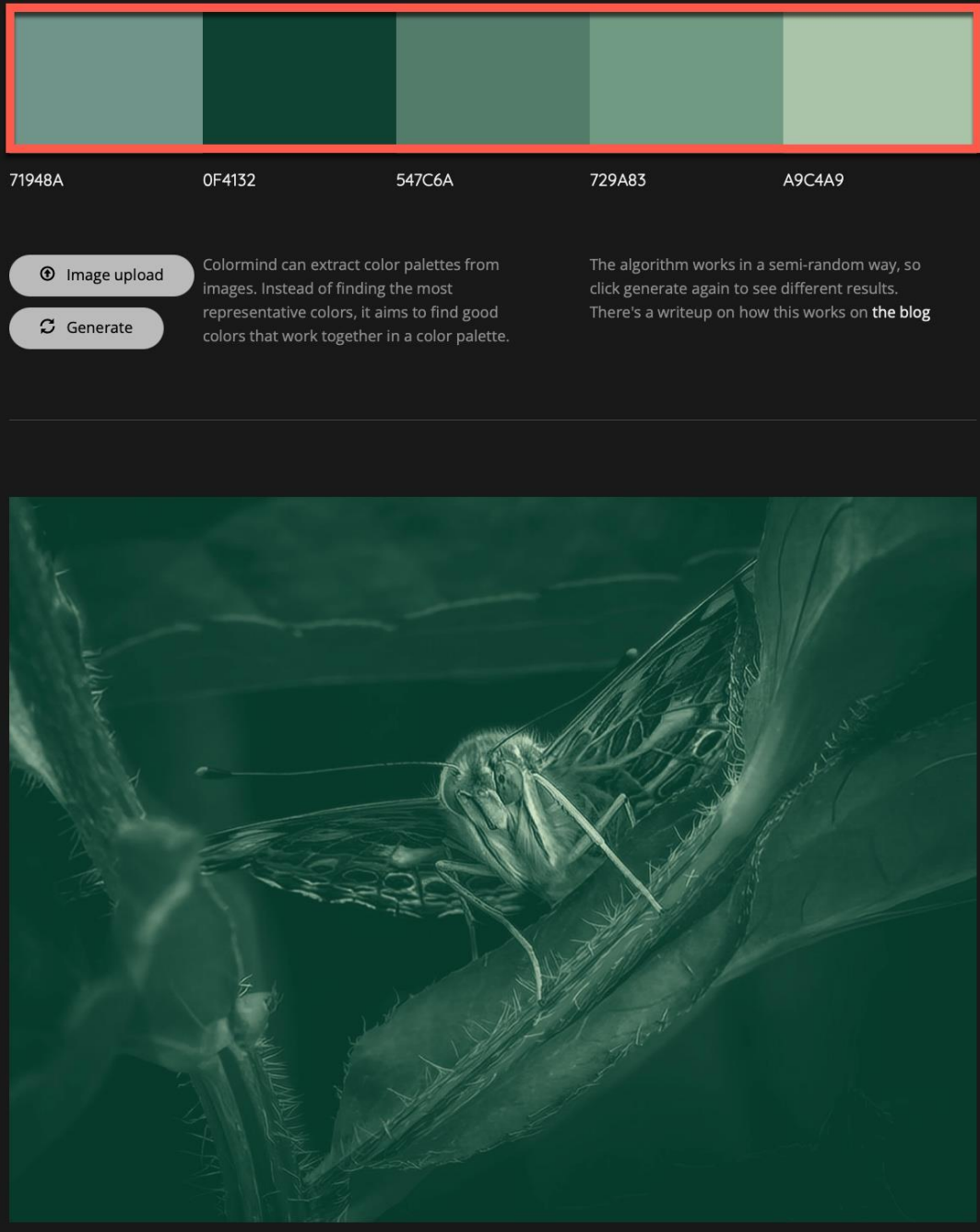
For the purposes of this article, we use the Colormind website Color extraction website application extracts the different colours found in an image being analyzed. The different colors and variations of the selected color are shown above each image.

Three images are presented below and have been analyzed using the Colormind website application.
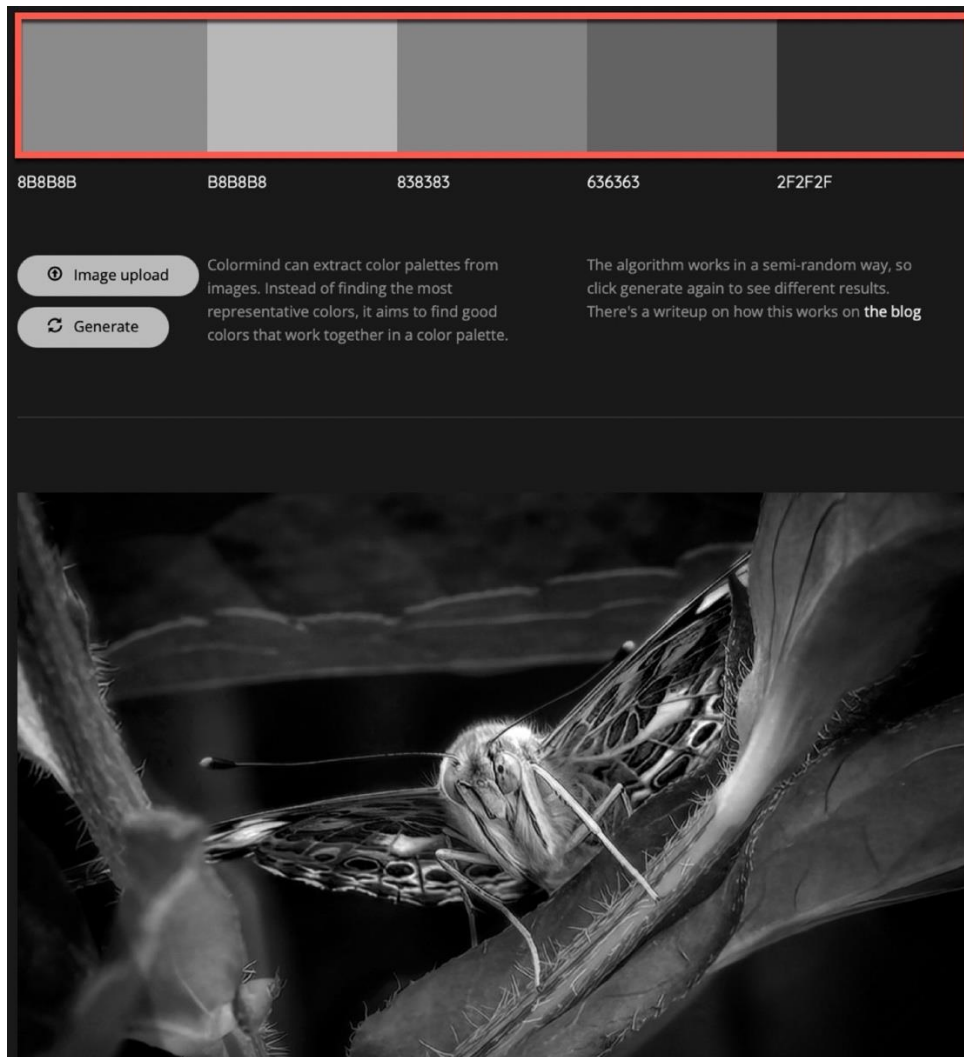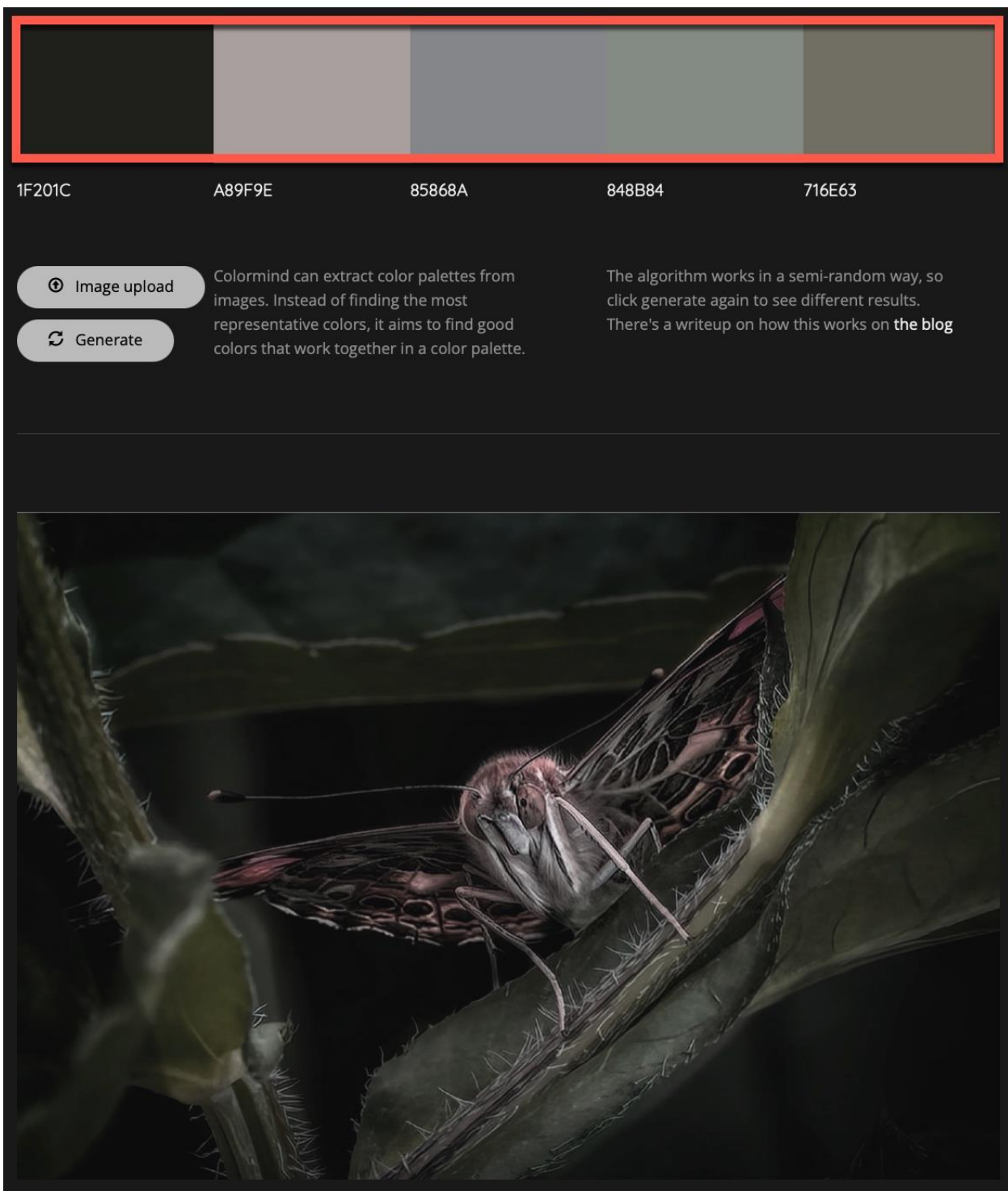
The above image is a monochrome image because all colors are a variation of a grayscale. Noted image would be commonly referred to as a black & white image.

The image below has green as the selected colour with variations of green. Therefore, this image is deemed a monochrome image.

The following image contains multiple colours which are not consistent with a single selected colour. Therefore, this is deemed a colour image and not a monochrome image.

1F201C   A89F9E   85868A   848B84   716E63

⊕ Image upload

Colormind can extract color palettes from images. Instead of finding the most representative colors, it aims to find good colors that work together in a color palette.

The algorithm works in a semi-random way, so click generate again to see different results. There's a writeup on how this works on **the blog**

↻ Generate

In the 2021 Monochrome competition, the judging panel detected images with isolated colours inconsistent with the remaining colours in the image.

It would appear that a colour bleed through from the conversion process from a colour to a monochrome image. Some experts have suggested that the areas in question were heavily edited prior to the conversion process. Not flattening the image layers before converting can also cause issues.

Three samples images where this bleeding occurred are included below.
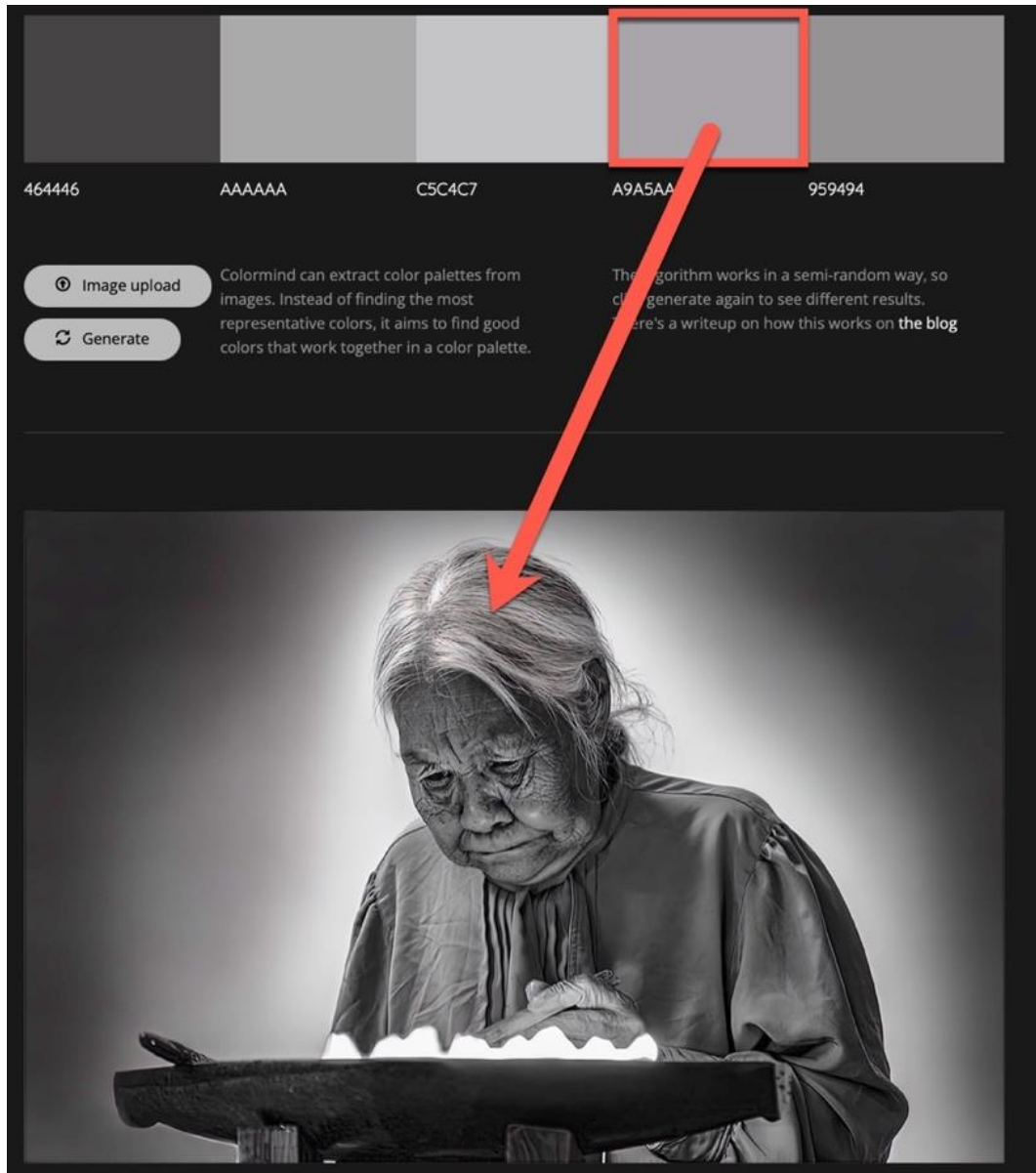
Judges detected a colour in the woman's hair which was inconsistent with the other colours in the image. Colormind and Adobe Color colour extraction applications confirmed the observations of the judges.
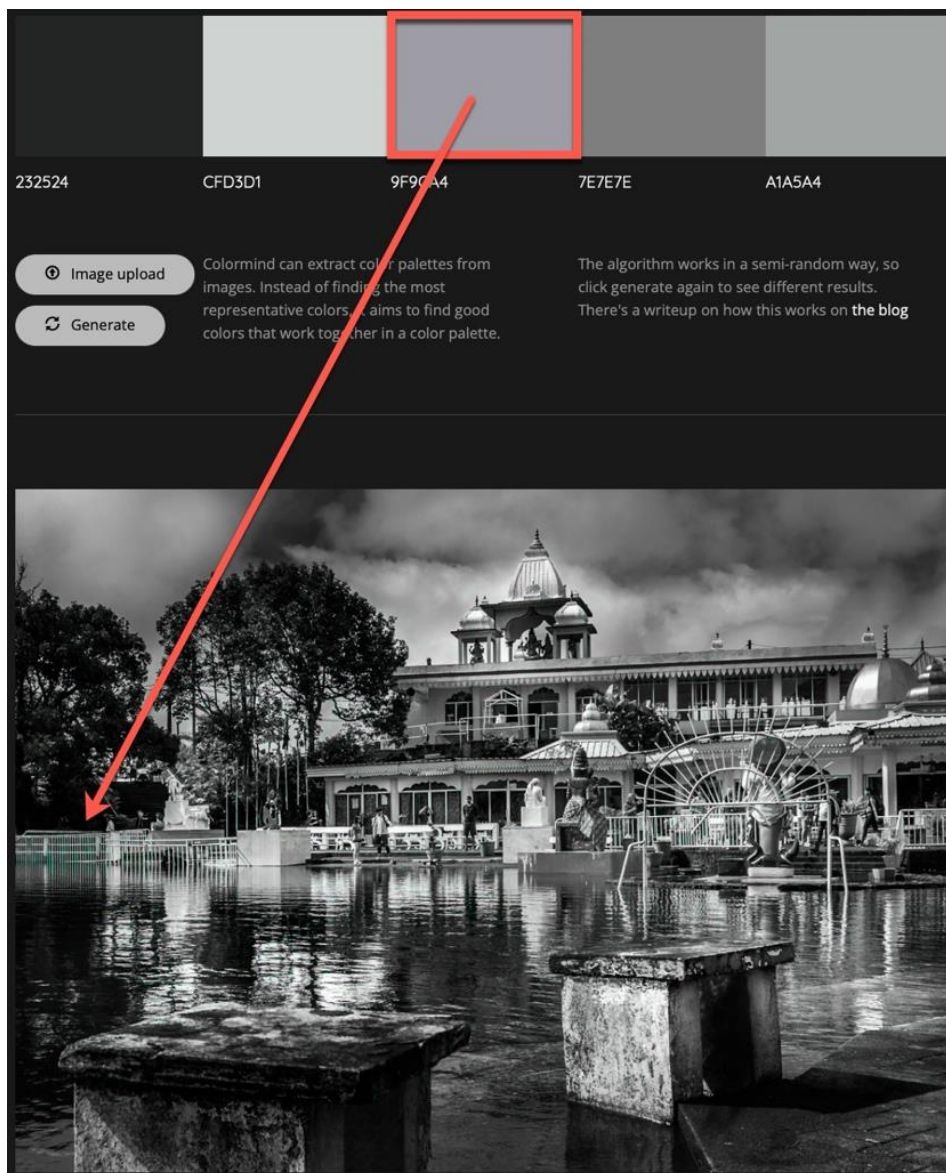
In the above image, the judges detected the inconsistent colour in the fence as highlighted in the air above. Colormind and Adobe Color extraction confirmed the observations of the judges.

To avoid your image receiving a lower score than expected or having the image disqualified in a monochrome competition, we encourage all photographer to consider using one of the color extraction website application prior to submitting their images into a monochrome competition.

By using a color extraction application, a photographer can refine their conversion process or consider using a different pre-set.