

An Intersectional Point of View

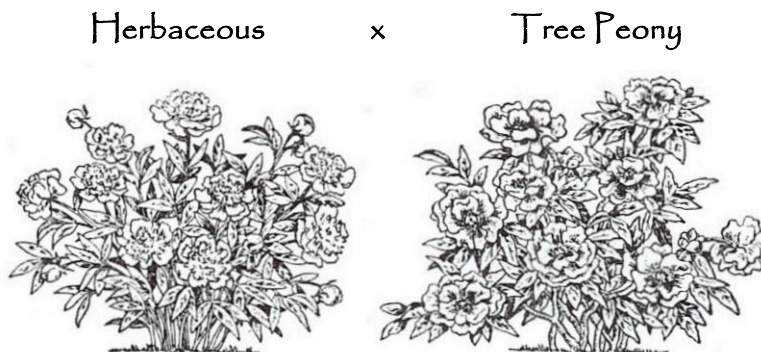
APS Bulletin Number 337

March 2006

Tips for Photographing Intersectional Hybrid Peonies

**Donald R. Smith, APS Director
West Newton, Massachusetts**

As I write this article, it is early January and other than attending to my seeds (which I germinate indoors) once a week or so, there is little to do but sort through and organize photographs. As I look through my photographs I am reminded of some of the difficulties associated with taking really good pictures of the intersectional hybrids. Although many of these difficulties are not limited to the intersectional hybrids, there are a few particular challenges associated with photographing the bright yellow flowers so common among the intersectional group.



Let me start by saying that I am by no means an expert in photography. Like most of you, I am simply an amateur trying to take the best photographs that I can. By applying the old fashion method of trial and error, I have learned a great deal over the last few years and as a result have been able to improve my photographic skills considerably. The two biggest challenges for me have been eliminating solar glare and obtaining accurate flower colors. Both of these goals seem to be especially difficult to achieve when trying to photograph mostly yellow flowers. Although I have yet to find complete solutions, I have made some progress on both fronts and would like to share with you some of what I have learned.

First, I will address a few of the difficulties associated with obtaining accurate colors. This is an issue common to all color photography, but is especially important in flower photography where accurate depiction of true flower colors is often so essential. This problem can be especially severe with film cameras, where color distortions vary greatly with film type and speed. Digital cameras also exhibit significant color distortions but,

unlike photos obtained from film, can be more easily corrected on your computer prior to printing. Nowadays it is fairly simple and inexpensive to convert the photos from your film camera into relatively high-resolution digital images stored on a CD. This is easily accomplished for only a few dollars extra when you have your pictures developed and printed at the local market or pharmacy. Once your photos are on a CD they can be handled just like any other digital images.

One of the most common color distortions results in pictures that contain too much blue. This problem is caused by digital focal plane arrays or films that are overly sensitive to the blue part of the light spectrum. You can diagnose this distortion in your photographs by looking for foliage, which appears bluish green, and/or pinks that appear violet or slightly blue. Often this extra blue is fairly subtle and may not be immediately obvious, but the off-color, slightly bluish foliage will usually give the problem away. This effect often makes pinks look prettier than they really are and thus you may want to believe that the pictures are accurately representing the flowers even when they are not.

When photographing bright yellow flowers, this effect is usually much less subtle. I was surprised to discover that just a little extra blue can make yellows appear much paler than they actually are. In extreme cases, bright yellows can appear cream or even white. As a result, it is quite important to take careful and accurate garden notes on flower color so that these can later be compared with the photographs instead of relying exclusively on your memory of the flower and foliage colors. Since flower color is often a major factor in our choices of which varieties to purchase, it is fairly important for us, as photographers, to try to get the colors as accurate as possible.

Fortunately, with modern digital photography this is no longer such a difficult problem to fix. Most computers sold today come with some type of basic photo processing software that is pre-installed. The majority of these photographic software programs allow the user to make simple adjustments or enhancements to their photographs. For example, I have a program called Arcsoft Photostudio 2000 by Arcsoft, Inc. (www.arcsoft.com). Adobe Photoshop (adobe.com) in a limited version is another photo processing software package commonly installed on many new computers. One of the most basic adjustments that can be made with these programs is a color correction (sometimes called a tone adjustment). A simple color correction allows the user to increase or decrease one of the three basic colors (Red, Green, or Blue) relative to the others. Just look in the menu bar at the top of your screen for an edit or adjustments button. Pull down the menu and click the appropriate option. Don't be afraid to experiment with the adjustments. You can always undo whatever changes you make, then redo and undo them again as many times as you like to be sure that the correction is giving you the effect that you want. Once you are finished with the corrections, save the corrected image using the "save as" option under a different file name (I usually just add a "c" at the end of the original name) and you will then have both the original (unchanged) image as well as the new color corrected one.

I have found that nearly all of my photographs have too much blue in them. I have also determined that simply reducing the amount of blue by as little as 5-15% usually gives a much truer overall color balance that simultaneously restores the true deep yellow petal colors, eliminates the bluish tones from the pinks and returns the foliage to its natural dark green color. This correction is analogous to putting a blue filter on your camera except in

this case the filtering is fully adjustable and is performed after the picture is taken rather than before.

Solar glare can be a very annoying problem that is significantly more difficult to fix. In this context, glare is sunlight that reflects off of the flower petals and into the camera. The lighter the petal color, the less sunlight is absorbed by the petals and thus more of the sun's rays are reflected into the camera. When the sun is directly overhead, the upper petals are in position to reflect a lot more light than the lower ones and, therefore, often appear much brighter in photographs. This results in a picture where the lower part of the flower looks fine, but the upper part appears much brighter and has lost most of its color. This frequently ruins an otherwise beautiful shot.

Once significant glare is present in a photograph it is extremely difficult to eliminate, so it is best to try to minimize or eliminate it before taking your picture. This can be done most effectively by avoiding direct sunlight. One approach is to wait for a cloudy or overcast day to take your pictures. If this is not possible, then try to wait for a large cloud to drift by and at least temporarily shade the sun. Utilizing clouds on sunny days can provide some of the best photographic conditions, since the flowers tend to stay fully open while the sun is behind the cloud, which is not always the case on mostly cloudy or heavily overcast days. For those times when nature will simply not cooperate at all, you may need to resort to artificial ways of blocking the sun such as by using a large umbrella. I have found this to be a very effective way to reduce glare and thus get much better pictures on bright sunny days. The umbrella effectively blocks the direct (overhead) sunlight while still allowing plenty of indirect light from all sides and below. On a calm day you can simply hold the umbrella over the plant with one hand while taking the picture with the other. However, this can be more than a little tricky on windy days. For these times, you may prefer to use some type of stand for the umbrella or a tripod to hold the camera or both. Although it can be extremely challenging and frustrating to deal with such windy conditions, it is usually worth the extra time and trouble in order to get a glare free picture.

As stated earlier, removing glare from your photos is very difficult. The main reason for this is that solar glare is usually isolated to just one portion of the image (i.e., the upper petals of the flower) whereas most of the corrections that you can make to your pictures affect the entire image in pretty much the same way. Therefore, normal tone or brightness adjustments don't really do much to reduce the glare relative to the rest of the image. On the other hand, glare seems to be caused primarily by the blue part of the spectrum (i.e., blue light is reflected by the flower petals more efficiently than green and red). Thus, reducing the proportion of blue in the image will also reduce the amount of glare. However, since the glare is so bright compared to the rest of the image, in order to substantially reduce the glare you would have to reduce the amount of blue by so much that the yellow colors become much too yellow. So there is only so much you can do without making the image look even worse by badly distorting all of the colors.

Fortunately, as it turns out, it is primarily the high frequency end of the blue spectral band that seems to be responsible for the majority of the glare. This is fortunate because some photo processing software programs break each color band into three parts (high, middle and low) and allow you to adjust each part of each color separately. These three sub-bands are generally referred to by the photographic terms, highlights, mid-tones and shadows.

This is much the same as the treble, mid-tone and bass adjustments on the graphic equalizer on your home or car stereo system. In this case, the highlights refer to the high end of the frequencies in that color whereas the shadows refer to the low frequency side of the band. By making fairly large (30-70%) reductions to only the blue highlights without reducing the blue mid-tones and shadows, it is possible to significantly reduce the glare from the upper petals with little or no noticeable effect on the other colors in the image. Recently, I was able to use this method very effectively to “save” a number of outstanding pictures that I originally thought were ruined due to the presence of glare.

I hope some of you will be adventurous enough to try one or more of these tips during your next garden photo session or better yet on photos that you already have. Don't be afraid to experiment a little with your pictures, you just might be pleasantly surprised by how much better your photos can look.