

*I really want to have live plants in my office, but I can't get anything to survive. Can you suggest something that will survive in low light or should I just buy plastic plants?*

Before you resolve yourself to plastic plants, try *Zamioculcus zamiifolia* (ZZ Plant). There are actually several good choices for low light plants, but nothing compares to the ease of growing a ZZ Plant. The glossy leaves have an attractive sheen making the plant look like it has been polished with leaf shine (a product I do not recommend using). The thick, swollen stems help retain moisture which means ZZs have minimal water requirements. In low light, you do not need to water ZZs more than once every two weeks. If you forget a watering, it will easily survive for a month or more without water. Fertility requirements are also low, but if you add a water-soluble fertilizer (like our 20-10-20 Brookwood Fertilizer) once every month or two it will help keep the ZZ from growing as slowly as it would otherwise. Considering ZZs typically have no insect or disease problems, the slow growth is the only negative thing I can say about the ZZ Plant.

*I purchased an orchid from the Brookwood store in Old Town Spring. Once the orchid stopped blooming I repotted it into an orchid pot. The orchid has now tripled in size and is overpowering the pot and the weight is causing the pot to tip over. Can I split this orchid? If so what is the procedure?*

Orchids can be and should be divided every couple of years after blooming. Start by disinfecting some pruning shears big enough to cut smoothly through the base of the orchid. I recommend using Consan Triple Action 20™ to clean the pruners. Take the orchid out of the existing pot and knock off the bark media. Orchids spread by rhizomes, creating multiple shoots in the pot. Find a middle point of the clump and cleanly cut the rhizome to divide the orchid. You can either put a powder rooting hormone (like Rootone™) on each of the divisions before repotting or you can repot and then use a root stimulator solution to water them after planting. If you have Consan Triple Action 20™, mix 2 teaspoons of Consan™ into your gallon of root stimulator solution to promote rooting and prevent bacteria or fungal pathogens at the same time. After watering with this solution, you should not need to water again for 7-10 days. Resume normal watering after this period. It may take about a month for new roots to develop.

This method is nearly always enough to get the job done right. But if you use Consan Triple Action 20™, the label has a recommendation for use on orchid divisions that involves the extra steps of soaking the orchid both pre and post dividing as well as soaking the new bark media and wetting your hands with the Consan™ disinfectant before beginning. If you want to be certain that you do not spread any diseases to the orchid divisions, this is a very thorough process that could prove to be a difference maker if you are willing to take the extra steps.

*I enjoy planting fall annuals, but options seem limited to pansies, kale, snapdragons, and alyssum. Can you suggest any others?*

You have listed the most commonly used fall annuals for a reason; they are tested and generally reliable. But if you want to try adding some variety to your fall planting, there are some other good options. Results can be somewhat mixed with less-common choices as plant growth during the winter varies based upon night temperature lows and exposure to the elements. I mentioned *Erysimum* 'Citrona' in last month's article and it is one of

the first choices I would recommend. For full sun exposures, I like the yellow and orange Erysimum edged with blue Pansies or Violas. 'Citrona' will bloom throughout the winter until late April to early May. Another winter annual providing bright yellow and orange blooms is *Calendula*. The most commonly available cultivar is 'Bon Bon', in either yellow or orange. 'Bon Bon' is an upright plant reaching about 12" tall with large double flowers that can withstand light freezes. While the flowers of 'Bon Bon' are larger, my favorite *Calendula* is 'SummerLovers Skyfire Yellow'. The daisy-like flowers are more profuse on a more cold-tolerant, disease resistant, spreading plant. Don't let the name fool you; even 'SummerLovers' will not withstand our summer heat and should be replaced in the spring. If yellow and orange does not fit your fall color pallet, try planting *Linaria*. 'Enchantment' and 'Fantasy' are good cultivars for our area. 'Enchantment' has bicolor flowers in vibrant magenta and orange. 'Fantasy' is available in about ten different colors. Both cultivars grow to a height of 12-15" and bloom heavily during cooler months with a pleasant fragrance. Temperatures in the upper-20s will not hurt the blooms. If damaged by a hard freeze, both cultivars recover quickly and will last until killed by heat. For partial shade areas in the fall landscape, try planting *Cyclamen* or *Primula obconica*. Plant both in well-amended organic soil with good drainage for best results. *Cyclamen* blooms come in an increasing number of colors in shades of red, pink, lavender, and white. By looking at the unique blooms and heart-shaped foliage of *Cyclamen*, it is hard to imagine they make a good landscape plant but they actually do quite well in good soil during our mild winters. They are most frequently recommended for shade, but at Brookwood we finish our *Cyclamen* in sun during the fall, making their use more versatile in the home landscape. The best sun exposure for maximum bloom power and performance is morning sun with afternoon shade. This is also the best sun exposure for *Primula obconica*, sometimes called German Primrose. *P. obconica* is in my opinion the best landscape primrose and is available in a variety of colors. Primrose is typically not available until mid-winter. Other options for you to consider include Dianthus, Nemesia, African Daisy, Diascia, Dusty Miller, Lobelia, Stock, and Poppies.

*You recommended I use a 3-1-2 ratio fertilizer to help force foliar growth on a potted Bougainvillea. Can I use 20-10-20 fertilizer? What is the difference?*

If you have water-soluble 20-10-20 on hand, that will work fine to help leaf out the Bougainvillea. In this case, the biggest difference between 20-10-20 (a 2-1-2 ratio) and a 3-1-2 ratio (like 21-7-14) fertilizer is the amount of nitrogen in the solution. The 3 macronutrient components of fertilizer ratios (Nitrogen, Phosphorous, and Potassium, or NPK) complete the same functions within the plant so once you know what nutrient is lacking, you can better determine how best to achieve the desired response from your plants. While it is not the most scientific approach, it is fun to be able to visually recognize specific nutrient deficiencies. I encourage you to learn about plant nutrition and experiment; just remember too much fertilizer is never good. In a simplistic overview, nitrogen is a component of the building blocks of photosynthesis and thus increases foliar growth. Phosphorous promotes blooming, fruiting and rooting. Potassium is considered the "regulator" nutrient and keeps elements in balance within the plant, ensuring proper growth and fruit development, as well as increasing drought and disease resistance.

If you ever have trouble getting to sleep at night, ask me to tell you about the effect soil pH and ion exchange has on nutrient uptake.