

Our speaker for this month was Joyce Fowler of Joy Orchids. Joyce got into the orchid growing business by accident. After losing her good paying job with a local business due to misappropriation of company funds she began cleaning houses to earn income. Through her new job of cleaning houses she met an older gentleman who grew orchids. One of her first tasks for the gentlemen was cleaning and sterilizing a pile of plastic pots that stood 10'x10'x4'. It took her nearly two months of consistent work to clean that large pile of orchid pots. After completing this arduous task the gentlemen said to her, "because of the patience and perseverance you have shown in doing this hard job I can make an orchid grower out of you." She decided to leave her job of cleaning houses behind and entered an apprenticeship with the gentlemen to learn the orchid business. Joyce began with learning to divide orchids, how to water and fertilize them, and how to treat for pests. She eventually took over more involved tasks such as recovering the greenhouses with shade cloth, working orchid shows, and taking over his cut flower sales route. As his health began to fail he approached Joyce about buying his orchid collection, and thus Joy Orchids was born. Today she gave a discussion on the basics of *Cattleya* orchid care.

The original orchid collection when Joyce took over the business consisted of 90% *Cattleya* orchids. Even though they only bloom once a year and their flowers are not nearly as long lived as other orchid genera they are still to this day Joyce's favorite orchids. The most important thing to understand about growing *Cattleya* orchids, that Joyce cannot stress enough, is that they prefer being grown root bound in their pot. You will find that when these plants are snug in their pots they will give you the best growth and flower production. If you over pot your *Cattleyas* they will continue to grow and produce new roots, but the plant may go as long as 2-5 years before flowers are produced. For optimum growth and flowering it is essential for these plants to feel secure and for their roots to touch the sides of the pot.

When watered or during application of fertilizers, *Cattleya* orchids prefer to be absolutely drenched followed by a period of drying out between events. They do not like to constantly be wet. If you are currently growing any of your *Cattleyas* outdoors, please bring them inside and allow them to dry out – especially with recent heavy rainstorms. They are capable of surviving heavy rain events if grown in a coarse enough potting medium, but they sure are not happy about it. During the summer months Joyce typically waters her orchids once every 7 days and applies fertilizer to the plants with every other watering. During the winter months, watering and fertilizer application occurs as the weather dictates. Typically watering is reduced to once every 10-14 days when the weather is cooler. However, once temperatures drop to 40°F or below it is important not to water your plants until things warm up. If you allow your plants to become and/or remain wet as temperatures drop this can make them susceptible to fungal infections that are capable of killing your plants.

To fertilize their plants they use Peters Professional 20-20-20 at a 2 teaspoon/gallon solution. Joyce refers to this balanced, all-purpose fertilizer solution as the "steak and potatoes for your plants." It provides the necessary nutrients for root and leaf growth. To encourage blooms on their plants they utilize Peters 10-30-20 fertilizer. As professional growers they utilize the boost in phosphate from this fertilizer to provide increased vigor to their plants and to encourage regular blooming. She says that if you just keep your plants healthy they will go into bloom when they are supposed to. Twice a year they apply Epsom Salts to their plants at a rate of 2 teaspoons/gallon. They do this on advice received from Louis Del Favero that this practice of added magnesium helps the plant to receive the fertilizer solutions better. To avoid excess salts from accumulating within your orchid pots it is important to flush the pots with fresh water 4-5 days after applying Epsom Salts.

At her nursery they have had success in using insecticidal oils to eradicate pests such as scale. They use Ultra-Pure Oil Horticultural Insecticide, which is a miticide and fungicide made by BASF. She mixes 2 ounces of the Ultra-Pure Oil with one gallon of water and applies the product to her orchids using a fine mist sprayer. They apply the insecticidal oils to the plants on a seasonal basis as a preventative measure. Joyce recommends applying an insecticide, such as Malathion, to your orchid collection just after local azalea plants have finished their blooming (usually February-March). The reason being that thrips are highly active during early spring and the insects will be in search of flowers to enjoy. Preventative spraying of your orchid plants could avoid unsightly damage to flowers caused by these pests.

When dividing your plants look for the 'natural break' to cut along when creating your divisions. To ascertain where the 'natural break' is look for the oldest pseudobulbs, which will typically be smaller and concentrated towards the center of the plant with the larger, newest growths towards the outside. Whether dividing or repotting your plants, remember to sterilize your tools after making cuts to avoid spreading diseases or virus from one plant to another. Joyce uses a 10% bleach solution to sterilize the scissors she uses to cut her plants. The easiest way to create a 10% bleach solution is to use a container that is exactly one cup, add 1 ounce of bleach, and then fill to the top with water. After making all of your cuts on a plant place your cutting utensil(s) in the bleach solution for a minimum of 10 minutes before proceeding to the next plant. When repotting your *Cattleyas* it is essential to remember that the plants want to become established in a smaller sized pot than you can ever imagine. For example, if you were to divide a 6" *Cattleya* in half (creating 2 new plants) do not pot each new division into a 6" pot. Joyce suggest potting each plant into a smaller 5" pot. You have to remember that you now have half the sized plant that you had originally and you must pot down into a smaller sized pot. Make sure when repotting to replace your plant tags as they become brittle over time and can break apart. For newly repotted orchids Joyce applies a micronutrient product, SUPERthrive, to stimulate new root growth on the plant. Some of us members in the club use a similar product that contains chelated nutrients by Laura Newton called Plant Potion #9. An additional step that Joyce will do during some of her repots is to spray plant roots with Physan 20 (2 teaspoons/gallon) as a preventative measure against root rot.

-cattleyas can be great orchids to grow, not for everyone, but beauty and mystique in standard cattlya flowers