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Dolomite on Paphs

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Remember that old expression, "There is no such thing as too much chocolate"? That same idea seems to apply when it comes to Paphs and calcium carbonate (Lime). Many years ago, Paul Phillips of Ratcliff Orchids, told me that they could not repot Paphs as frequently as most hobbyists so they just added a teaspoon of dolomite limestone to each pot and it had the same effect as repotting.

There is nothing fancy or expensive about dolomite limestone, which comes in 50-pound bags that cost just a few dollars. Perhaps that is why it has never been marketed to orchid hobbyists. Typically it is used to raise the pH of the soil on our lawns so that nutrients are available to the grass. Liming is also called sweetening the soil. Dolomite limestone contains not only calcium carbonate, but also magnesium. All limestone rock contains calcium, but only certain deposits have the combination of calcium and magnesium, which is called dolomite limestone. There are also minor amounts of other nutrients as well, but it is the calcium and magnesium that is important.

There is a powdered formulation as well as a granulated form that lasts much longer when added to orchid pots. The rotting bark medium in which Paphs are usually grown gradually becomes more acidic as the decomposition process releases organic acids. As more acids are released, the pH drops in the medium and roots have a more difficult time acquiring nutrients, especially calcium. Calcium and magnesium are extremely important for leaf growth. Roots also seem more susceptible to rots when calcium is lacking in the soil or water. While frequent, thorough flushing removes these organic acids, they are quickly regenerated in a rapidly decomposing medium. Lime counteracts the process to some degree, but mostly it raises the pH and neutralizes the acidity.

Most Paphs are found in nature growing in areas with lots of rocky outcrops made of limestone. There, Paphs thrive nestled amidst the decaying plant litter and eroding limestone. Only a few Paph species are found growing as epiphytes or on rocky soils that are not limestone. Surprisingly, these other species also thrive when supplied with additional lime.

I usually add lime to all my Paphs when the first signs of rot appear on new leaves on any plant. The granulated lime lasts a month in the summer when Paphs are being watered twice a week and longer in winter when watering is less frequent. The powdered form washes through too quickly. Lime seems to have the same effect when used in just about any medium from mixtures of peat and bark to straight bark and even to rock.

In an experiment begun over a year ago, several multiflora Paphs were planted in fine lava rock with nothing else added except granulated lime and Nutricote. Their growth has been extraordinary and led to other types of Paphs going into other types of rock such as Stalite following the same approach. The ultimate goal is to never have to repot until the Paph bursts the pot. Even the Parvisepalum Paphs seem to love the rock as long as it is mixed with lime. One old-fashioned bulldog-type Paph that was almost given up for dead was even resurrected when planted in rock mixed with limestone. The only downside to growing paphs in rock is that they require more frequent water, especially when potted in Stalite. This spring most of my remaining Paphs will go into rock.