Walter Pagel, director of scientific publications at the M D Anderson Cancer Center in Houston, Texas, has been raising orchids for 24 years. “They are not the easiest plants to grow”, Pagel said. “It takes some sensitivity to their needs.” But Pagel has figured them out. He only recently threw away his first plant, given to him in 1978, because of a debilitating virus. Until then, it had been flowering annually, a feat envied by most orchid enthusiasts.

When Pagel is not gardening, he oversees a staff of 27 editors and support staff who help faculty by editing their papers for professional journals and books. He has been in the same department at M D Anderson since 1971, with a brief break in 1974-1976 to work on The Quality Review Bulletin for the Joint Commission on Accreditation of Healthcare Organizations in Chicago. He returned to M D Anderson in 1976 and worked his way up to director of the department.

“I would guess if you did a survey of all science editors”, Pagel speculated, “there would be a very large proportion who wished they were landscapers, or gardeners, or something related to growing flowers or plants. I have a friend who used to do this work [science editing] who started a wholesale tree-nursery business. Another friend, in Chicago, has taken extensive landscaping courses in preparation for a career change.”

Orchids can be found in settings ranging from tropical jungles to deserts. “In the wild, many grow on trees, where leaves fall and accumulate around the plant; when they are dissolved by rain, they supply the plant with nutrients”, Pagel explained. “The whole mystery of orchids is how they maintain their speciation by carefully controlling the exactly right insect that pollinates them.” (He added that the orchid species and pollinator have generally evolved together.)

A new orchid owner, Pagel suggested, should consult a book to learn how to care for the plant, for example, how much water, light, and air circulation to give it. “You have to pay attention to the plant”, Pagel said. “Most people don’t want to pay that much attention to them. For example, one of the places I buy orchids from will sell you an orchid in flower and then buy it back [after it flowers] for 30% of what you paid for it. People who subscribe to the plan recognize that they don’t have the will or the skill to bring it to flower a second time.” For Pagel, the accomplishment or joy in raising orchids is in getting the plant to flower. “We [orchid fanciers] are so interested in the flower, that we look to see where the bud starts to form. If you’re an amateur, you’ll think it’s a root, but it’s slightly differ-
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ent from a root.”

Pagel suggested *Phalaenopsis* as a good orchid variety to start with because “it’s easy to get to flower.” “You can keep all of them alive; getting them to flower is tougher”, Pagel explained. “You have to give them enough sun—not too much. That depends on where they grow as a native species.” The environment in which the plant or its parents evolved—its temperature, rainfall, and sun exposure—will generally determine how it should be cared for.

Pagel said several gardeners played major roles in helping him develop his hobby: “I’ve been influenced about gardening and orchids by people who did it with an extraordinary passion”, he explained. “Katy Ferguson and her predecessor, Lynn Lowery, who was the founder of native gardening in Texas, both inspired my gardening. I learned a lot from them and enjoyed hanging out with them.” Pagel said Gene May helped him develop his appreciation for orchids. May collected, studied, and respected the native habitat of orchids before the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Pagel said.

CITES, which regulates the taking of anything native or indigenous to an area, was created to keep commercial collectors from putting flora and fauna, including some orchids, on the endangered list. The Holy Ghost orchid (*Peristeria elata*)—found in Colombia, Costa Rica, El Salvador, Panama, and Venezuela—is among the 25,000 species of plants protected under CITES.

Pagel has about 10 varieties of orchids (none of these are endangered). With numerous flowering orchid plants around his Charleston-style porch and many more orchid plants in an adjoining greenhouse, Pagel’s gardening talent is evident. When asked how he chooses his orchids, he said, “I’d just as soon buy a commercially grown variety. The range of bloom sizes and plants is large.”

Pagel’s greenhouse is bright and filled with orchid plants in various degrees of blooming. The fan that circulates air blocks out noises from the surrounding neighborhood. Orchid plants are housed on shelves and tables and, where there’s space, suspended from posts. The blooms are fragrant and stunning, ranging from tiny delicate white blooms to large robust purple ones. As the plant grows, the blooms remain constant in size, Pagel said.

“The plants of a particular genus have many species, of course; some species have blooms that are miniature and some have blooms that are large”, Pagel explained. “Hybrid genetic variation is wider than wild-type variation. In wild orchids, a new species is declared only when the phenotype of an orchid changes, which happens slowly and often as a result of gradual alterations in the local environment.”

Growing orchids may be perceived as an exotic art, but it is also a pragmatic endeavor. “You take the triumphs wherever you can get them”, Pagel said. “What many people don’t recognize about successful gardeners is that they have thrown all their failures away. Good gardeners are ruthless as well as skilled.”

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