The Orchidaceae is an enormous family distributed throughout the world in perhaps as many widely differing habitats as any group of plants. Orchids are found in all but the most extreme environments such as the sea, the driest deserts and the tops of the coldest mountains. Despite the variety of habitats, the group shows less floral diversity than many smaller families and possesses several characteristics which set it quite distinctly apart. Orchid seeds are minute and usually must develop in symbiotic association with a fungus.

In general, the development period for each plant is very long, sometimes several years. Leaves are alternate, parallel-veined (the orchids are monocotyledons) and may be reduced almost completely to mere scales at the base of the stem. But it is the orchid flower which is most characteristic and serves to distinguish members of the group from all other plants. Basically there are three sepals which may be petaloid and crested, and three dissimilar petals, two laterals which often resemble the sepals and a third posterior one which is highly modified to form the labellum or lip. Because of a rotation during development, this petal comes to lie at the front of the flower.

The labellum is frequently very large, may be pouched or lobed, and possesses an almost infinite variety of ornamentation and color combinations. The sexual organs are united into another characteristic orchid structure called the column. There may be a much enlarged sterile stigma called the rostellum and pollen from the usually single fertile stamen is frequently aggregated into pollinia, sticky masses often with attached threads.

Except for vanilla which is extracted from the orchid Vanilla planifolia and the questionably nutritive drink salep, made from the tubers of some European species, orchids are of little economic value. But of course, as everyone knows, they form the basis for a vast international floricultural industry. And for those who are not so interested in cultivated orchids, there is a fascinating occupation available in searching out and studying our own native species.

The rose pogonia or rose-crested orchid, Pogonia ophioglossioides, is a rewarding one. It ranges over much of the eastern United States but is found only at lower elevations, in coastal plains, swamps or ditches. It has been reported to get as high as two feet, but usually grows to a foot or less. There is a single lanceolate leaf on the stem and a single flower at the tip of each stem. The labellum is about an inch long, deep pink and heavily bearded. The two other petals and the three sepals are pale pink and all very much alike. The column is short, with one attached stamen and a flattened, disc-like stigma.

Unlike most orchids, the rose pogonia does not have its pollen aggregated into pollinia. Pollen grains are separate, fine and powdery. The flower is dependent on bees for fertilization. As the bee enters the flower, any pollen from another orchid will brush off on the sticky stigma; then, as it backs out again, an elastic hinge on the anther is triggered, releasing the lid and allowing a shower of pollen to fall on the bee’s body and be carried to the next flower.

The rose pogonia is said to smell like fresh raspberries, but even if you find the scent elusive, the beauty of the little flower is ample to command your attention. It is not very common, but is well worth searching for in damp places in the Coastal Plain in May and June.

Illustrated by Lucile Walton