Most of our native orchids have rather small flowers, exquisite to look at closely, but not large and flamboyant like many of the cultivated ones and those from warmer climates. However, we do have one which could hold its own in any array of tropical orchids, and that is the purple fringed orchid, *Habenaria psychodes*. The flower stalk may be over three feet in height, with a showy spike 2-8 inches long comprised of numerous flowers, each up to half an inch across. It blooms in early summer in damp, open woods, usually high up in the mountains.

Many orchids are piphytic, that is, they do not use roots to draw up water and nutrients from the soil, but depend instead on rainfall, and often have special water-storage organs. About a dozen of our native orchids are epiphytes and are restricted to the southeastern part of the country. Our local habenas are terrestrial, that is, they have roots which function like any normal land plant.

The orchid flower has a form unique to this family. As with their near relations, irises and lilies, flower parts are arranged in threes, but there is a marked bilateral symmetry. The three sepals look like petals. Two are alike and the third is enlarged into the hood which arches over the flower. Two petals are alike and may be incorporated into the hood, while the third is much bigger and considerably modified to form the lip. In *Habenaria psychodes* the lip is divided into three lobes, each of which is deeply fringed, hence the common name. The lip has a backward extension into a tubular, hollow structure called the spur. The generic name comes from the Greek word *habena* meaning a ‘thong’ or ‘rein’ and refers either to the spur or to the lip which in some species is elongated into a large strap-like structure. The reproductive organs of the orchid, i.e. pistils and stamens, are united into a single structure called the column which may be very large and distinctively shaped.

Orchids rely entirely on insects, and in a few instances, hummingbirds, for pollination, and the various elaborations of the flowers have been developed to attract the pollinating insects. Many species of orchids have mechanisms which will only attract one insect, another reason why the plants are hard to transplant.

Pollen grains in most orchids are clumped together into two cohesive bundles called *pollinia*. These are attached by stalks to sticky discs near the entrance to the column. When an insect lands on the lip and reaches into the column for nectar, the discs adhere to his head, and he flies off looking as if he has one or two extra antennae, which are really the orchid pollinia. Seeds of orchids are extremely light and can be dispersed by wind. On the Pacific island of Krakatoa, after the volcanic eruption of 1882 which destroyed all forms of life, orchids were among the first plants to reappear.

I wish the seeds of the purple fringed orchid would blow a little more liberally through Virginia. But in general, they are not very frequent, and should be carefully searched out, and appreciated and--please--left alone.