

"*Epiphyte*" means "on a plant." Some *epiphytes* live on tree branches and trunks to get better light and to escape herbivores (plant-eaters). These plants are not parasites and usually are not harmful. *Epiphytes* are common in rainforests at many levels between the soil and the tree tops. This greatly increases the number of species that grow in a rainforest, contributing to the amazing biodiversity of these ecosystems.

*Epiphytes* make their own food through photosynthesis. Their roots function mostly as anchors to hold them in place. Many *epiphytes* have succulent (fleshy) leaves and stems where rainwater accumulates and is stored. Their leaves may be waxy or reduced to tiny scales to minimize water loss. Tiny frogs and a variety of insects benefit from these water sources, too. *Epiphytes* obtain minerals from dust that washes into the stored water.

In rainforests, bromeliads (the pineapple family) are common *epiphytes*. A familiar example in Florida or other southeastern states is "Spanish moss," which is not a moss but a simple bromeliad that hangs from trees like hair. Over half of the 20,000 orchid species are *epiphytes*. *Epiphytic* orchids have aerial roots (the ones that grow out of the pot) that are covered with a white layer of dead cells (the velamen) that fill with water and then help protect from water loss in dry periods. The staghorn fern and some cactus species, such as the Christmas cactus, live as *epiphytes*. In the dense rainforest, *epiphytes* produce brightly colored flowers or bracts and scents to attract their pollinators for seed production.

The Tropical Dome has a varied collection of *epiphytes*. A "fake" tree over-arches the main path and supports a number of *epiphytes* including both *bromeliads* and orchids. Additional orchids are in areas where you can get close enough to see the velamen on the aerial roots. Staghorn ferns have been "stuck" onto support structures in several places. Notice how much "fuller" the Tropical Dome seems because of the many *epiphytes*. Just as people move into high-rise condominiums for the views of Lake Michigan and Milwaukee, *epiphytes* have found that life up high has its advantages too.

Photo credit:

<http://www.rollins.edu/biology/greenhouse/images/bromel3.jpg>

