What Makes an Orchid an Orchid?

Bletia purpurea

Key Terms

used in describing the parts of an orchid

Anther: Part of the stamen, where the pollen is produced

Anther Cap: Part of the stamen, where the Pollinia are produced. The Anther Cap is located at the end of the Column and shelters the Pollinia

Column: Located in the center of the orchid flower, this specialized reproductive structure is unique to orchids. The Column combines the male parts of the flower's reproductive system (stamen) with the female parts of the reproductive system (pistil). The end of the Column also houses the Anther Cap and Pollinia

Lip/Labella: A modified petal that often has a unique and/or large shape adapted to facilitate pollination. The lip is often shaped as an insect to attract pollinators and serves as a landing platform for insects. The pollinia of an orchid are located near the lip/labella so the pollinia sticks to the pollinator after landing on the lip

Ovary: The part of the flower that becomes the fruit after f ertilization occurs. Orchid ovaries are always epigynous, meaning that they are enclosed. The ovary is often located behind the flower in the stem. One famous example of an orchid's fruit is the Vanilla bean produced by the *Vanilla plantifolia* orchid.

Ovule: Part of the ovary, the ovule produces seeds after fertilization occurs

Petal: A modified, often colorful, leaf that surrounds the reproductive system in a flower

Pistol: The female parts of a flower's reproductive system, including the Ovary, Ovule, and Stigma

Pollinia (Pollinia plural): Mass of pollen in a sticky "ball" produced by the anther. Instead of producing tiny individual grains of pollen to be carried by pollinators, the pollinium allows thousands of tiny pollen grains to attach to pollinators as a cohesive unit which is an efficient way to transport pollen from one orchid flower to another, fertilizing the plant and beginning the seed making procress.

Seed: A fertilized and mature ovule that has developed into an embryonic plant. Orchid seeds are so small they can be easily be mistaken for specs when they are on their own. This adaptation allows the orchid flower to produce thousands, or even millions, of seeds at a time, giving them a better chance to produce new plants.

Seed Capsule: A small structure that houses mature orchid seeds before releasing them.

Sepal: Often closely resembling petals, sepals protect the budding flower as it develops

Stamen: The male part of a flower's reproductive system

Stigma: Part of the pistil, the stigma is a sticky part of the flower that gathers pollen (pollinia) for the fertilization of seeds from visiting pollinators. It is located on the Column, behind the Pollinia