

Herbaceous monocots, some are saprophytic, or partially so, and most all are involved in mycorrhizal relationships on which they are dependent.

Largest family of flowering plants! over 20,000 species. May be due, in part to the very specialized pollinations relationships they are involved in.

Most abundant in the tropics, becoming less common northward. Sometimes are epiphytic, such as vanilla. None are native to Hawaii.

Leaves usually simple, sometimes reduced to scales in saprophytic taxa. 3 sepals which may be bract-like or petaloid, 3 petals forming an irregular flower which is really twisted 180 degrees. Lower lip (labellum) sometimes flares out, or is like a pouch. Pollen is packed together into a pollinium, a sticky mass designed to be picked up by insect visitor. Ovary is inferior. Fruits a dry capsule with abundant tiny seeds. Must germinate in a site with the required mycorrhizal partner.

In your area: *Cyperpedium* (Ladies Slipper), *Dactylrhiza* (Key Rower), *Coeloglossum* (Frog Orchid), *Platanthera* (Bog Orchids). *Spiranthes* (Ladies Tresses). *Listera* (Twyblade). *Corallorrhiza* (Coral Root). *Goodyera* (Rattlesnake Plantain), others?

New words: lip, saccate, tuberoids, spur, pollinium, column

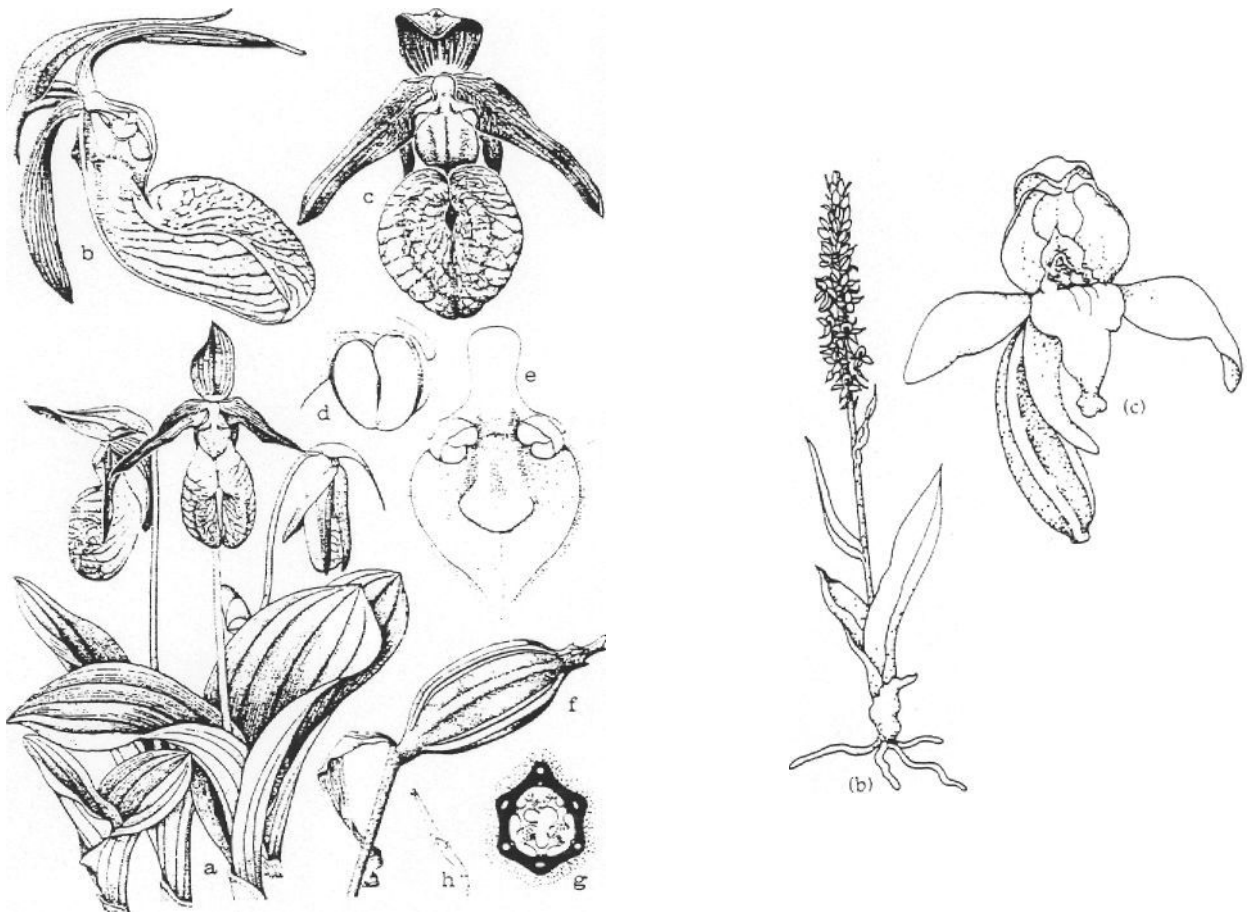


Fig. 11.10 Orchidaceae. *Cyperpedium acaule* Alton. a. habitat x 1; b. flower, with the lip in long-section. x 1. c. front view of flower. x 1; d. fertile stamen. x 4. e. column, as seen from beneath, showing 2 fertile stamens, stigma, and dilated [?scaminoce?], x 2; f. fruit x 1. g. schematic cross-section of ovary, after fertilization, with developing ovules, x 4; h.