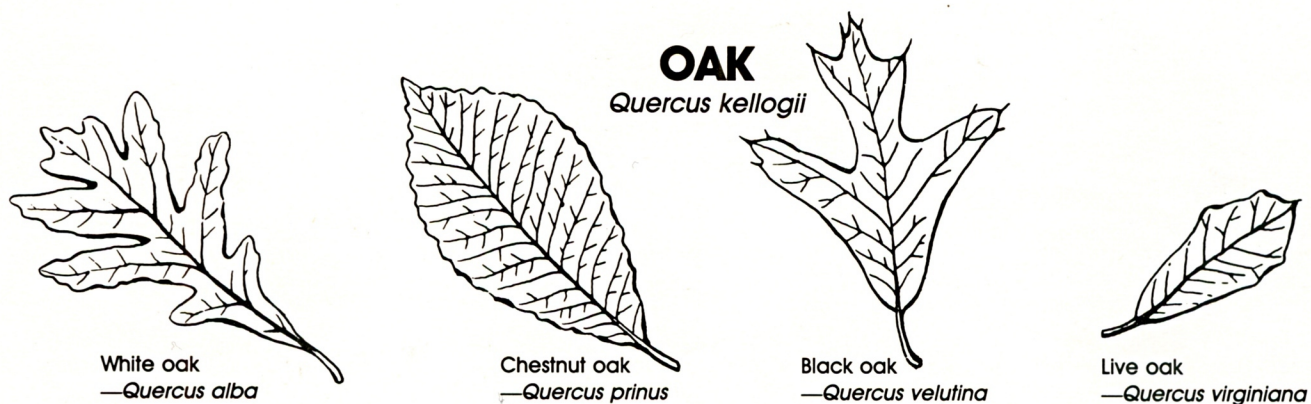




There are about 65 species of oaks native to North America with a few European species grown ornamentally. They vary in size from small scrubby trees to large forest trees of 150 feet. Oaks blossom in the spring with the opening of the leaf buds or after the leaves are out. Most oaks are deciduous in the autumn. Some species (the live oaks) retain their leaves until spring or until the third or fourth year. The staminate flowers are borne in clusters of slender, pendulous catkins. These are usually yellow varying to pink or red.

The oak tree here illustrated (*Quercus kelloggii*) is the largest and most abundant of the Sierra Nevada Region. Though limited in range to the mountain slopes and valleys of California and southwestern Oregon, it is typical of the black oak group and is very similar to the black oak of the eastern states (*Quercus velutina*).

FAMILY: Fagaceae

GENUS: *Quercus*

SPECIES: *kelloggii*

COMMON NAME: Oak

POLLEN GRAINS: Spheroidal or oblatelly flattened and triangular in outline with three meridionally arranged germinal furrows. Exine thin but warty-granular. Intine thin.

POLLINATING PERIOD: April and May

DISTRIBUTION: Oaks inhabit the temperate regions of the northern hemisphere and the higher altitudes within the tropics.

ALLERGIC IMPORTANCE: In regions where oaks abound, they are usually the most important of the hayfever producing trees.

The oak catkin produces prodigious amounts of pollen and is usually considered important in the region where the trees are plentiful. The pollen is not as toxic as some and this factor is reduced because of adverse climatic conditions during the pollinating period. The live oak of California pollinates in a more favorable climatic environment and will produce seasonal exacerbation of symptoms.