

One of the first native woodland wildflowers to bloom each spring is bloodroot (*Sanguinaria canadensis* L.), of the Papaveraceae the Poppy Family.

In Delaware, bloodroot blooms from March to April. Simultaneously, before leaf-buds break in the forest canopy, a leafless stem containing a single terminal flower bud, along with a deeply lobed leaf, emerge from a stout rhizome. Initially, the stem and flower bud are wrapped-up tight by the leaf, and in time the leaf gradually unfolds while the bud slowly swells into a blossom. The blossom is composed of 8-16 snowy white petals and the center appears golden due to the numerous stamens that are coated with bright yellow pollen. The petals fall quickly in just a few days, quicker if the days are windy, so the window of opportunity to view this species in flower is short.

The buds containing leaves and flowers develop a year before they appear in the spring, and sometime after flowering, the leaves begin to enlarge and will last into fall. Fruits mature in late spring and seeds have a large white growth along their edge that contains oil. This oil is attractive as food for ants and as a result, ants help to disperse seed throughout the woodlands.

Although the flowers of bloodroot lack nectar, the species is usually pollinated by bees. Bees will visit the flowers of bloodroot when the weather is warm and sunny, but during days that are cold or rainy, which frequently happens in the spring, the plant will self-pollinate.

Bloodroot is a perennial plant and the thick rhizome contains a red juice that will stain anything it comes in contact with. This juice was widely used by Native American's to decorate their skin and also their tomahawks. The rhizome of bloodroot also contains a substance called sanguinarine, which has potential for use in modern medicine. Currently, sanguinarine is used as a toothpaste additive and in other oral care products.

If multiple leaves are observed on one plant, it is an indication of a branching rhizome and a single intact rhizome can produce up to ten leaves and flowers.

Bloodroot is a monotypic species, meaning it is the only species belonging to the genus *Sanguinaria*. The native geographic distribution of bloodroot is from Nova Scotia south to Florida and west to Nebraska.

William A. McAvoy
April 2010