

## Saururus cernuus

*Saururus cernuus* (lizard's tail, water-dragon, dragon's tail, swamp root) is a medicinal and ornamental plant native to eastern North America. It grows in wet areas or shallow water, and can be up to about a meter tall.[1] The native range covers much of the eastern United States, as far west as eastern Texas and Kansas, south to Florida, and north to Michigan and New York state. *Saururus cernuus* also occurs in Ontario Canada.[1] It is an obligate wetland plant and able to grow in saturated soils.[2]

*Saururus cernuus* is a herbaceous perennial that gets its most frequent common name, lizard's tail, from its white flowers that bloom in the summer months.[2] The inflorescence is usually 6 to 8 in long.[3] After floral maturity the white flowers turn brown, giving the plant its namesake, lizard's tail.[3] The leaves are usually heart-shaped, arrow-shaped, or lance-shaped, and are arranged alternately on the stem.[3] When the leaves are crushed they release a citrus or sassafras aroma.[3][2]

As an aquatic plant, *S. cernuus* is an important food source for many wetland animals, including beavers.[4] In an exclusion study beavers reduced the prevalence of *S. cernuus* by 45%.[4]

Its medicinal properties have been used to treat swelling in the body.[2] Cherokee and Choctaw Native Americans mashed up *S. cernuus* roots as a poultice, and applied the plant to soothe inflammation of the breasts and back.[5][6] The Seminoles used the plant as an antirheumatic, as well as a way to soothe fevers and body aches.[7]

*Saururus cernuus* is a wetland plant that commonly grows to 2 to 3 ft in height.[8] It is herbaceous and can be distinctively identified during the flowering season.[9] Flowering occurs during the summer months, May to early August, blossoming with small white flowers composing a spike inflorescence 3–6 in long.[10] Flowers are simple, and have 6 or fewer stamens and 3 or fewer carpels.[11] Due to formation of dense rhizomes, lizard's tail can be very competitive for below-ground resources.[11] Leaves are heart-shaped (cordate) and alternate along the stem of the plant.[11]

Synonyms include *Saururus cernuus* f. *submersus* Glück.[12]

*Saururus cernuus* L. is distributed throughout Southeastern United States, normally within marshes, along the edges of streams or lakes. The Range includes the mid-Atlantic states to Florida.[13] Lizards tails are found in freshwater wetlands, normally submerged in shallow water.[14] *Saururus cernuus* can thrive in saturated soil, and can also tolerate shading by larger trees.[15] Rhizomes are abundantly present within this species, reaching lengths up to 3 meters.[8] Their rhizomes spread laterally below the soil.[10] These rhizomes are characterized with a linear series of nodes that follow along the tip of the rhizomes.[10] Seeds are dispersed in autumn, and are light green, then turn brown.[11]

*Saururus cernuus* have been used to restore and create wetlands. Native plant nurseries sell rhizomes for wetland restoration.[15] Native Americans and early settlers used lizards tail for their medicinal properties.[6] Lizard's tail rhizomes were ground and used as a sedative, to treat swelling and inflammation, and to lower fevers.[7][16]

Lizard's tail are abundantly present throughout the United States.[11] In fact, this plant can potentially outcompete other species of plants [11] *Saururus cernuus* form lengthy rhizomes that can out compete within their herbaceous layer.[8]

The genus name *Saururus* is from the Greek word, *sauros* meaning "lizard" and *oura* meaning "tail". The species name "*cernuus*" is Latin and refers to the plant's drooping and distinctive inflorescence.[15][17]

Studies show a possible connection with longhorn beetles and *S. cernuus*. [18] Mating of three different species of longhorn beetles have been observed in association with *S. cernuus*: *Strangalia luteicornis*, *Typocerus lugubris*, and *Typocerus velutinus velutinus*. Moreover, 29 other species of beetles have been observed on *S. cernuus*. [18] Flowers and fruits of *S. cernuus* are a likely food source for many beetles. [18]

Herbivores such as the North American beaver (*Castor canadensis*) have had a strong impact on aquatic plants. [19] Beavers often chose this lizard's tail plant rather than other plants that may thrive within the area. [19] Studies show that in areas where beavers are present, lizard's tail are less likely to be observed. [19]

