Lyre-leaved Sage
by Rufino Osorio

This overlooked native flower has the interesting capability, when stressed, to self-fertilize in bud and set seed without ever opening. This phenomenon is known as cleistogamy, which means "secret marriage".

The mint family (Lamiaceae) is a large one and many of its members are well known for their culinary and horticultural uses. Within the mint family — which includes such familiar plants as basil, oregano, and rosemary — one genus stands apart by its sheer size. *Salvia*, the genus to which sage belongs, is a vast assemblage of approximately 700 species of annuals, perennials, and shrubs found throughout the world.

The most widely cultivated of Florida's ten native species of *Salvia* is red sage, *S. coccinea*. Red sage is an annual or short-lived perennial with good-sized brilliant red flowers. It attracts butterflies and hummingbirds and provides a bright accent in the garden. Red sage is easily grown from seed in almost any well-drained, sunny location, and the recent development of white, pink, and bi-color cultivars will no doubt increase its popularity among the general gardening public.

Often overlooked in favor of its flashier cousin is another Florida native sage, the lyre-leaved sage, *Salvia lyrata*. Lyre-leaved sage is, biologically, hugely successful judging from its range: nearly everywhere east of the Mississippi River. However, it is a modest plant and can easily escape notice unless it is growing and flowering in large masses.

*Salvia lyrata* is a perennial which bears its foliage in a basal rosette. The leaves are lobed, with the terminal lobe much larger than the others — a condition referred to as "lyrate" in technical botanical jargon, which explains both the species and common names. The leaves are usually conspicuously marked with burgundy or chocolate-colored markings along the principal veins. Thus, lyre-leaved sage is a member of a very exclusive club: native Florida plants with variegated leaves.

In spring, a spike of purplish blue flowers is produced from the center of the rosette. The plant will continue flowering while good conditions persist; however, if it is stressed, normal flowers are replaced by specialized flowers which self-fertilize in bud and set seed without ever opening. This phenomenon is known as cleistogamy, a technical term derived from Greek which literally means "secret marriage". Plants growing under great stress, such as during a drought, will produce only cleistogamous flowers.

Some populations, at the extreme southern range of the species, appear to be short-lived and never seem to produce normal flowers. There is a possibility that the production of cleistogamous flowers and an annual lifespan have become genetically fixed in these populations.

Like red sage, *Salvia lyrata* is extremely easy to grow in well-drained but rich soils under conditions ranging from full sun to rather dense shade, and it also will attract butterflies and hummingbirds. In nature, seeds are dormant during the summer but readily germinate in late winter or early spring. Seedlings grow quickly and if started early in the season will flower in their first year.

Beneath dappled shade in rich moist woods, *Salvia lyrata* reaches its fullest development. Under such conditions, one can find dozens of plants covering many square feet and transforming large patches of ground into a blue haze. When grown in a similar manner in cultivation, I find *Salvia lyrata* more attractive than many other flashier and better-known native wildflowers. Lyre-leaved sage is also easily grown as a pot plant.

Although related to true sage, *Salvia lyrata* is not aromatic and does not have culinary uses. North of our area, it is known by the common name of cancer weed, but the origin and significance of this name are unknown to me.

Rufino Osorio is awards registrar for the American Orchid Society. He is enthusiastic about miniature, unusual, or neglected native plants that have horticultural potential and are easy to grow throughout a wide area of Florida. More of his special species will appear in future issues of The Palmetto.