Some Notes on the Pine Woods Lily

by Carl Amason

Here on my place in Union County, Arkansas, amid the sandy soils and piney woods, there are quite a lot of the Iris Family member that is universally known as pine woods lily, a common name that, frankly, I do not like because it is not a lily, but the scientific name has been changed as frequently as the game that young people played sometimes when I was growing up, known as "fruit basket turnover". I learned the plant as Eustylis purpurea, which is what you will find it listed and pictured in books that go back twenty years ago, but its scientific past has it listed as a nemastylis, not they tell us to call it Alophia drummondii, and the name changing probably isn't over because some botanists are studying its relationship to the largely Mexican genus Tigridia. But it remains a lovely, easily grown wildflower, beloved by those who know it as "pine woods lily".

All my life, I would seek out my treasures along the sunny sandy rail fence corners of the cotton fields or along the plowed edges of the peach orchard. It grew any place where grasses would grow--sunny, well drained, sandy acid soil. When fallow fields began to grow up into woodlands, it would flee to the roadsides and forest edges. And I can certainly understand why people not knowledgeable about wildflowers, or even cultivated plants, think they have found some kind of wild orchid when they first find them blooming on their first sighting. Only people with some botanical teaching can, at first exposure, place it as a member of the Iris Family. And it is only one of several members of the showy Iris Family that grows within our membership area, which includes what used to be Alophia, but is now Herbertia lahue ssp. caerlea, which is found mostly along the lowlands and along the coast of Louisiana and Texas (I don't know a common name) and Nemastylis geminiflora, Prairie pleatleaf, which grows in areas of limey soils which puts it mostly in alluvial, but well drained areas of the Red River Valley in the west and the Mississippi Delta in the eastern part of Louisiana. In Arkansas, there is another lime loving Nemastylis species, N. nuttallii, found mostly in the Ozark area. I have never seen any of the Nemastylis in bloom, and all of these Iris Family members have a multitude of synonyms; their botany relationships are confusing. But as usual, I have digressed, so back to the pine woods lily, and away from celestial lilies and Herbertia.

My understanding of the range of the pine woods lily is that its original home range was west of the Mississippi Valley, in the sandy soils and piney woods of East Texas, Louisiana, and some few southern counties of Arkansas. In the Atlas of the Vascular Flora of Louisiana by Drs. Dale Thomas and Charles Allen, they have studied specimens from St. Helena and Tangipahoa, two of the Florida Parishes east of the Mississippi. I wonder if they have been introduced and escaped as I suspect sooner or later the entire southeastern pine belt will support living populations. I can not state with authority, but only as interesting statements. I have been told that the only known Mississippi population is somewhere in the Vicksburg National Military Park area and it was brought in with some sod. And most of my young life, I thought it grew almost all over the world, not knowing that a fairly uncommon, pretty wildflower was so common in my area.

It is not one of the first things to come up in the spring. Its pleated leaves emerge after warm weather has arrived and quickly grows into a flowering plant 10 to 16 inches tall, with a bright purple with brownish and yellow markings, that look like miniature Tigridia flowers--a plant that I really don't know.
As many pine woods lily plants that I have seen, I really can't swear if they grow from a true bulb or a corm, I just enjoy the plant and I have never given myself the luxury of dissecting the structure. It is a small structure and is found with difficulty in the dormant season about two inches underground. The flowering stalks have leaves; usually two or three, but only one at a time, never in whorls or opposite. The flowering buds come from bracts at the tips. Each flower is composed of three sepals, each about an inch in length and an half inch wide, oval shaped. The three petals are smaller, 5/8 " in length, and half as wide, with a crimped end that forms a circular depressed tip about 1/4 ", with yellow markings where it is crimped. The entire flower is about two inches across and rather flat, but the three petals do arise about the plane of the sepals about 1/8 inch. In the middle are three columns of stamens, upright 1/4 inch, with a style with three parts. Each part has two tips that bend back over the anthers. This is hardly noticeable unless the flower is dissected. The ovary is three parted and is inferior. It all makes for a very pleasing and pretty flower. The flowers begin blooming on my place in the very last days in May, peak in bloom by mid-June, and with the coming of hot, dry weather, blooming is over by the end of June. If the summer is a good growing season and the rains come just right, I have seen them re-bloom in early September, but that is not dependable in the wild. Seeds usually ripen in September and the above ground parts of the plants quickly die. The plants are easily grown from seeds and blooming can occur in two years. The seeds are dark and round.

In all of my observing, I have seen a range of the color from light to medium purple. I have never seen one that could be called lavender, certainly not pink, nor have I seen a flower that I would call dark purple. At close range, the flowers are showy and really show up in the grass, about the same height as the flowers. I have never seen deer damage or insect damage to the plants, but I’m sure they have natural enemies, but black grasshoppers are not one of them. Perhaps they have evolved with the grasses and herbivores haven’t developed an addiction to them. They are difficult to find at anytime except when they are blooming. Another aside that should bring a chuckle: Many times friends and unknowns come to me, telling of their discovery of “lots of orchids in bloom”. I usually ask several pointed questions, time of day, location, color, etc., and I quickly deduce their findings. When I want them to take me to the site, in the afternoons, after work, I am so happy to go back with them. They are so distressed as "someone has picked every one of them", or "a deer has eaten all the blooms". Of course, I know the situation. I see the late afternoon’s results of the morning’s flowers. We discuss the situation, hopefully on my part, that they had seen an iris relative, not an orchid, and I show the badly shriveled evidence among the grass. So be warned, these are early risers. I know they are opened by 7 AM., and on hot, dry days, the flowers are showing stress by noon, by 2 PM., they are gone, but on cloudy, cool, June days, I have seen them stay in good shape until after 3 PM.

For the most part, I really don’t cultivate these beauties. I mow the dead grasses of late fall and winter where they grow and eagerly await their June flower season. I have a suspicion that they are short lived by the many seedlings keeping the colonies alive. Purple flowers do not show at a distance like white, yellow or pink flowers, but the flowers, which are at right angles to the stems, are lovely. Even the dried seed pods add much interest to a coffee table sized dried arrangement. I don't see any practical arrangement use for the flower itself as it is so short lived. And that brings me back to my final observation. Enjoy these ephemeral flowers where they grow and bloom and enjoy them by the name of pine woods lily because I strongly believe that we have not seen the end of the name changing of the species of flowers. If you are confused over the names, so are the botanists, the taxonomists, the book writers, and even the writer of this article. The scientific name is a mess, but the use of and sight of
"pine woods lilies" is universal. Please enjoy these wildflowers in nature, be aware of the problems of nomenclature, but don't let the arguments deprive you of the pleasure of seeing but do be aware of the problems of taxonomists and appreciate their problems--at least sometimes. Carl Amason is a superior plantsman who lives and gardens near Calion, Arkansas.