

TWO NEW NATURAL *SARRACENIA* HYBRIDS FROM THE GULF COAST

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Introduction

It has been two years since I accepted ICPS president Richard Nunn's invitation to serve on the board of this wonderful society, and I have loved every minute of it. In those two years, I have put myself toward developing more protections for *Sarracenia* habitat on the American Gulf Coast, and have learned much about the long history of rare flora conservation and land stewardship in the various southeast states.

While visiting Mississippi, a new hybrid was found that I have chosen to name after devoted conservationist Dr. Ken Gordon, the late Heritage Botanist of Mississippi. Doing so has precedent in the established tradition of naming *Sarracenia* nothospecies after people who study or protect them. As Dr. Gordon was a Mississippian, and as he was instrumental in protecting land that this hybrid may be found on, I think it is fitting that he be honored by the naming.

In a different context, for the past year I have been working with the late Dr. Larry Mellichamp on some botany of the gulf coast *Sarracenia*, a discourse he had long been involved in. In evaluating the various hybrids of the region, a particularly rare one was found to have been overlooked. I found it miraculously preserved in cultivation. Long though it has been known, it was never technically treated, its rarity in its narrow native range is the likely reason behind the oversight. I am very pleased to name it after Larry.

Sarraceniology engenders many facets, but perhaps the most challenging in the field is the study of the hybrids. To distinguish between hybrid and species can be among the most cognitively activating of all tests of knowledge about the genus. I have found it demands a sure sense of not merely the diagnostic traits of the species but a familiarity with the forces and structures behind their combinations, a lesson of discrimination between the structures and behaviors common throughout the genus. It demands a knowledge of the plasticity of their states.

The hybrids I discuss here have been seen and recorded in the wild before, but never formally named. Naming them at long last certifies their existence in nature, where they are indeed exceedingly rare.

Sarracenia × *gordonii* (Fig. 1)

In June 2022, in Jackson County, Mississippi, Ren Oliver and I found *S. alata* (Wood) Wood and *S. psittacina* Michx. growing without other congeners in a roadside right-of-way near Gautier. A small number of their hybrid progeny were found, which we photographed, and a voucher was collected and pressed. In other areas where the two species live together, we also found their hybrids. The hybrid only occurs in places that have been recently disturbed (mowing, burning, off-road vehicle traffic, etc.).

Long ago, this cross was discussed but left unnamed by Bell & Case (1956). Plants were discovered in Mobile County, Alabama (*Bell 1534; Case P-62a*) that could have been *Sarracenia alata* × *S. psittacina*, but as the plants were collected from an area where *S. rosea* Naczi, F.W.Case & R.B.Case was also present, these authors were not entirely sure that *S. rosea* could be ruled out of the pedigree. They refrained from diagnosing the plants and never followed up on the issue, leaving the identity of the specimens unascertained.

Sarracenia ×*gordonii* Trexler & Oliver *nothosp. nov.* TYPE: Jackson County, Mississippi, west of Gautier, roadside ditch. 31 May 2022. *Trexler 0009* (HOLOTYPE: UNCC).

Sarracenia ×*gordonii*, *hybrida naturalis inter S. alata et S. psittacina, foliis puberulentibus et recumbentibus, extus colore sanguinea et viride suffusis, venulis fere atropurpureis, tubis extus et interne obscure areolatis, phyllodiis raris et minoribus, 2.1 cm longis, foliis carnivoribus 11.3 cm - 12.5 cm longis.*

Plants are intermediate between *Sarracenia alata* (Wood) Wood and *S. psittacina* Michx., often forming ground-hugging rosettes, as in *S. psittacina*, but plants bearing suberect to erect leaves are also to be expected in the field. Rhizomes may be vertically or horizontally oriented (horizontal in the type specimen). Lids and orifices are often fused shut and incapable of trapping insects, forming a globose head with a pointed tip, the orifice facing toward the center of the rosette. Some plants in the field indeed had open orifices through which prey could have entered and thereby be consumed. Pitcher leaves recumbent, glabrate, suffused with red venation, faintly areolate along the tube, ala reduced as in *S. alata* (in contrast to the flamboyantly broad wing of *S. psittacina*). Pitchers textured rigidly and waxy in life, suggesting that they are as durable as the *S. psittacina* parent in winter and may be partially to entirely evergreen. Faint pubescence from the *S. alata* parent should be anticipated on some plants in the field too.

Sarracenia ×*gordonii* should be sought where *S. alata* and *S. psittacina* occur together in Mississippi and Alabama. In places where *S. alabamensis* subsp. *wherryi* (D.E.Schnell) Case & Case, *S. leucophylla* Raf., and *S. rosea* Naczi, Case & Case also grow with *S. alata* and *S. psittacina*, this cross may be impossible to diagnose, even when in bloom. The areolation from *S. leucophylla* may become utterly suffused with pigment in its primary hybrids and so discriminating between crosses by foliar traits among the other areolate-leaved taxa may be extremely unreliable in the field where *S. leucophylla* is found alongside *S. alata* and *S. psittacina*. Therefore, they may be impossible to tell apart from *S. wrightleyana* Hort. Veitch ex Mast. in places where *S. leucophylla* is also present with the parent taxa. Hybrids may be nearly impossible to tell apart from *S. casei* Mellichamp in Washington County, Alabama, after petal drop.



Figure 1: *Sarracenia* ×*gordonii* at the type location. Photo by C. Trexler.

Presence of undulation in the lid margins and white pigment in the distalmost portions of the leaves may help distinguish the hybrids from each other. The peculiar mode of acropetal dehiscence in *S. leucophylla* may be another indicator of its influence in these crosses.

The hybrid is uncommon in cultivation but not unheard of. Dr. Jan Schlauer notes at least two cultivars of it exist in ICPS records: *S.* ‘Robin Louise’ J. & P. Pietropaolo 1986 and *S.* ‘Yellow Eel’ S. Amoroso 2014. The charming and memorable (if weird) *S.* ‘Alien Banana’, a favorite of mine, is also of this cross. This cultivar was featured by Romanowski (2002: 93), but I have not been able to locate it in U.S. American cultivation.

A common name for this hybrid, if there must be one, can be Gordon’s Mute Trumpet, in respect to the usually closed (and sometimes upright) pitchers, which have long been called “trumpets” in colloquial English (e.g., “white trumpet” for *S. leucophylla*, or “yellow trumpet” for *S. alata* and *S. flava*). However, it is good practice to seek common names from amongst the residents of the plant’s native range before inventing a nonscientific moniker. This is so any established lexicological history of the nothospecies is not overlooked outside botany.

Heather Sullivan, Heritage Botanist at the Mississippi Museum of Natural Sciences at Jackson, proposed her late predecessor, Dr. Ken Gordon, to be this hybrid’s namesake. Dr. Gordon was responsible for protecting *Sarracenia* habitat in Mississippi, including environments unusual for the genus to inhabit. Notably this includes the westernmost sliver of range of *S. alabamensis* subsp. *wherryi*. Without his excellent foresight and hard work much would have been lost to conservation, history, and science.

I thank Heather Sullivan and Ren Oliver for helping me find and study this rare hybrid in Mississippi, and Dr. Jan Schlauer for editing and reviewing the manuscript.

Sarracenia × *mellichampii* (Fig. 2)

Sarracenia flava L. once grew in Baldwin County, Alabama, alongside *S. leucophylla* Raf., *S. psittacina* Michx., *S. rosea* Naczi, Case & Case, and *S. alabamensis* subsp. *wherryi* (D.E. Schnell) Case & Case. *Sarracenia alata* (Wood) Wood also grew there in an extremely limited range (Mellichamp 2009). Baldwin County was at one time one of the most, if not *the* most, diversely populated region for wild-growing *Sarracenia* in the world, once famous for its six endemic parent taxa, which resulted in enormous and fantastic hybrid swarms (now largely extirpated). Perhaps the rarest and most unexpected of these hybrids was *S. alabamensis* subsp. *wherryi* × *S. flava*.

This cross has long been regarded as rare. In a remarkable instance of east meets west, the parent taxa coexisted as recently as 30 years ago in a few sites in Baldwin and possibly Escambia counties, Alabama (Folkerts 1992). They were also found growing close to each other in adjacent Escambia County, Florida to the east, which is the easternmost part of the range of *S. alabamensis* subsp. *wherryi* (Mellichamp 2007, unpublished data). In the past, the range of *S. flava* extended instead from the north through Escambia County, Alabama (where it is extant), into Baldwin County, Alabama. In Baldwin, it appeared patchy south of the vicinity of Splinter Hill in the middling-southeasterly reaches of the county near the border with Florida, notably around the vicinity of Seminole. These populations are now long gone. *Sarracenia alabamensis* subsp. *wherryi* is rapidly dwindling in the county.

This hybrid is perhaps one of the rarest we know of. Of the 12 locations where both parents occurred in proximity, only two of those sites were ever known to have spawned the hybrid, and when present it was always uncommon (Folkerts 1992).

Incredibly, a single plant of *S. alabamensis* subsp. *wherryi* × *S. flava* has endured in a few private collections for the past three decades. From Bob Hanrahan’s original wild collection in the 1980s in Baldwin County, it has been distributed many times. I have the same clone from two sources: former



Figure 2: *Sarracenia* \times *mellichampii* and flower. Photo by M. Wang (left), C. Trexler (right).

ICPS president Jay Lechtman and Mike Wang. I do not know the ownership histories behind Mr. Wang's plant. Mr. Lechtman got his from Michael Fantus of Washington, DC, in the late 1990s. Mr. Fantus acquired it from Mr. Hanrahan, who in turn collected it from the wild. Mr. Hanrahan asserted that the plant was of wild origin from Baldwin County, Alabama (Jay Lechtman, pers. comm.).

I recognize *S. alabamensis* Case & Case as a separate species from *S. rubra* Walter. The formula of *S. x popei* Mast., a synonym *pro parte* (if *S. alabamensis* is not considered separate from *S. rubra* at species rank) for the cross, is *S. flava* \times *S. rubra*. The lectotype of *S. x popei* as designated by Nelson (1986) and prepared by Masters in 1881 bears no information regarding the provenance of its parents. The plant was bred artificially at Glasnevin by David Moore and a pitcher and flower of it pressed by Masters in 1881. It was described in *The Gardeners' Chronicle* (1881) that year as well.

The dark lip of the pressed specimen from Glasnevin is not a trait derived from *S. flava* and is strictly never a trait of *S. alabamensis* subsp. *wherryi*, but it is a common feature of the *S. rubra* populations of the Atlantic coast. The venation extends to the distal portion of the long, narrow lid, further implying influence of *S. rubra* from the Atlantic coast. The earliest record we have of *S. alabamensis* subsp. *wherryi* is a collection made by Pollard in Mississippi in August 1896 (as *S. flava* L.), so it seems unlikely then that the taxon now known as *S. alabamensis* subsp. *wherryi* was involved in the cross that produced the lectotype of *S. x popei* in 1881.

I believe therefore that the name *S. x popei* was not applied to a hybrid of what we now know to be *S. alabamensis* subsp. *wherryi* \times *S. flava* and was indeed bred from a *S. rubra* subsp. *rubra* of Atlantic stock. This means a new name for the hybrid *S. alabamensis* subsp. *wherryi* \times *S. flava* can be designated.

***Sarracenia* \times *mellichampii* Trexler *nothosp. nov.* TYPE: Baldwin County, Alabama. 14 October 2022. Trexler 0042 (HOLOTYPE: cultivated foliage and a flower of this hybrid from a plant originating in the wild has been seen, pressed, and deposited at the herbarium at UNCC).**

Syn.: *Sarracenia* ×*poppei* Masters, Gard. Chron., n.s., 16: 40 (1881) p.p.

Sarracenia ×*mellichampii*, *hybrida naturalis inter Sarracenia alabamensi* subsp. *wherryi* et *S. flava*, *foliis tubiformibus angustis, necnon dilatatis lato, peristomio margine revoluto non stricto, adaxiale inciso et colore flavo-viride, tubis extus textura dense pubescente, colore extus rubiginoso suffusus et flavis, fauce plerumque venulas atrosanguineas habens, foliis 17-50 cm altis, foliis vernalibus minoribus quam aestivalibus, phyllodiis erectis multis, 15-24 cm altis. Sepala ovata, colore limone-flavo, petalis panduriformibus, colore rubiginoso suffusus et flavis. Duos odores simul habens, similes fructis maturis et putris caseus est.*

My plant is intermediate between the two parents, but largely has proportions similar to smaller *S. flava*. The brightly cream-colored mouth opens broadly, much like *S. flava* but with a slightly more pronounced gape, and has a weakly revolute, cream-colored peristome with a deeply incised spout. The throat bears red veins and a red throat patch. The texture is pubescent, which could be a trait of either parent, but is certainly a trait of *S. alabamensis* subsp. *wherryi*. Exterior color is suffused reddish-bronze with yellow in the lower portions of the leaves. The phyllodes are tall, and, critically, have terete petioles without the characteristic buttressing abaxial channel of *S. leucophylla*. This, combined with a noted lack of acute lid undulations, differing respective phenological affinities, and lack of areolae, safely eliminates *S. leucophylla* from the pedigree. The flowers are delightful – small, with yellow sepals and pendulous red panduriform petals. They are aromatic, scented like a pairing of fresh raspberries and extremely mature cheese. Their color and scent are a dead-giveaway to the plant’s hybrid origin.

The common name for this hybrid, if there must be one, can be Mellichamp’s Trumpet.

I would like to acknowledge the kind help of Jay Lechtman, Mike Wang, and Calen Hall in providing me with plants, history, and numerous photographs of this rare hybrid. I would also like to thank Ren Oliver and Dr. Jan Schlauer for editing the manuscript (and teaching me quite a bit in the process!).

I name *S. ×mellichampii* in honor of our own Dr. T. Larry Mellichamp, who passed away on September 12, 2022. Two weeks before he died, I told him that I would designate this rare hybrid in his name. Here I fulfill that promise.

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