



Segolily

Newsletter of the Utah Native Plant Society

March-April 2014
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In this issue:

Unidentified Flowering Object.	2
Bulletin Board	3
Utah Botanica	4
So Long Blue Spruce, Utah Has a New State Tree	
Arabian Grass Invades Moab..	5
Plants Defend Their Fungal Friends	6
Grow This: Annuals	7
Meadow gentian	9
Maybe Gily-flower is not so Silly, or More Adventures with Common Names	10



Giant helleborine (*Epipactis gigantea*) is one of 16 native species of orchid in Utah. The orchid family is renowned for its large, colorful, and unusually-shaped blossoms, but helleborine is more of a shrinking violet (or wallflower!). Helleborine's flowers are brownish-purple on the back and often yellowish-green on the inside (as seen above) with prominent reddish-brown venation. The flowers tend to droop and are sometimes obscured by the leafy bracts. Giant helleborine occurs widely in Utah but is found mostly along streams, riverbanks, marshy areas, and hanging gardens. Like other wild orchids, it is best enjoyed in nature rather than being dug up for the yard. Photo by Steve Hegji.

Utah Native Plant Society



Utah Native Plant Society

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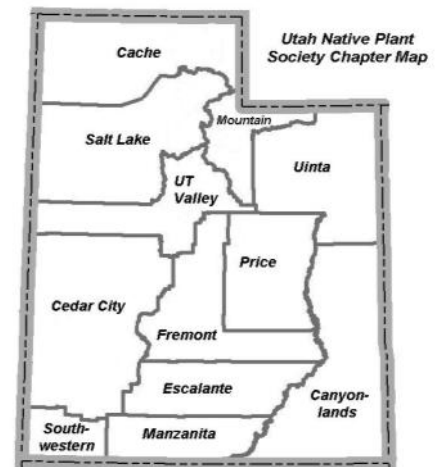
Website: For late-breaking news, the UNPS store, the *Sego Lily* archives, Chapter events, sources of native plants, the digital Utah Rare Plant Field Guide, and more, go to unps.org. **Many thanks to Xmission for sponsoring our website.**

Sego Lily Editor: Walter Fertig (waltola64@gmail.com). The deadline for the May 2014 *Sego Lily* is 25 April 2014.

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Unidentified Flowering Object

This month's UFO is from retired BLM botanist Lee Hughes. It is a shrub from blackbrush and pinyon-juniper habitats in the canyon country of eastern Utah. Although the branches are slender, the wood is quite hard and was used for digging tools by native tribes. Can you identify it?

The January Unidentified Flowering Object was *Tidestromia lanuginosa* and was photographed by frequent contributor Steve Hegji.

Have a UFO to share? Send it in! - *W. Fertig*

In Quotes: "Botany is the science in which plants are known by their aliases" from M. Goran, *A Treasury of Science Jokes*, 1986

Bulletin Board

Salt Lake County Chapter: Wednesday, April 2nd, 7 PM, REI meeting room (3300 E 3300 S, Salt Lake City). Blake Wellard will talk about some of his research on our local plants, probably focusing on the small relict wetlands that are hidden away in Salt Lake County.

Wednesday, May 7th: REI is not available this month, but if we can find a suitable venue Bill Gray will talk about his recent trip to Hawaii, where he was able to visit some exceedingly rare plants.

American Penstemon Society Annual Meeting, Zion NP and Southwest Utah, May 16-18: The 2014 annual meeting of the American Penstemon Society will be held in southwestern Utah and co-sponsored by the Utah Native Plant Society and its local Southwestern Utah chapter. Field trips are scheduled for Zion National Park, the Beaver Dam Mountains, and the Cedar City-St. George area, where participants will be able to observe at least one dozen rare, unusual, and beautiful *Penstemon* species. Utah has the highest number of *Penstemon* species in North America (73 full species and another 23 distinct varieties/subspecies), of which 34 are endemic to the Beehive State. Some of the more notable species we should see include *Penstemon petiolatus* (Crevice penstemon, a fuchsia-flowered dwarf with holly-like leaves found on limestone boulders in the Beaver Dams), *Penstemon x jonesii* (Jones' penstemon, a burgundy-flowered natural hybrid between *P. laevis* and *P. eatonii* found sporadically in Zion NP), and *Penstemon higginsii* (Higgins' penstemon, a bluish-purple flowered species endemic to the mountains at the north end of Zion NP and the adjacent Great Basin).

More than *Penstemons* await the participants in the field trips. With 1075 recorded plant species, Zion National Park has the highest concentration of wildflowers of any national park or monument in Utah (and is second only to Grand Canyon NP in the Colorado Plateau). Zion's high species richness is a result of its location near the junction of four major floristic provinces: Colorado Plateau, Great Basin, Mojave Desert, and Rocky Mountains. About 50 species are only found in the park or in neighboring areas of southern Utah. Mid-May is an optimal time to observe desert wildflowers in the park's canyon bottoms and higher elevation species on slickrock trails and mesa tops. Shady canyons and hanging gardens support their own unusual floras, rich in ferns, orchids, shooting-stars, and other showy species.



Three field trips are planned for Zion National Park. Local wildflower experts from the park and the Utah Native Plant Society will help guide hikes along the upper and lower portions of the East Rim Trail, where visitors can expect to find *Penstemon x jonesii*, *P. laevis*, *P. eatonii*, *P. palmeri*, and *P. humilis* var. *obtusifolius*, as well as dozens of showy wildflowers. Another field trip led by Walter Fertig will proceed by vehicle up the Kolob Terrace Road to Lava Point in the northern portion of the park to observe *Penstemon higginsii* and *P. leiophyllus*. A longer, all-day caravan tour led by Mikel Stevens and Robert Johnson of Brigham Young University will search for beardtongues from Springdale (host town of the meeting at the south entrance to Zion) to Cedar City and St. George and will include stops to see the rare *Penstemon franklinii*, peculiar *P. ambiguus* with its *Phlox*-like blooms, and stunning *P. petiolatus*, as well as many other *Penstemon* taxa. The same trips are scheduled for Saturday and Sunday, so no one needs to worry about missing out.

On Friday and Saturday evenings, the American Penstemon Society and Utah Native Plant Society will be hosting speakers and a dinner banquet. Noel Holmgren will give the keynote address on *Penstemons* of the Southwest on Saturday night. Walter Fertig, co-author of the flora of Zion National Park, will provide a slide show on interesting plants of Zion on Friday evening. Both events will be held at the Springdale Community Center next to the Springdale library.

For more information on the 2014 meeting and to register, go to the American Penstemon Society website at <http://apsdev.org/aps/meetings.html>. Participation is limited to members of APS or the Utah Native Plant Society. - W. Fertig

Have a botanical meeting or chapter event to publicize? Send announcements to the editor.

Above, right: Higgins' penstemon by W. Fertig.

Bulletin Board

New Android App for Utah Wildflowers: Flora ID Northwest has recently published a new Android app for Utah Wildflowers on the Google Play Store. They are pleased to make this available in a “field friendly format” that is the culmination of nearly 20 years producing interactive plant keys. The app is titled “2450 Utah wildflowers.” It is much more comprehensive than the usual wildflower book or app, with many more species, over 7600 photos, and sophisticated interactive keys with all the functionality of the keys in our PC programs. The app includes 90% of all the native and naturalized, non-grass-like flowering species in Utah. Species can be sorted by either common or scientific names, with synonyms listed in descriptions.

For more details, see their website, www.flora-id-northwest.com or the web page on Google Play Store (<https://play.google.com/store/apps/details?id=com.floraidnorthwest.utah>). Other apps are available on the store for Arizona, New Mexico, Nevada, Washington, California, and Oregon. More apps for western and central US and SW Canada will be gradually released before the end of April.

Utah Botanica

So Long Blue Spruce, Utah has a new State Tree

In late March, 2014, Governor Gary Herbert signed a new law stripping the Colorado blue spruce (*Picea pungens*) of its status as the state tree of Utah and replacing it with the Quaking aspen (*Populus tremuloides*). The move to replace the blue spruce began last fall when State Senator Ralph Okerlund from Monroe introduced a bill at the suggestion of a 4th grade class in Sevier County. Okerlund took exception with the name “Colorado” being attached to the state tree of Utah, and noted that blue spruce is also the state emblem of the Centennial State. (Apparently it did not occur to anyone to merely drop ‘Colorado’ from the name, as this is not even the official common name of *Picea pungens*.) Aspen was suggested as a better state tree because it is more widespread in Utah than blue spruce. More importantly, Utah is the home of Pando the aspen, the planet’s largest living organism (see *Sego Lily*, November 2010). Pando (Latin for “I spread”) is a single aspen clone with 47,000 separate trunks derived from a common rootstalk covering 43 acres and weighing an estimated 6615 tons. The enormous clone is located on Fishlake National Forest, near Richfield. After measured debate (for which the Utah legislature is renowned) proponents of the change prevailed, and Quaking aspen is now the official state tree.

Does Utah need other new state botanical symbols? Obviously, the Utah Native Plant Society is not advocating the replacement of our own namesake, the Sego lily (*Calochortus nuttallii*), as the state’s official state flower. Presently, Utah does have a state grass (Indian ricegrass, a.k.a. *Oryzopsis*, *Stipa*, or *Achnatherum hymenoides*), state fruit (cherry, *Prunus avium*), and two state vegetables (Spanish* sweet onion [*Allium cepa*] and Sugar beet [*Beta vulgaris*]). But what about a state shrub? Or state weed? Or state lichen, moss, or fern? Send suggestions of new state symbols to your umbel editor (waltola64@gmail.com) for the next issue of *Sego Lily*. - W. Fertig



Above right: Quaking aspen (Populus tremuloides) with drooping catkins. Photo by Al Schneider (www.swcoloradowildflowers.com).

*Does this need to be changed to plain Sweet onion now?

Arabian Grass Invades Moab Area

By Sarah Topp

On February 23rd, I went on an outing with visiting relatives to see a unique rock art panel in the Kane Creek area just west of Moab, Utah. Along the rough foot trail following the cliff base, I noticed an annual grass I didn't recognize, and it was already in full flower! Upon closer examination, I was surprised to learn that it was a species of *Schismus*, especially since this genus is not known from Grand County, but from the lower and warmer Utah counties of Washington and Kane.

Arabian grass or Mediterranean grass is native to the Mediterranean region and Asia and was introduced in the desert southwest in the 1930s. By 1933 it was present in Tucson, Arizona, and by the 1970s *Schismus* species were found in all of the desert counties of Arizona in great abundance. *Schismus arabicus* and its close relative, *S. barbatus*, are presently listed among the most abundant annual plant species in the Lower Colorado River Valley of the Sonoran Desert and the Arizona Uplands.

Schismus arabicus and *S. barbatus* are short-lived annual grasses whose seeds germinate rapidly following fall and winter rains, allowing them to be one of the first to flower come spring. They occupy habitats that are often disturbed, both in desert and semi-desert shrublands. By outcompeting native annuals they can also expand into undisturbed habitats. They are demonstrated to be very drought tolerant, and have been observed to germinate and produce seeds in seasons where there was not enough rain for many of the other annual species. *Schismus arabicus* rose from relative obscurity to become one of the dominant annual grasses in arid and semi-arid regions of California during the 1940s. As *S. arabicus* became more dominant, the similar native annual grass, six-weeks fescue (*Vulpia* or *Festuca octoflora*) became less common.

Schismus arabicus probably arrived in the Kane Creek area as a hitchhiker from tourists visiting the rock art panel. How far it has or will spread in Grand County and eastern Utah remains to be discovered, but if drought conditions continue in our area, it is likely to continue its march northward.



Top: Arabian grass growing outside of Moab, Utah, in February 2014. Above: details of the floret. Photos by Sarah Topp.

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Plants Defend Their Fungal Friends

By Peter Lesica (adapted from *Kelsey*, newsletter of the Montana Native Plant Society, Winter 2014)

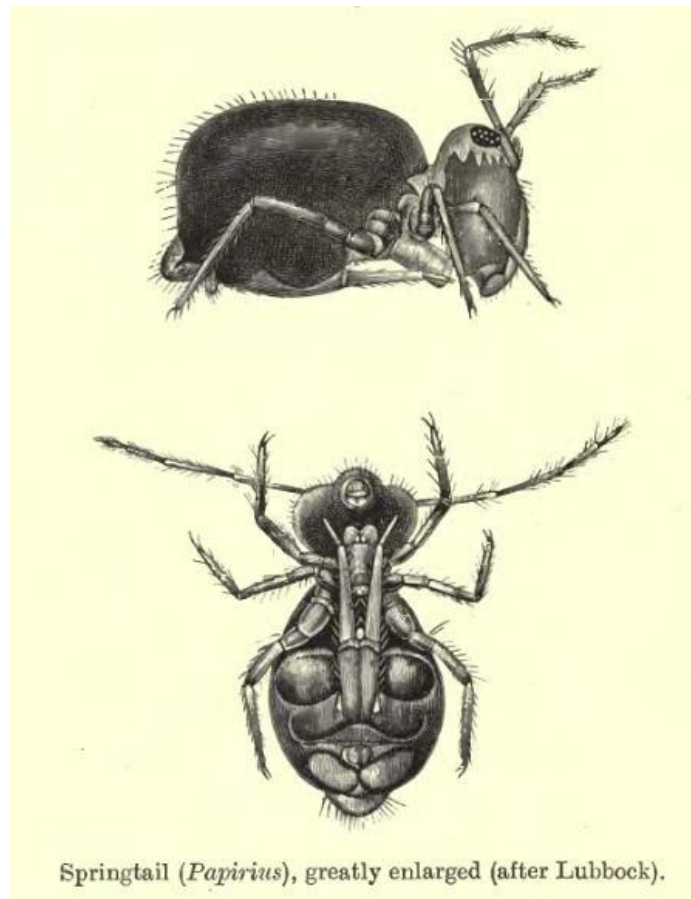
The mycorrhizal symbiosis between vascular plants and soil fungi is one of the oldest and probably most common mutualistic relationship on earth. Soil fungi form exceedingly fine and far-reaching hyphal networks that can penetrate even the smallest openings between soil particles to extract nutrients such as phosphorus and nitrogen needed to make amino acids and proteins. Although soil fungi are great at acquiring mineral nutrients, they have trouble obtaining carbohydrates that supply the energy for growth. Plants have a hard time getting mineral nutrients because it's hard to make roots fine enough to reach all the nooks and crannies in the soil profile. On the other hand, most plants have an easy time making carbohydrates because two of the three main components, carbon dioxide and sunlight, are readily available above ground. Approximately 450 million years ago vascular plants and fungi figured it out — they could combine forces for mutual benefit, and the mycorrhizal symbiosis was born. Mycorrhizal fungi penetrate the roots of their plant host and deliver nitrogen and phosphorus through highly branched organs called arbuscles. In exchange, the fungal hyphae absorb carbohydrates from the plant cells they have penetrated. Everybody gets what they need most.

Vascular plants have strategies to protect their ability to photosynthesize carbohydrates. Plants produce all manner of chemicals to deter, stifle, or kill the animals that would eat their leaves, stems, and seeds. But what about the

plant's symbiotic fungal partners in the soil? There are many soil insects that eat fungus and these insects can damage mycorrhizal fungi, lowering their ability to gather nutrients for their vascular plant partners. Plants defend their own tissues from enemies, but do they protect the fungal partners that gather nutrients for them? This is the question that Marie Duhamel and her collaborators recently reported on.

English plantain (*Plantago lanceolata*) is a common plant in Europe, where it is native, and in North America, where it has

been introduced. It is dependent on having a fungal partner and has been shown to produce several defensive chemicals, including catapol, a chemical that deters feeding in many herbivorous insects. Duhamel et al. grew English plantain in pots with and without mycorrhizal fungi and with or without springtails, tiny soil-dwelling, wingless insects, many of which feed on fungal hyphae (snow fleas are one type of springtail). They grew the plants for three months and then harvested them. Duhamel's team found that plantain grew more than 50%



Springtail (*Papirius*), greatly enlarged (after Lubbock).

Above: Springtails are a nemesis of mycorrhizal fungi, but some vascular plants can form chemicals to inhibit them and benefit their fungal partners. Illustration from a 1909 exhibition catalog of the British Museum of Natural History.

better in the presence of the fungal symbiont, but half of this positive effect was lost in the presence of springtails. So when the mycorrhizal fungus was attacked by springtails the host plants did indeed suffer. More importantly, the researchers found that the hyphal mass of the mycorrhizal fungus contained catapol, but only when the springtails were present. This defense chemical must have come from the host plant because the fungus is not capable of making it. Taken together, these results suggest that when springtails are eating its mycorrhizal fungi the plantains provided a chemical defense to directly help the fungus and indirectly help themselves by deterring herbivory. The host plants came to the rescue of their fungal partners by providing chemical weapons in the presence of hungry frugivores.

But this isn't the end of the story. In some cases the host plant does more than just help its mycorrhizal fungal partner deter its enemies. John Klironomos and Miranda Hart found that springtails actually are killed by eating *Laccaria bicolor*, a mycorrhizal fungus which then, in turn, eats the insect and transfers part of the nitrogen to its host plant, eastern white pine (*Pinus strobus*). The host plant turns its fungal partner into a "hit man" and then reaps the rewards. It may be that there are more carnivorous plants out there than we imagined.

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Grow This: Annuals

By Robert Dorn (adapted from *Castilleja*, newsletter of the Wyoming Native Plant Society, March 2014)

Annual forbs are used mostly for flower beds, planters, or pots that are changed every year. They can also be used to get a flower display the first year of planting. Some annuals readily reseed themselves but others need to be replanted by hand.

Cleome serrulata (or *Peritoma serrulata*; Purple or Rocky Mountain beeplant) can grow 3-6 feet tall and wide with a thick stem and large taproot. The leaves are compound with 3 narrow leaflets each to 3 inches

long. The flowers are pale pink to lavender (rarely white) to 1 inch across, and clustered at the tips of the many stems and branches. They bloom for a relatively long period between July and September. The flowers are exceedingly attractive to bees. Many of these bees may be important pollinators of fruit trees and other crops. Beeplants may keep your bees happy for the rest of the summer after the fruit trees are pollinated in the spring. An unresearched question is whether they



Above: Rocky Mountain beeplant (*Cleome* or *Peritoma serrulata*), a native annual that grows easily from seed and provides a showy display each summer. Although it has pea-like fruit pods, beeplant belongs to a separate family (*Capparaceae*) and is more closely related to the mustards. Photo by Al Schneider (www.swcoloradowildflowers.com).

draw the bees away from pollinating crops or whether they attract more bees to an area so that more crops get pollinated. The seeds are much sought after by birds, especially Mourning doves. The plants occur naturally in disturbed (especially sandy) areas in valleys, plains, and basins. They prefer full sun and well drained soils and are drought tolerant. They self seed readily if the birds and rodents don't get all of the seeds. They are easy to grow from seed. Sow seed in the fall and cover with 1/4 inch of soil. If sown in spring, cold stratification for 60 days beforehand may help germination. Seed is commercially available.

Helianthus annuus (Annual or Common sunflower) grows to 6 feet tall and half as wide. The leaves are up to 12 inches long and somewhat triangular. The flowers have a circle of yellow rays surrounding a center of brownish disk flowers. The flower heads are to 3 inches across or occasionally larger with one to few at the tips of stems and branches. It flowers from July to September. The seeds are highly sought after by birds, especially if the plants are left standing into winter. If you plan to grow other species on the site in the following year, remove the plants (including roots) in late fall since the remains can inhibit other plants. Sunflowers occur naturally in disturbed areas in basins, valleys, and plains and prefer full sun and loose, well-drained soils. They are easy to grow from seed. There are many cultivars in the nursery trade.

Lupinus pusillus (Small lupine) grows to about 10 inches tall and as wide. The leaves are compound with mostly 7 narrow leaflets arising from the same point. The pea-like flowers are purple



Above: Small lupine (*Lupinus pusillus*) comes in three varieties in Utah, each differing in whether the inflorescence is longer or shorter than the leaves (var. *intermontanus*) or whether the calyx is hairy (var. *pusillus*) or glabrous (var. *rubens*). The species occurs commonly on sandy soils in a variety of desert shrub, sagebrush, juniper, blackbrush, or grassland communities. Photo by Al Schneider (www.swcoloradowildflowers.com).

and marked with white and clustered along the upper part of the stems. Blooming is from May to July or August. The plants occur naturally in valleys, basins, and plains. They prefer full sun and sandy soil. Sow seed about 1/4 inch deep after scarification either in fall or spring.

Machaeranthera tanacetifolia (Tansyleaf spinyaster) grows to about 18 inches tall and 12 inches wide. The leaves are finely dissected and to 2.5 inches long. The flowers are sunflower-

like with the rays light blue to lavender and the central disks yellow, the flower heads up to 1.5 inches across with many heads per plant at the tips of the stems and branches. It has a long blooming period from July to September. The plants occur naturally in dry open areas of the plains and basins often in disturbed or sandy soils. They prefer full sun and dry, well-drained, loose soil. It can be grown easily from seed which is commercially available.

Meadow Gentian

By Walter Fertig

King Gentius is best known as the last monarch of the Kingdom of Illyria on the Adriatic Coast (modern day Albania and Montenegro) before it was conquered by the Romans in 165 BC. In his ancient encyclopedia, *Natural History*, Pliny the Elder gave Gentius credit for discovering the use of the root of the yellow gentian (*Gentiana lutea*) for curing malaria. Linnaeus later immortalized Gentius by naming the genus *Gentiana* (and ultimately the gentian family, Gentianaceae) in his honor.

At one time taxonomists recognized more than 325 species in the genus *Gentiana*, ranging across the Northern Hemisphere and the Andes of South America. Most gentians have blue to purple flowers with four or five petals fused at the base into a tube. Often the area between the corolla lobes is pleated, or the lobes are variously fringed on their margins or at their base within the floral tube. Due to this variability, the genus has been split into three main groups, usually recognized as separate genera. The group of approximately 25 north temperate species with four fringed petals and lacking pleats are now placed in the genus *Gentianopsis* (literally translated as “*Gentiana*-like”) and called the fringed gentians. These species can also be recognized by their seeds that are covered by scale-like papillae (best seen under high magnification).

Meadow fringed gentian (*Gentianopsis detonsa* or *G. thermalis*) is widespread across northern Canada and south through the



Above: Meadow fringed gentian (*Gentianopsis detonsa*) in flower by Al Schneider.

Rocky Mountains to New Mexico, Utah, and Nevada. The species is sometimes split into two, with *G. detonsa* restricted to Canada and *G. thermalis* to the Rockies. Meadow fringed gentian is an annual with several stems arising from near the base and opposite leaves. The flowers are 1 ½ to 3 inches long and deep blue, with four petals that are coarsely toothed or fringed along the margins. When the flower is closed, as often happens on a cloudy day, the four petals become coiled, much like

the blades of a windmill. Other *Gentianopsis* species differ mainly in having unbranched stems or a perennial growth form. The species is often locally common in moist meadows and streambanks in mountainous areas.

Gentians are still used medicinally in Europe in folk and commercial remedies to treat urinary infections and stimulate digestion. Native Americans also utilized certain species to treat headaches and as an antidote for witchcraft. More study is needed to determine if *Gentianopsis* has efficacy in warding off witches.

Maybe Gily-flower is not so Silly, Or More Adventures with Common Names

By Walter Fertig

In the January 2014 issue of *Sego Lily*, I penned a short essay on the pitfalls of substituting common names for Latin or scientific names. One of the foremost problems with common names is that so few species actually have a widely used or accepted vernacular name. Instead, most “common” names are arbitrarily assigned in floras or governmental databases, many of which are poor translations of the original Latin.

As an example of the latter, I cited Gily-flower* as a common name for the genus *Gilia* in the Phlox family (Polemoniaceae). A number of references in my home library, including the *Intermountain Flora* and *Flora of Colorado* noted that the genus *Gilia* commemorates Spanish botanist Felipe Luis Gil. Assuming this to be true, I lamented the adoption of Gily in place of the perfectly good name *gilia*.

Astute reader Al Schneider, President of the San Juan/Four Corners Native Plant Society and webmaster of SWColoradowildflowers.com, wrote to inform me that I had fallen for a common mistake. Felipe Luis Gil was actually Filippo Luigi Gili, an Italian naturalist and director of the Vatican Observatory from 1800-1821. Gili's claim to botanical fame was as co-author (with Argentine botanist Gaspar Suarez) of a three volume treatise on the economic plants of the New World (*Obser-*

* Gily flower should not be confused with Gilly Flower, the late English actress best known for her starring role as Miss Abitha Tibbs on the BBC comedy *Fawlty Towers*.



Above: *Gilia ophthalmoides* (a.k.a. *Gilia inconspicua*) is one of more than a dozen species of annuals in the genus *Gilia* in Utah. Recent genetic research suggests that *Gilia* is a polyphyletic and unnatural genus that should be split into several separate genera. Photo by Al Schneider (www.swcoloradowildflowers.com).

vazioni Fitologiche or Botanical Observations) in 1792. This book was admired by Spanish botanists Hipolito Ruiz Lopez and Jose Pavon Jimenez (better known today as Ruiz and Pavon), who described the new genus *Gilia* in their 1794 publication on the flora of Peru and Chile. Although they wrote in Spanish, Ruiz and Pavon Latinized Filippo Gili's name to “Felipe Gil”. Later botanical historians failed to notice that the

spelling of Gili's name was changed. The error has been repeated over and over by subsequent authors who, like me, did not review the original publication for Ruiz and Pavon's intent.

As common names go, “Gily flower” may not be as bad a translation of *Gilia* as I originally thought. Of course *Gilia* also works as both a genus name and common name. Certainly there is a precedent for having Latin names serve both purposes, as is

the case for such organisms as Philodendron, Chrysanthemum, Geranium, Fuchsia, Rhododendron, Aster, Acacia, Agave, and Yucca.

Historically, *Gilia* has been something of a “garbage can” in the Polemoniaceae. Over 200 species now placed in *Collomia*, *Gymnosteris*, *Langloisia*, *Leptodactylon*, *Linanthastrum*, *Linanthus*, *Navarretia*, and *Eriastrum* were originally included in *Gilia*. In the past 30 years, *Gilia* has undergone a second round of revision, with a suite of species being transferred to new or resurrected segregate genera such as *Ipomopsis*, *Allophyllum*, *Alliella*, *Giliastrum*, *Lathrocasis* and *Saltugilia*. Those species that remain in *Gilia* are annuals with deeply divided leaves, small, tubular flowers, and relatively large seeds that become slimy when wet. Even the nomenclature of the remaining *Gilia* species remains controversial, with some authorities recognizing numerous cryptic taxa based on genetic differences.

So far, most of the renamed *Gilia* species have retained “gilia” as part of their common name rather than ‘gily-flower’, at least according to the US Department of Agriculture’s PLANTS database (<http://plants.usda.gov>). But in a few cases, the common name has been changed, such as Arizona ipomopsis for *Ipomopsis arizonica* (formerly *Gilia aggregata* var. *arizonica*). Changing common names when a species is transferred to a different genus is an unfortunate practice, as it undermines the whole point of keeping the vernacular nomenclature stable. In this case, the older name of Arizona scarlet gilia is more meaningful (and certainly more clever) to a broader audience than the redundant “Arizona ipomopsis”. Furthermore, common names do not have to reflect evolutionary

relationships—that is the role of Latin names.

One final consequence of recognizing Filippo Gili as the namesake of *Gilia* has to do with pronunciation of the genus. Most people I know pronounce *Gilia* with a hard G, like the name “Gil” (as in square-jawed coach Gil Thorp of Midvale High). As Al Schneider notes in his website, “[i]t is generally accepted that when a person’s name is used as part of a botanical name, that name should be pronounced as the person would have pronounced it. Gili’s name should be pronounced with an Italian soft “g”, as in “gee whiz”: gee lee

ee, with the accent on the second syllable. The genus name *Gilia* would then be pronounced: “Gee lee ee-ah” with the accent on the “lee”. Most of us won’t pronounce the genus name this way so let’s settle on “Gee lee ah” or Gee lee uh” with the accent on the first syllable”.

I won’t argue against the merits of Al’s recommendation, but something tells me that getting people to agree on changing their pronunciation of *Gilia* may be far more difficult than getting everyone to agree on either the common names or the taxonomy of the genus!



Above: Carmine gilia (*Gilia subnuda*) is a Colorado Plateau endemic that was first collected by Alice Eastwood in the canyon country of San Juan County, Utah. This species has recently been transferred to the genus *Alliella*, named by August Brand in 1905 to commemorate Eastwood’s many contributions to botany. Brand’s name was relegated to synonymy until genetic work by Mark Porter supported its recognition. Photo by Al Schneider (www.swcoloradowildflowers.com).

Utah Native Plant Society



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If you have a smart phone you can now access the UNPS website via the QR at left. At the UNPS website you can access the *Sego Lily* in living color, download previous issues, read late breaking UNPS news, renew your membership, or buy wildflower posters, cds, and other neat stuff at the UNPS store.

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- Sustaining \$40.00
- Supporting Organization \$55.00
- Corporate \$500.00
- Lifetime \$250.00

Mailing

- US Mail
- Electronic

Contribution to UNPS scholarship fund \$

Name _____
 Street _____
 City _____ State _____
 Zip _____
 Email _____

Chapter _____ (see map on pg 2)

Please send a complimentary copy of the *Sego Lily* to the above individual.

Please enclose a check, payable to Utah Native Plant Society and send to:

Utah Native Plant Society
 PO Box 520041
 Salt Lake City, UT 84152-0041