Plant Lover's Almanac

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For February 14, 2015

It's Valentine's Day, and I am sure you have your favorite plant & lover's quote. Here are a few I found in our modern Common Surftu love affair of the web of life. From Sweden With Love, comes this proverb: "Love is like dew that falls on both nettles and lilies." I like it, especially as it channels my own mantra that (almost) all plants have attributes we can love. One person's invasive and impenetrable multiflora rose mess is another person's delightful sweet-smelling rose on a stream-land stroll. As Shakespeare wrote in Sonnet 35:

Roses have thorns, and silver fountains mud; Clouds and eclipses stain both moon and sun, And loathsome canker lives in sweetest bud, All men (or "plants") make faults."

Then there is a quote from the prolific A.N. Onymous, of "Love is a flower that is made to bloom by two gardeners", and the reliable Kahlil Gibran with "Life without love is like a tree without blossom or fruit." The last word about Valentine's Day, though, goes to Mr. Donut himself, Jim Gaffigan: "Without Valentine's Day, February would be, well...January. Deflategate, Gaffigan-style.

But seriously, back to the time of the season, back to plant-loving, which takes me back to a week ago, at the Cleveland Botanical Garden. I was there to talk about one of my favorite topics – why trees matter – at their 10<sup>th</sup> Annual Sustainability Forum. Myself notwithstanding, it was an excellent program: Chadwick Clink, the new urban forester at Holden Arboretum held forth about assessing the benefits of urban forests and Pete Nelson of Animal Planet's 'Tree House Masters' was very informative and entertaining. It was about trees, but, on this day of flowers and love (remember Goethe and his "*A flower is a leaf mad with love*", what I remember about that day was – orchids.

Yes, it was the time then, and is the time now, and will be the time until March 8, for orchids at CBG.

Orchids, how cool are they? The orchid family (Orchidaceae) is a huge and wonderfully diverse group of an estimated 880 genera and possibly more than 25,000 species worldwide, with more being discovered due to the continued passion of intrepid tropical orchid explorers. Add to that over 3000 hybrids developed by breeders every year. Some botanists estimate that the orchid family comprises as much as 10% of all species of seed plants worldwide. There is also a long history of danger for orchid explorers, continuing to this day in South American coca zones and in other areas with regional governmental and factional disputes.

We do not eat a lot of orchids, though dried seedpods of the genus *Vanilla* provide us the eponymous flavoring we love so much. Dried tubers of some orchids are eaten directly in some cultures, some orchids are used in perfumes, some as traditional medicines, but the main joy of orchids is their fascinating lifestyles and the beauty they impart, from native wildflowers such as lady's-slippers, showy orchis and rattlesnake plantain in our area, to the many tropical and semi-tropical orchids we love in botanic gardens and in homes of orchid lovers.

As to the aforementioned lifestyles, many orchids are epiphytic on other plants, many are vines, others grow terrestrially in soils, and a few live as saprophytes on other plants due to their lack of chlorophyll to produce their own food through photosynthesis. Orchid flowers are often models of a phantasmagorical coevolution with pollinating insects. There are tropical orchids that so resemble the females of pollinating bees that male bees attempt to mate with the bee-like flowers (so-called "pseudocopulation" of orchids). Many orchids have elaborate pathways that bees and wasps, drawn by the promise of nectar and pollen foodstuffs are drawn into, facilitating the attachment of a pollinia packet that the insect then effectively transfers to another orchid on its next flight and thus completes cross-pollination. Check out the many books on the marvels of orchid pollination and fertilization, including Charles Darwin's classic "Fertilisation of Orchids" (1862).

Another lifestyle of the richly interesting and rightly famous Orchidaceae is the relationship with mycorrhizal fungi that is needed by orchids for seed germination and seedling growth. Orchids, unlike many plants, do not have adequate food reserves in their seeds; they require certain fungi to transfer nutrients from soil and from other plants to the developing orchid. The orchids regulate this association with these fungi until they no longer need them – and then consume the cooperative fungi! This led the great mycorrhizologist James Harley to pen thusley:

"I passed through the woodland and marked with one eye,
The Orchid and Fungi were sharing a pie.
The Orchid had gravy and piecrust and meat,
The fungi took the dish as their share of the treat.
When the pie was all finished, Fungi as a boon.
Were kindly permitted to pocket the spoon.
Whilst the Orchid seized knife and fork with a cry,
And ended the banquet by eating Fungi".

At any rate, make a day of it, head out today, treat yourself to some vanilla milkshakes, and then visit the Cleveland Botanical Garden for Orchid Mania, its orchid displays in the glasshouse, the connection to orchid art throughout the Garden, and special events such as the Orchid Doctor on some Saturdays, Orchids after Dark on Wednesdays, and more (check it out on <a href="https://www.cbgarden.org">www.cbgarden.org</a>). There is a fee unless you are already a member of CBG.

Finally, back to the beginning and Valentine's Day quotes. Nettles and lilies. A pleasing quote: love for all. Much nicer than a (predictably) Author Unknown quote on the web: "Love is like a poisonous mushroom. You do not know if it is the real thing until it is too late." How crude! I prefer Love Is A Rose by Linda Ronstadt, much nicer. But wait, now that I think of it, the lyrics are:

"Love is a rose but you better not pick it Only grows when it's on the vine Handful of thorns and you'll know you've missed it Lose your love when you say the word mine."

Let's face it: even today, love is complicated. But worth the effort, if you can just resist the word *control*.