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Unusual, Exotic, and
Native Plants



A Special Visitor to West Central Louisiana and Almost Eden: The Zebra Longwing Butterfly



For the first time this past fall we were graced with the presence of Zebra Longwing Butterflies, *Heliconius charithonia*. These big bold beautiful butterflies are 'sometimes visitors' to the warm southern and more tropical regions of Louisiana and are permanent residents of Florida (their state butterfly) and the Lower Rio Grande Valley of south Texas. They migrate north to other portions of the US and have been reported from as far north as Illinois, Colorado, Virginia, and even New York (you think they could have shown up a little sooner, lol). They were here from October until mid-December of 2016. This is one of the easiest butterflies to recognize and of the first a budding butterfly enthusiast like myself to have learned and one I had always yearned to see. Their long delicate wings and seemingly non-stop fluttering give rise to a fairy-like appearance. The long dark wings with broad bold wide buttery yellow stripes are actually warning signs to predators that this butterfly is poisonous due to the fact that the caterpillars consume Passionvines which have poisonous components that the insects take up as a defense against predation in the same way the Monarch butterfly does.



Zebra Longwing Butterfly Eggs on Maypop

The Zebra Longwing is reported to have spatial memory and will return to the same plants each day in search of nectar. And like the Julia, they also have an especially strong affinity for the flowers of Lantana but are not against visiting other similarly nectar rich species such as Porterweed, Mexican Firebush, and Pentas. Even if the plant is removed the butterfly will return to the same spot for several days looking for the plant. The Zebra Longwing is one of the few butterflies known to consume not only nectar from flowers but it also consumes and digests the proteins in pollen which has also been shown to have been transferred to its eggs. This is also

considered to help with extending its adult lifespan for up to 6 months whereas most adult butterflies live for about 2-4 weeks. The Monarch can live for nearly that long but it too is one of the exceptions.

The more we learn about these beautiful butterflies the more



Figure 2: Zebra Longwing Caterpillar on Maypop



Figure 3: Zebra Longwing Caterpillar in the 'J'-Position preparing to pupate or form a chrysalis

intelligent they seem to appear. Zebra Longwings spend the night roosting in groups for protection and warmth with the most senior butterflies getting the best spots. In the morning the senior butterflies nudge the junior ones once it is time to leave the roost in search of breakfast. Appearing to be a truly 'social butterfly', pun intended, the typically larger female Zebra Longwings lay their bright yellow eggs in groups and singly on the tips of new growth and leaves of the Passionvines and the young caterpillars are gregarious, living and eating in close knit groups until they are an inch long or more. The alien looking, spike encrusted, folded dead-leaf with shiny spider eyes peering-out look of the chrysalises are one of the few solitary stages for the Zebra Longwing. Even as adults when they would show up at the nursery there would always be more than one and up to three in our local population.

Living in a hot tropical climate with mostly black wings and a black body means that you get warm rather quickly and so often on hot sunny days, as anyone seemingly would, it spends its time in the shade. In its native habitat this is often where many of the native Passionflowers are found, like the Corksystem Passionflower, although here they have been laying eggs and raising caterpillars on our native Maypop seedlings. If you would like to plant Passionvines to attract the Zebra Longwing butterfly they are known to lay eggs on the Maypop, *Passiflora incarnata*, the native Yellow Passionvine, *Passiflora lutea*, the Corksystem Passionflower, *Passiflora suberosa* (now *P. pallida*) and a variety of other passionvines. Look for us to hopefully offer Corksystem Passionvine later this year and we will definitely, probably, maybe, if everything goes well, have the native Yellow Passionvine in the late spring and summer of 2017. We have noticed that, at least in our nursery, our female Zebra Longwings have been opting for the Maypop over the cultivar 'Incense' and other hybrids. Like our Gulf Fritillary and Variegated Fritillary Butterflies, who have their very own stands of *Passiflora incarnata* that we can transfer them to if their numbers get too large, we are happy to share our butterfly food plants with the local pollinator populations. In 2016 the numbers of butterflies were truly exceptional here even without our Zebra Longwing surprise and we hope that yours was too!



Figure 4: Zebra Longwing Chrysalis



Figure 5: Zebra Longwing Chrysalises

New Growing Guides

If you are not familiar with our [Growing Guides](#), they are freely available for download in PDF format on our website for a variety of different plants and include in-depth growing and planting instructions. You can find the [Growing Guides](#) page under the 'Information' section on the left side of our website below the Categories on any of our web pages. We have recently added the following growing guides and all of the titles below are clickable hyperlinks. We've included the introductory paragraphs from each to give you a feel for their layout:

Enjoying Epiphyllums – Night Blooming Cereus and Orchid Cacti

Epiphyllums are one of the few true jungle cacti and are actually naturally epiphytic, meaning that they actually grow on trees or other plants, and find soil and nutrients trapped in small pockets where the branches “Y” out from trees. This means that you do not want to “over pot” your Epiphyllum and it should remain somewhat root bound and should not be kept overly moist. Allow the soil to become semi dry between waterings although they can be kept slightly more moist during the growing season (spring to late summer as a general rule) and should be kept slightly dryer when not in active growth (late fall and winter). [Read more here](#).



Epiphyllum 'Fifty Grand'

Growing the Pride of Barbados Successfully



Pipevine Swallowtail on Pride of Barbados

The Pride of Barbados, *Caesalpinia pulcherrima*, is a tropical to subtropical naturally evergreen medium to large shrub in the Papilionoideae (butterfly-like flowers instead of mimosa-like flowers) side of the Legume (Fabaceae) or Bean family. It produces wide spike-like (actually racemes) clusters of up to 40 ball-shaped red to pinkish red buds that open to reveal golden yellow and orange flowers that fade through shades of deep orange and red. The flowers are produced on new growth and it can flower continuously throughout the warmer months of the year and well into fall. The flowers are butterfly pollinated and our Sulphurs and Swallowtails seem unable to resist the bright colorful nectar rich flowers. Pollinated flowers are followed by flattened 'bean' pods that ripen to brown and split and twist open once fully mature dropping their hard tan colored seeds to the ground below. [Read more here](#).

Getting the Most Out of Your Angel's Trumpets

Angel's Trumpets, whether *Datura* or *Brugmansia*, have long been garden favorites prized for their large showy flowers, and for many, for their wonderful fragrances. The large trumpet shaped flowers open at night and each flower can last for a few to several days. Once flowering begins it can last for months if they are well cared for, making these the star and often times the center piece of the garden. Like many night blooming flowers, the fragrance of the Angel's Trumpet often doesn't begin to express itself until sunset providing a beacon in the dark to the large often light colored flowers for hummingbird moth pollination (a common name applied to Sphinx moths and inclusive of a broad variety of other large pollinator moths) and other smaller moths as well. Plant them close enough to doorways, walks, and outdoor sitting



Brugmanisa 'Goldflame' (Double)

areas where the fragrances can be appreciated throughout the growing season but allow ample room for them grow into their beautiful natural forms. [Read more here.](#)

This year we have added a variety of new Angel's Trumpets including Goldflame, shown above, which is nicely fragrant, opens a soft primrose yellow and changes to a deeper golden yellow to near orange and is long lasting. Pink Perfektion is a flowering machine producing a near continuous wave of double or more fragrant flowers that open from pale rolled buds and darken to a glossy rich pink on a compact plant. Angel's Flight Variegated is a compact double peach flowered Brugmansia with chartreuse and green foliage, what more could you ask for from an Angel's Trumpet! Prince Charming is another double pink with nicely fragrant double flowers that seem to have contrasting white splashes or streaks randomly produced on the flowers, look for us to offer this one later in 2017. And last but certainly not least is the wonderfully fragrant dark pink Peruvian Princess that is small and compact enough for containers and is one of the freest flowering Angel's Trumpets we grow!

Please feel free to provide feedback on any of our growing guides. If you have constructive information that we have overlooked, we would certainly be happy to include it. You can email it to us through our [website](#) or send it directly to jeff@almostedenplants.com.

Alien Invaders Part Deux? *Copidosoma floridanum* – A Chalcid Wasp



Figure 6: Soybean Looper Caterpillar filled with *Copidosoma* Wasp Pupae

timing their maturity with that of the host. *Copidosoma floridanum*, a type of Chalcid Wasp, actually holds the insect world record for producing the most parasitoid adults from a single host or brood at 3055! It is common for other species to have well over 2000 live adults produced from a single host. Each one of these things that look like grains of rice, see Figure 6 above, are all cocoons of the wasps. They fill the entire body including into the head of the caterpillar. The caterpillar's last act is to spin a protective silk enclosure just as if it were about to produce a normal chrysalis for metamorphosis.

Our Angels Trumpets had all been moved into the greenhouse for the winter to allow them to continue to grow and flower so that we may use them as mother plants. Apparently the Soybean Looper Moth along with a few Yellow-Striped Armyworm Moths thought that they would make good host plants. It just so happens that there is a tiny wasp that grows to about 1/5" long that lays a fertilized female egg as well as a non-fertilized male egg in looper moth eggs. As the caterpillar grows these eggs multiply, and multiply, and multiply, cloning themselves up to 3000 times. The tiny wasp larva grow at the same rate as the caterpillar does



Figure 7: Soybean Looper Moth newly emerged adult



Figure 8: Soybean Looper Moth Caterpillar and a Parasitized Cocooning Caterpillar

The truly alien part is that some of the female larva develop into sterile elongated snake-like creatures with rasping teeth that eat everyone who does not have the same DNA as they do, including many of their male siblings. It doesn't matter that they eat many or even most of the males as it doesn't take but a few males to fertilize several hundred or more female wasps. Since there are other species of parasitoid wasps that compete with the Copidosoma wasp for hosts this helps to ensure that their female siblings have minimal competition. The snake-like larva have been named 'soldiers' by the scientists who study Chalcid Wasps and will eventually eat the organ tissue of the caterpillar as well. Once the host caterpillar dies so do the female soldiers.

Sounds like a great form of natural biological control right? Well, it actually is, eventually. You

see the only downside is that the parasitoid hosts actually cause the caterpillar to go through additional instars (a.k.a. molt into the next larger skin) instead of moving into the pupal stage, the cocoon. This can cause the caterpillars to actually consume up to 40% more plant material than a normal looper caterpillar would. The upside is that the exceptionally high population of wasps



Figure 9: Closeup showing proboscis of Soybean Looper Moth



Figure 10 Copidosoma floridanum adult wasps with ballpoint pen for reference. The above image is obviously spliced but is from the same image.

produced will hopefully have parasitized nearly all of the caterpillar eggs reducing the looper population to levels low enough to be sustainable rebalancing the ecosystem. Another interesting note is that this little moth is actually beneficial to some extent as it is itself a pollinator as you can see in Figure 9 it has a fully developed, tightly coiled proboscis. Whereas, some adult moths do not feed at all, like the beautiful and well known Luna moth. This is just another example that all of Mother Nature's creatures are important in the great scheme of things!

So if you find a similar unusual looking, unmoving, tan caterpillar behind a spun webbing in your garden or greenhouse be sure to leave it in place as these truly are beneficial insects, if tiny, even if they haven't been given a good common name yet. If you carry it into your office for further study you will find that the little wasps hatch out rather quickly once the cocoons start to darken to black. They can be quite humorous and entertaining especially when you are trying to study a plant under the microscope (as this is how I had first learned that they had hatched out) watching them sitting around scratching and preening and generally getting in the way before I rushed as many as I could gather up back out to the greenhouse.

More New Plants to Look for in 2017

Dwarf Vitex



Pink Pinnacle™ Vitex

Image courtesy of Star® Roses

Vitex or Chaste Trees are one of the most reliable, adaptable, pest and disease resistant shrubs that we can grow and most cultivars can reach 10-15' high and wide. And grow they do, across much of the US and even into zone 6 as die-back perennials. Today breeders are working to bring new dwarf forms to the market like the recently introduced **Blue Diddley®**, a 2015 Proven Winners introduction. From the breeding work of Carol Robacker at UGA comes **Pink Pinnacle™ Dwarf Vitex**, a compact plant with a dense branching habit producing dense spikes of rich pink flowers on a plant that grows to just 3-6' high and a 2017 introduction. These two compact dwarf selections are small enough to enjoy in medium to large containers as well as in the confined spaces of smaller gardens, as low to medium sized shrubs in the landscape, or as low maintenance informal hedges.

The flowers of Vitex are excellent for



Blue Diddley® Vitex

Image courtesy of Proven Winners,
www.provenwinners.com

attracting bees and will also attract butterflies and even hummingbirds. Provide these easy to grow plants with a full to mostly sunny position (preferably 6-8 hours of sun per day) in a well-drained, somewhat fertile soil for the best results although they are fairly adaptable. Dr. Michael Dirr has an excellent article discussing much of the recent breeding work and comparing the various available Vitex cultivars titled "[A New Beginning for Vitex](#)" in the online version of the Nursery Management magazine.

We have been working diligently all winter to bring you a host of exciting new plants for the 2017 growing season including more exciting new Angels Trumpets (besides the ones mentioned above), more native plants, more fig varieties, more Camellias, more plants for pollinators, more great perennial Hibiscus, and much, much more.

We do understand that many items at this time show to be temporarily out of stock. Registered customers that are logged in to our [website](#) will find a clickable green "**Email me when ready**" link below the "**out of stock**" message. Once you have clicked the link it will turn black. As soon as we add that item back into the inventory you will automatically be sent a onetime notification that that plant is back in stock by our system. Please add "[@almostedenplants](#)" to the safe senders list or white list in your email account so that the email notification does not end up in your SPAM box. We never share, sell, or otherwise distribute our customer's personal information and only send emails, like this one, if you are signed up to receive our periodic newsletter or if we need to contact you about an order or question you have asked.

Winter Thriller™ Helleborus from Chris Hansen



From left to right: Winter Thriller™ Midnight Ruffles, Wedding Ruffles, and Red Racer Helleborus

Helleborus are like fine wines and simply only get better with age. These are practically deer and rabbit proof, exceptionally long-lived, shade loving, durable and easy to grow perennials that are evergreen throughout all but the coldest portions of their growing range in USDA zones 4-8(9). The Lenten Roses in our gardens are typically in full flower by Christmas and will last well into March. Chris Hansen has been breeding these low maintenance garden favorites for several years now and his hybrids have long been in high demand. His Winter Thriller™ series offer larger flowers, typically 3" wide, a selection of the highly sought after double forms, a beautiful array of rich colors, all on plants that have long flowering seasons that begin flowering in winter and once established can continue well into spring.

Like some perennials, you generally do not plant Helleborus for "instant color", these are garden investments that will reliably reward you year after year once they have become established in about 3 years' time. Chris' Winter Thriller™ series are vigorous, easy, and begin flowering at a young age making these choice selections for the garden. Provide them with a shaded area, and deciduous shade seems to work just fine. The site can also be filtered shade, like under pines, or it can receive cool sunlight like early morning sunlight on the east side of your house. Good drainage is necessary for longevity but as long as your soils have average drainage the durable Lenten Rose should do just fine. They do prefer an organic mulch as well as moderate amounts of organic matter in the soil for moisture and nutrient retention. One source mentioned that they may prefer alkaline over acidic soils but they have done quite well in our 5.0-5.5 pH gardens soils and have never looked back once planted.

Also commonly known as Hellebore, the Lenten Rose is a winter growing perennial and so should be fed in fall or early winter while it is in growth, preferably with a non-burning, slow-release fertilizer. About the only maintenance is to remove spent foliage in fall or early winter before new growth begins. Plan well before you plant your Helleborus as they prefer to remain where they are planted and can resent being transplanted. The long lasting flowers can be used as cut flowers just remember that sap and plant parts are toxic so handle them with care. Dispose of vase water carefully and rinse and wash vases thoroughly after using them for Lenten Rose flowers.

Obviously cultural growing requirements for any plant may be slightly different across the US. This is where the value of the horticultural side our County Extension Services, as well as local universities, horticulturists, and botanic gardens come in. We've provided some additional excellent resources for growing Helleborus from reliable sources across the US to help get you started so be sure to put these valuable assets to good use.

[Helleborus orientalis, Lenten Rose](#) – by Michael Arnold, Texas A&M

[Hellebores](#) – by Gail Roos, UGA Extension – Cherokee County – Newsletter Archive, January, 11, 2016

[Helleborus](#) - Oregon State University

[Helleborus orientalis](#) - Missouri Botanic Gardens – selected as a MBG Plant of Merit

Order Now and We'll Ship Your Plants When You Are Ready to Plant

Spring is nearly here in some of the mildest winter regions of the US but not for the rest of us. Most summer flowering annuals and plants that are tender perennials or die-back perennials, like Angel's Trumpets, typically should not be planted until all danger of frost has passed and the soil has begun to warm. For these plants it gives them the better part of spring and all of summer and into fall to develop a large, well-developed root system and crown with which to survive winter. Often a mulch and a protected area may be desirable as well if you are like myself and like to push your zone a little from time to time. Our website now offers a great new feature that allows you to place your order now and select which week you would like your plants to be shipped to you so that they arrive at the correct time for planting. If you are not sure when your last expected freeze and frost dates might be you can use a [zipcode lookup](#) on [Dave's Garden](#). You can select a shipping week up to 6 months in advance if you so desire and you'll find this feature on the first page of our checkout process. We'll select the best of the bunch, tag your plants in place, and care for them until you are ready for us to ship them.

Thank you for taking the time to peruse our *extended* Winter 2017 Newsletter and if you know of anyone who would be interested in reading it you can forward it to them by copying the below link:

[Almost Eden Winter 2017 Newsletter](#)

Textual version of the link:

https://almostedenplants.com/shopping/growing_guides/Almost%20Eden%20Winter%202017%20Newsletter.pdf

You can sign up to receive our periodic [newsletter here](#).

Thank You & Good Growing,
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