



Growing Avocados in Lompoc by Warren Arnold



Amorphophallus titanum
Titan Arum,
Bunga Bangkai

Docent gently lifting the tip of a huge petal to let visitors get a whiff of the rotting flesh smell typical of this giant bloom. The once a year event was widely publicized and we had hoped to see the blossom open, but the plant had its own ideas and remained shut the day we visited.

UC Santa Cruz Arboretum
and Botanic Garden
Photo Mimi Erland

Someone asked me a while back if I knew anything about growing avocados here in Lompoc. No, I didn't have any information then, but recently I spoke with Ray Milholland who did know about growing avocados here in Lompoc, and here is that interview.

W: So, Ray, how long have you been growing avocados in this area?

R: I planted my first ones about 30 years ago. I have grown Hass, Fuerte, Bacon, Black Mexicali, Zatano and Sir Price. Hass has been the most successful. Sir

Price is a Hass variety.

W: What would you say is the most serious problem with growing avocados here?

R: Well, I would have to say that frost has been the biggest threat. I have lost six trees to it. Some old trees did recover, but younger trees need to be covered on cold nights. [Ray lives on a hillside, so temperatures are even lower in the valley]

W: What about pests?

R: Avocados tend to be shallow rooted, so gophers

can be a problem. I've had no trouble with insects and deer tend not to eat avocados. Wind, though, can blow young fruit off the tree.

W: OK, now I am ready to plant an avocado. How do I go about it?

R: Since avocados are a tropical tree, the soil needs to be well composted. Their own leaves make a good compost. After that, again, being a tropical tree, they need lots of water. If a tree is failing because of lack of water, it can be cut back, and

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Meeting May 15th, 2:00

Member's Favorites

Bring in a sprig, branch or bloom of one of your favorite plants for an informal show-and-tell. As gardeners, we often try a new plant not knowing if it will perform in our yard as we envision.

What better way to be introduced to something new

than by a friend that divulges all the details on how to plant, water, fertilize and prune so you can grow a beautiful new plant in your garden.

Please help share a plant that you love because it grows well in our climate and soil and brings joy to you.

The meeting will start at 2:00 at Stone Pine Hall, 210 South "H" Street, next to the Lompoc Museum.

Light refreshments are provided. All garden and botany enthusiasts are welcome, so invite your friends and neighbors to join in.

A Couple's Semi-Successful Attempts at Controlling Bindweed Organically by Elena and Carl Jones

My husband and I once read that **morning glory** – the common name for over 1,000 species of flowering plants in the family *Convolvulaceae* – was every gardener's nightmare. We soon came to understand why.

Photo 1



Bindweed
Convolvulus arvensis
Photos Carl and Elena
Jones



Photo 2

Growing in our backyard is **field bindweed**, or *Convolvulus arvensis*, a species of creeping herbaceous perennial plant in the morning glory family (photo 1). It was there, in the weed-infested, clay-heavy soil of our property when we moved, in six years ago.

Field bindweed is usually found at ground level and has small, white or pink flowers (photo 2). The weeds die back each year, have an extensive root system and spread quickly. This invasive plant also climbs very well, tightly coiling itself around anything it can find, making weeding tedious (photo 5).

Furthermore, it seeds readily, and its seeds can survive in the soil for up to 50 years, due to their exceptionally hard and durable seed coats.

What bindweed told us about the conditions of our backyard was that the soil was out of balance, with pH issues and stuck or incomplete decomposition of organic material, accompanied by excess heavy soil metals such as magnesium and potassium. The clay soil structure – paired with an accumulation of dry and dead plant matter that could not finish decomposing – had created the right conditions for bindweed to flourish. Furthermore, the soil was low in humus materials, with low available calcium and phosphorus.

Over the years, we have enriched our soil by adding amendments and the material that our compost pile has been generously producing. Our goal is to have a space where we can successfully grow fruit trees, vegetables and flowers. In an effort to control bindweed, we also planted specimens from the marigold family. Some research has in fact shown that the roots of annuals such as *Tagetes minuta* put a chemical in the soil that repels weeds like couch

grass, bindweed, and creeping Charlie.

As field bindweed receives the majority of the energy that feeds it from the sun, it has also been useful to shade the soil with lots of mulch (wood chips, compost, leaves, straw, etc.). An additional approach to weaken the vine-like plant is to pinch the heads off of any morning glory peeking out of the soil.

When using a material such as weed control fabric, black polyethylene, cardboard, or old carpet to add an extra layer of sun block, it is important to overlap the sheets of weed blocker and to weigh down or bury the edges to keep out all light. Bindweed's rhizomes are known for their ability to penetrate through fabric, plastic, and other barriers, so the recommended thickness of mulch is 4-6 inches.

One more thing we learned from our research was that pulling morning glory weeds up from the roots stimulates the development of new, more numerous fibrous roots, which then spread underground and help cultivate the plant in new locations, up to 20 feet away. This is why morning glory is considered an **invasive** species,

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Bindweed continued...

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perhaps second only to the kudzu plant.

As our efforts went on, we decided to implement two more **non-chemical control techniques** that expert gardeners recommended. It is said that using more than one technique at the same time is a more effective way to control bindweed infestation than to use one method alone.

We bought a household **steamer** and filled it with water; we proceeded to steam a few clusters of bindweed leaves until they completely wilted. This technique seemed to be working but required repeated trips back to the house to refill the steamer's tank with water. Multiple applications are in fact needed to provide season-long management of the weed.

As we had a large problem to tackle, we decided to experiment with yet another recommended technique: **maceration**. This is a process of biodynamic gardening where the natural enzymes and toxins that develop during the maceration of the weed parts inhibit – in a selective way – the growth of only the plants that the macerate is prepared with.

We submerged the bindweed (rhizomes, stems, leaves, flowers) in a plastic bucket filled with rainwater to a ratio of 1 kg (2.2 lb.) of weeds to 10 liters (2.6 gal) of water – and allowed them to decompose over the course of two weeks, stirring the contents of the bucket with a wooden stick once daily. It is recommended to cover the bucket with a piece of jute and to place it away from the house, as the macerate will soon begin reeking. Clay or enameled containers work well too. When the white foam that naturally forms on the surface of the macerate is gone, then the process has been completed and the content of the bucket can be filtered and used (photo 3).

We then poured the fermented juices directly onto a few areas encroached with bindweed and did so before the sun peeked out of the clouds. The following day, upon observation of the bindweed leaves, we noticed that only one or two clusters had been affected by the fermented juices and had dried up (photo 4). The inconclusive results of this experiment made us wonder whether this technique was as effective as it had been touted.

We continued our research into organic control of bindweed and found some information on **decompaction**, which entailed breaking the soil with a tool such as a broad fork. However, this practice is tricky, and many gardeners are not in favor of tilling gardens. Deep mulching, on the other hand, builds the soil life naturally and aerates it.

It is worth noting that bindweed, with its strong, deep roots, can break up compacted soil (such as our clay-heavy one) and allow water to penetrate once the plant dies back. So, if we look at bindweed as a workhorse plant helping to better the soil, we understand why it is there.

In the end, we decided that

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Photo 3, macerated leaves and water for inhibiting growth of bindweed.

Photo 4, not all plants were affected by the fermented juices



Minutes from May 15, 2022 by Carol Redhead



Horseradish greens from Patcine's garden

Photo Julie Levy



Chia Sage

Photo Al Thompson

The May 15th, 2022, General Membership meeting was brought to order by President Warren Arnold at 2:00 PM. Board members present were Warren Arnold, Dr. Charles Blair, Mimi Erland, Patcine Beaman, Julie Levy, and Carol Redhead.

1. President Arnold read the mission statement and announced to the members that because this is a club, all members in the audience will benefit from being a part of the board meeting, which is held before each general meeting. Any decisions voted on impact all members.

2. Committee reports:

A. Drought Tolerant Garden - Mimi as chair had nothing to report at this time

B. Membership - roll was called and noted by Julie there are 43 members, 18 life members

C. Mimi read the minutes from January 2nd. Minutes were voted approved with no changes

D. Historical committee chair - Joe Heuring absent due to Covid illness

E. Treasurer report: Julie read the treasurer report and handed out copies of the budget: Because expenditures out-pace income, LVBHS is operating at a loss.

F. Publications: Charlie reported copies available of *Naturalist at Play* by Vern Human and Bess Christiansen's *Acres of Loveliness*, each at \$16.10, and DVDs of the Burton Mesa Chaparral at \$12.00 each.

G. Newsletter: Mimi requested colorful photos for the newsletter and complimented those sent by Jan of her travels and of the chaparral garden.

H. Web site: Julie has the website updated.

I. Member Louise gave handouts by the Audubon Society of pruning trees.

J. Motion to change the bylaws to change dues for life members to no longer be exempt from paying dues, but instead, due to a steady loss in revenue, could pay dues as an option. Vote carried, with one nay.

K. 501(c)5 to change to 501(c)3 discussion by Charlie is working with a person who can help with this decision.

L. Old Town Market opportunity: sign up sheet, by Charlie, a one-day Agriculture-related opportunity with no fee for us. Mimi to make fliers to hand out. Mimi needs a date if we are to participate. Joe Goetz will help set it up.

M. Summer gardens tour/

visit proposal by president Warren of and for members sign up sheet. Mimi needs a date for this

N. Jana brought flowerpots, lemons, and Hannelore brought booklets to share on *Creating Your Wonderful Garden* by Topix Media Specials.

O. Make a Difference Day proposal October 22, 2022: members voted to participate.

P. Next meeting to be September 18th.

Q. Meeting adjourned at 3:00 PM.

R. General Meeting speaker was Carol Redhead on the topics of Horticulture Therapy: What it is and How it Works, and Controlling Common Garden Insects with Integrated Pest Management Techniques (IPM)

S. Meeting Adjourned at 4 :00 PM Minutes respectfully submitted by Carol Redhead, secretary

Bindweed Continued...

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the preponderance of the success came from the implementation of the following techniques:

- covering bare soil with weed blockers and a heavy layer of mulch
- amending the soil with the nutrients it needs.
- planting flowering plants that deter weeds.
- practicing persistence!

If anyone reading this article has had better success at controlling field bindweed, please share your tips.

Elena & Carl Jones, LVBHS members and amateur gar-

deners

Side notes:

- when working on a large morning glory, wear rubber gloves and long sleeves to keep all plant juices from skin contact.

- bindweed competes very aggressively with adjacent crop plants for water, nutrients, and light, reducing crop yield and quality as well as interfering with harvesting by intertwining with crop plants and clogging up farm equipment.

- as bindweed is a perennial weed, it can only be completely killed with the systemic weedkiller glyphosate. This needs to be applied to the leaves, which then take the chemicals

down into the roots as bindweed grows.



Photo 5

Bindweed twining around tomato plant

LVBHS *founded June 5, 1977*

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Representatives:

Patcine Beaman

Elena Jones



Senecio candicans
'Senaw'

Photo, Jan Keller

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Lompoc, CA 93436



Matilija Poppy
Romneya coulteri

Photo by Julie Levy

...Message cont.

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the trunk painted white to prevent sunburn. Older trees recover best.

W: Can I grow a tree in a container? Do I need two varieties for cross pollination?

R: The only ones I have grown in containers were in bottomless containers. Avocados are self-pollinating, so you can get by with just one.

W: Any last words about growing avocados?

R: Be diligent in their care. Don't just plant an avocado and walk away. You must be passionate and dedicated to producing a healthy and high producing tree.



Bees loving the blossoms of a Eucalyptus

UC Santa Cruz Arboretum and Botanic Garden

photo by Mimi Erland