

FoodScaping in the Florida Keys

Grow your own

successfully growing tasty, nourishing food
in pots, in your back yard, on your balcony
or in a spare alcove..

• GrowKeyWest.org

We all know why we garden...

- Its FUN.... for both adults and kids
Provides bonding, educational, fun time
- Its Rewarding & Good Exercise
- Nature Therapy is a real thing... it reduces stress, lowers blood pressure, increases mindfulness... its a moving meditation

Fun for all ages...

Julian planting and harvesting beans



Carrots 5 years later

Why Foodscaping?

Gardening is Good.... Good Eating is Better

- Home grown produce is fresher and tastier
- Promotes healthy eating and exercise
- Home grown produce is more nutritious
- Home grown produce is good for you, good for the environment and saves money
- Really? ...Good for the environment....

How does it get here?

- Most produce grown in the US travels an average of 1500 miles before being sold
- Produce grown overseas travels thousands of miles before reaching your plate
- Trucking, shipping & flying food in takes a major toll on the environment and public health

At what cost?

- On average Americans consume about 400 gallons of oil per year for Agriculture....as much as a car if we drive conservatively
- Tractors, harvesters, etc. use petroleum, but the major petroleum consumption and environmental killers are the synthetic fertilizers, pesticides & herbicides made from petroleum

Once Agriculture thrived in the Keys Eating Local was in...

The Key West column in the *Fort Myers Press* dated December 27, 1884 stated...

“Many of the leading merchants own tracts of land on the Keys which are entirely devoted to the culture of pineapples, tomatoes, Irish potatoes, sweet potatoes, cabbage, cassava, tapias, beets, carrots, turnips and various tropical fruits which flourish in abundance”.

Historical accounts depict pineapple and key lime plantations in the Keys. There was black family that prospered growing and selling vegetables in the Solares Hill area of Key West. Up until the 1950s many Keys natives had kitchen vegetable gardens.

But then a shift occurred...

- Flagler rail arrives all the way to Key West
- Havana pineapple replaces Upper Keys pineapple
- Road development begins
- 1935 hurricane
- Keys land development became more valuable than farms
- Mainland development requires canals that dropped the fresh water table 5-7 feet
- Introduction of Persian seedless lime in S Dade County replaces the Key Lime
- Road infrastructure improves
- Supermarkets eventually emerge

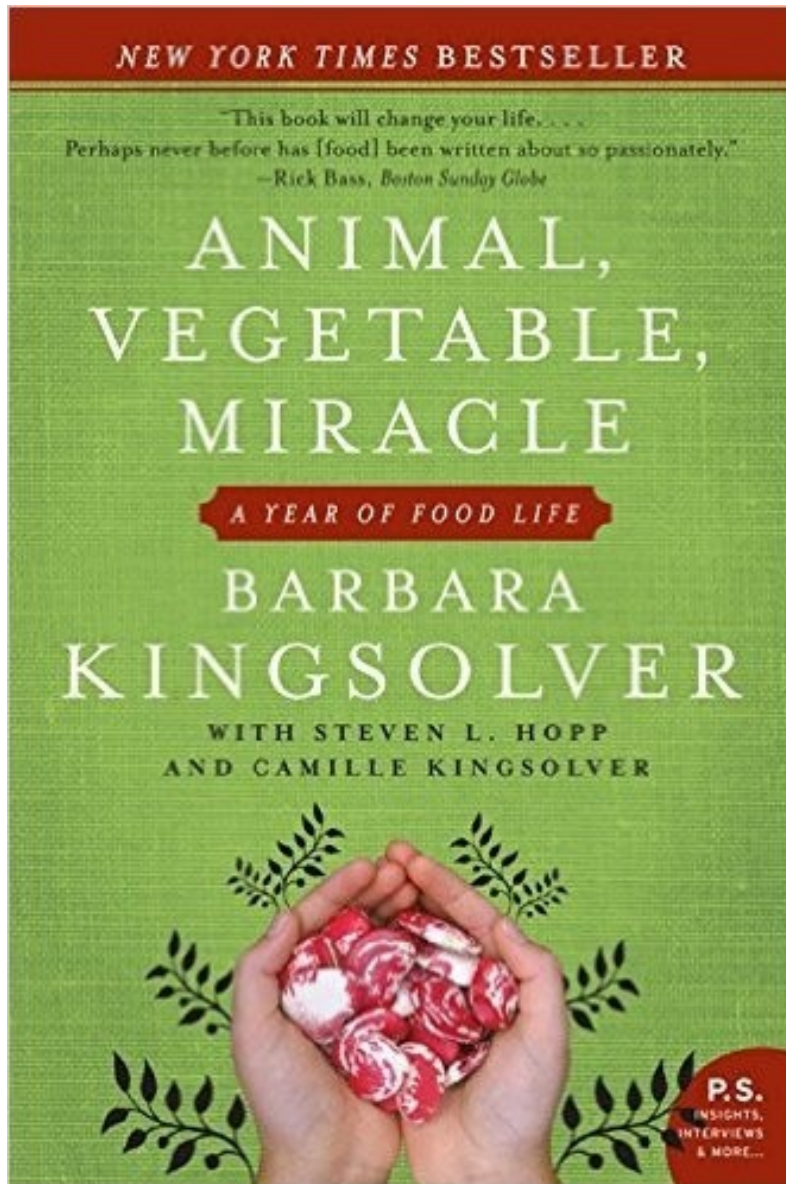
Now we rely on Supermarkets

How long can this last?

- The energy calories used to produce, pack and ship food outweighs the calories we receive from food... This is not a sustainable system and not good for public health
- Our current food system is viable only because of the government subsidies that facilitate both cheap energy and farming that is destroying our air, water, soil and health
- WHAT CAN WE DO???

“Animal, Vegetable, Miracle: A Year of Food Life”

Barbara Kingsolver



“If every citizen ate one meal a week (any meal) composted of local and organically raised produce (and grass fed meat and dairy) we could reduce our country’s oil consumption by 1.1 million barrels every week. That’s not gallons but barrels. Small changes in buying habits can make big differences. Becoming a less energy dependent nation may just need to start with a good breakfast”

Steven L. Hopp, Phd. co-author

Can we do anything?
Yes we can....

We can do it... veggies grown in raised beds at the KW Community Garden



What others have done...

Potted
Ginger
Harvest



Rick's Dwarf kumquat

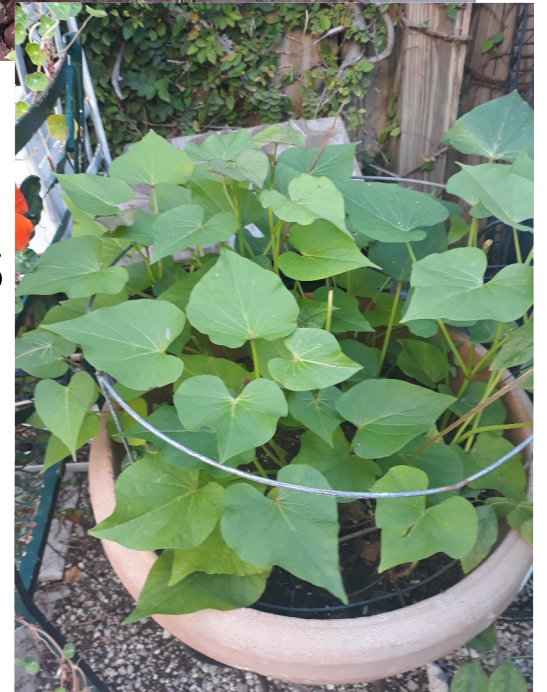


Climbing grapes

You can do it...



Lovely pots
of greens
in many
yards



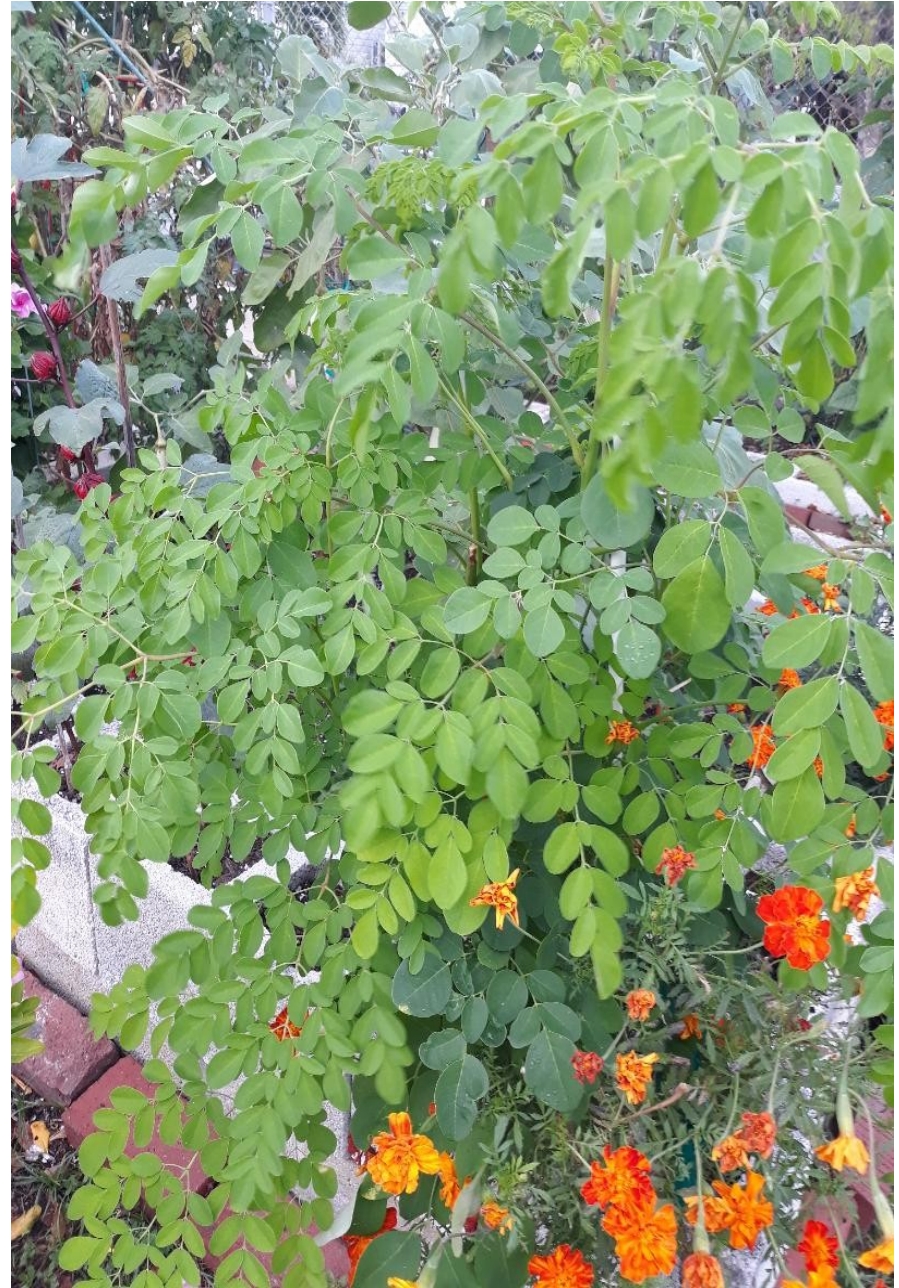
OK.. its good for the environment.. What else you got?

- Besides improving the environment, enjoying nature, getting great exercise... when we garden and also eat what we grow..we help our bodies even more...
- Nature has a secret weapon to help us thrive... **Phytochemicals.**
-
- The benefits of plant based foods go well beyond macro and micronutrients; plants are full of natural chemicals that have been shown to have significant beneficial effects on the body.

Chaya

Superfoods

Moringa



Phytochemicals - Phytonutrients

- What is a phytochemical? - A chemical of plant origin considered to be beneficial to human health..
- All plants - including fruits, vegetables, leafy greens, beans and grains - produce phytochemicals. While not necessary for actual survival, these chemicals and compounds offer impressive health benefits.

Health Benefits of Phytochemicals

- Improve Immune function
- Prevent Cancer
- Protect the Brain
- Support Heart Health

Phytochemicals - Phytonutrients

- Are part of the plant's immune system and help protect the plant from viruses, bacteria, fungi and parasites.
- Phytochemicals can offer humans some of that same protection. They protect cells from damage caused by environmental toxins and the body's natural chemical (metabolic) processes.
- “Phytochemicals have antioxidant properties and offer protection that decreases the risk of many diseases. They help with neutralizing free radicals, which can damage the DNA.”

Vijaya Surampudi, MD, UCLA Health.

Phytochemicals – Phytonutrients

The Keys have the perfect
climate to grow our own
Superfoods...

no need to
have Amazon deliver.

Green lentil salad with fresh greens... sisso or longevity



Lentil soup with sissoo



A Phytonutrient
feast...
at your doorstep.

So Let's get Growing...

Positives for Keys Gardens

- No snow – can grow year round
- Subtropic climate

We are on the border so we get tropical varieties and with care we can still grow many of the usual veggies

Garden Challenges in the Keys

- No snow... so lots of pests year round
- Hot Humid Summers
- Dryish winters
- Less total Sun hours in the Winter
- Less fertile soil – nematodes, alkaline
- Limited space to grow
- Iguanas/ Rats/Chickens and Cats

Summer Solutions

- Plant super nutritious perennials and tropicals greens; Chaya tree spinach, moringa, katuk, longevity spinach, sissoo tindora, Brazilian spinach, collards and eggplant all thrive in summer heat
- Consider heat loving annuals; okra, sweet potato, long beans, seminole pumpkin, calabasa or butternut squash.



Green papaya salad is starting to be well known... full of high powered phyto nutrients...

How about a hearty soup, chunks of papaya with chaya, carrots, peppers, tomatoes and herbs from your garden.



A Phytonutrient
feast...
at your fingertips

Chaya prep



- Chaya leaves must be boiled for 5 to 10 minutes before they are safely edible.... after boiling they have the consistency of sturdy spinach... use in lasagna, soup, twice baked potatoes, sauted w/garlic, in dips, etc
- Moringa leaves need no prep or cooking at all.... zip them into salads, soups, smoothies

Super Food - Longevity Spinach



No Prep required.... Laughs at iguanas & Summer heat

Collards.... Queen of the South



Like Lacinato kale, collards can grow for 3-5 years.... Walking Stick greens.

Solutions for Keys Gardening

- Mulching is the single best practice in a Keys garden, protecting soil from harsh elements while increasing fertility. Mulch beds & pots to protect roots from heat, it holds moisture, reduces weeds and works to enrich the soil over time.
- Water sufficiently but not too much. Morning is best but watering whenever you can is better than not watering.

Consider Living Mulch



Sissoo as understory
Ground cover and as “Pot
Cover” under taller plants

Good Irrigation

- Vegetables are colored, expanding water balloons that magically contain nutrients. Lack of hydration retards growth.
- General water requirement is 1" per week or 25 gallons per 40 sq ft. Raised beds, intensive planting, dry climate and temps above 60 degrees increase need.
- A 40 sq ft bed in the Keys depending on soil & plant spacing requires from 75 to 100 gallons water each week to thrive.

Ollas, Clay Pot Irrigation



Ollas can be a handsome irrigation solution for raised bed or large pots



planted ollas

Pot for Success.....

- Raised bed and Container gardens; cinder blocks, wood, work tubs, self watering containers.... so many choices
- Start with quality potting mix, not topsoil. Enrich yearly with compost, minerals, kelp, manure or organic fertilizers
- Mulch, mulch, mulch - Seaweed, grass clippings, living mulch, paper shreds, small or shredded leaves, organic hay

Cinder block raised beds



Home Depot tubs



Self Watering Tower



Inside job under the lights



Rick's Christmas Habanero



Galvanized Planter



Good potting soil...



DIY Self Watering Pot



Contact website for info

Eggplant Success



Solutions for Keys Gardening

- Inspect for pests often, first use hose spray then soap, neem oil, hot pepper and garlic sprays to deter pests. Amend soil with Earthworm castings...
- Companion planting to confuse pests
- Greased flashing around trees, netting, electric fencing for iguanas, grids under plants for chickens & cats, plastic forks in pots prevents use as litter box

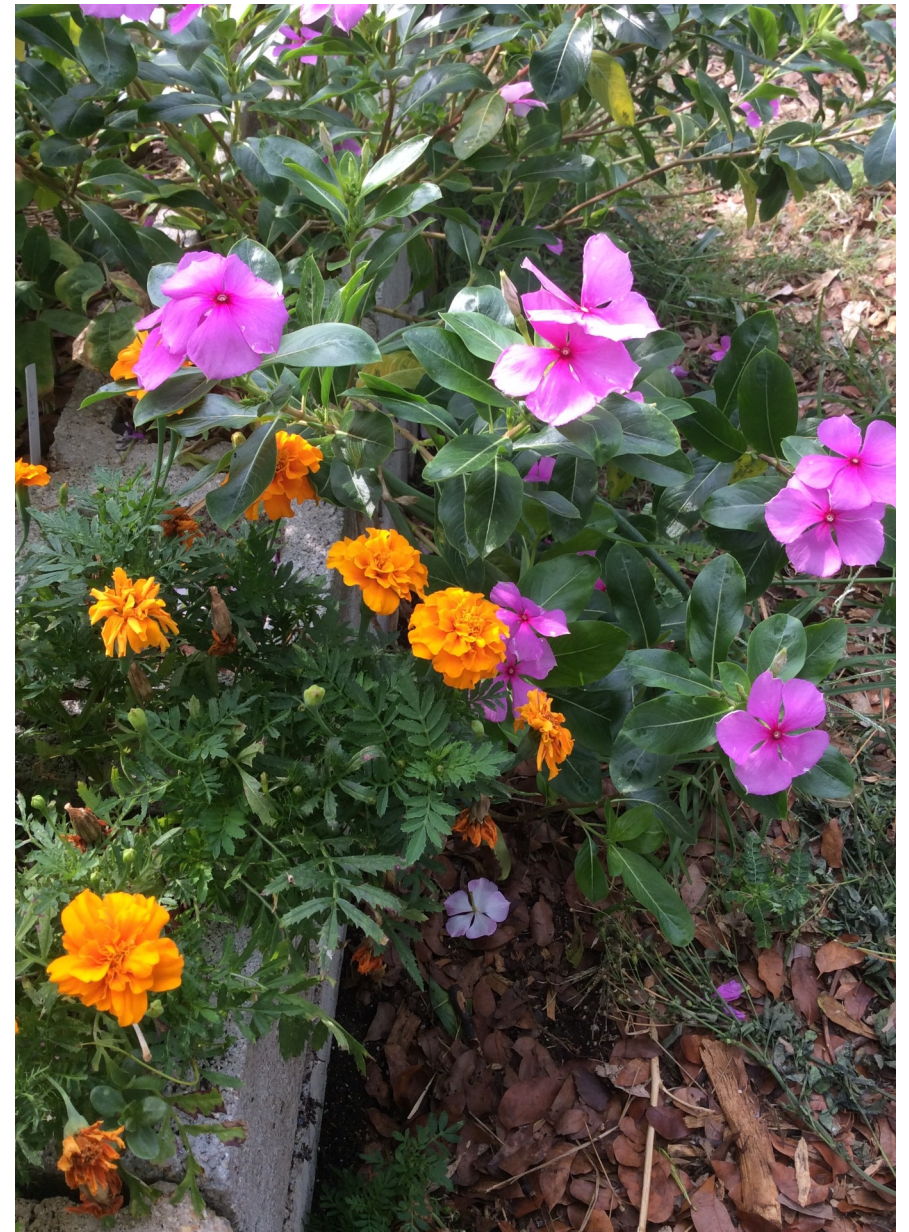
Companion planting to confuse pests



Celosia Spicata



Marigolds/Vinca



Solutions for Keys Gardening in the Ground or in Pots.. same answer

- Plant perennial tropical greens. Tasty, nutritious and survive summer heat.
- Look for dwarf, short season & small fruiting varieties due to less sun hours
- Don't fight the climate. Plant varieties in the right season and location. Fruiting plants like tomatoes, peppers need sun. Leafy greens and herbs need less sun.

From the top; Sissoo, Sweet potato greens, Katuk, Longevity spinach, Chaya tree spinach



Lacinato kale

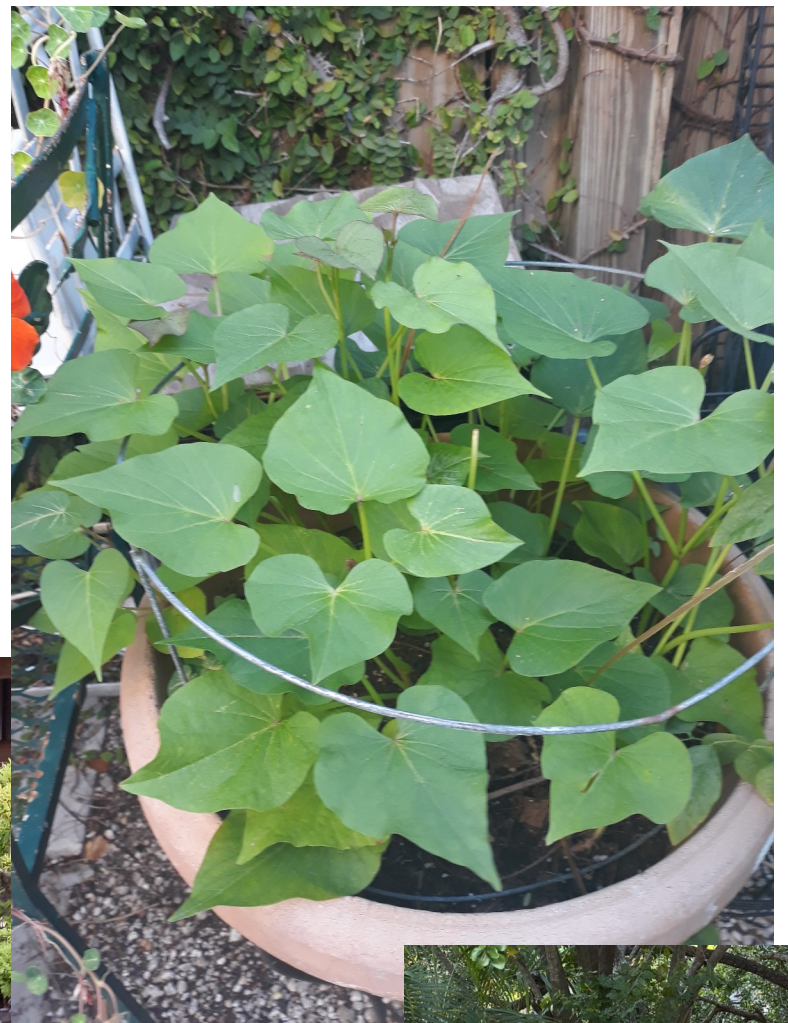


Solutions for Keys Gardening

- French Intensive Method uses closer spacing, succession and inter-planting
- Sow plants that take time to mature like peppers, eggplants and tomatoes in Aug and Sept in small pots then transplant to garden later.
- Sow tomatoes again in Nov-Dec in pots to replace finished ones in Jan.

Solutions for Keys Gardening

- Sow quick annual greens like arugula, tatsoi, baby bok choy, kale, turnips, carrots, beans, peas and lettuce onsite when its cooler, mid to late October
- Plant fast growing short plants around taller, slow growing plants
- Grow flowers - They are beautiful, confuse pests and attract pollinators



Highest Value Annual Crops for Winter Season

- Tender greens for salads - arugula, tatsoi, yukina savoy, baby kale, chard & pak choi
edible flowers nasturtium, borage, calendula
- Herbs & spices- basil, cilantro, dill, parsley
hot peppers, Mexican tarragon
- Sturdy long harvested greens - mature kale,
bok choy, napa cabbage, collards, perpetual
spinach, chard, broccoli

Bok choy



Chard & tatsoi



Perpetual Spinach



Lacinato Kale - Tatsoi



Herb and Spice Pantry



Lemon grass * Ginger * Curry leaf * Turmeric



Garlic Chives

Decorative Edibles

Daina's Turmeric



Max's Cuban Oregano

Don't be too tidy...

Cilantro

Going to seed

Arugula



High Value Annual Crops for Winter Season

All do well in planters or pots

- Peppers, hot, sweet, seasoning - Organic peppers are expensive.. thrive in pots
- Tomatoes - cherry or early varieties grow best and produce more - Campari
- Carrots - mini carrots and colored carrots are worth it – kids love to harvest them

Campari Vining Tomatoes pruned



Sweet Peppers, smaller fruits are best



More High Value Annual Crops for Winter Season

All do well in the ground or planters or pots

- Loose leaf lettuces... mesclun mixes
- Green beans - pole beans and bush beans
- Turnips – Hakurei is a white Asian hybrid. It grows quickly and is sweeter than radishes
- Edible flowers – Nigella, borage, nasturtium gomphrena, marigold, chrysanthemum

Loose leaf lettuces... mesclun mixes

Rick's tomato bucket



Martha's maters



Hakurei turnips



Serena's carrots



High Value Annual Crops for Summer Season

- Okra - dwarf varieties
- Lima Beans, Southern peas
- Asian Long Beans
- Seminole pumpkin, calabasa and winter squashes – butternut if you have room.

Seminole Pumpkin



Calabasa



High Value Perennials

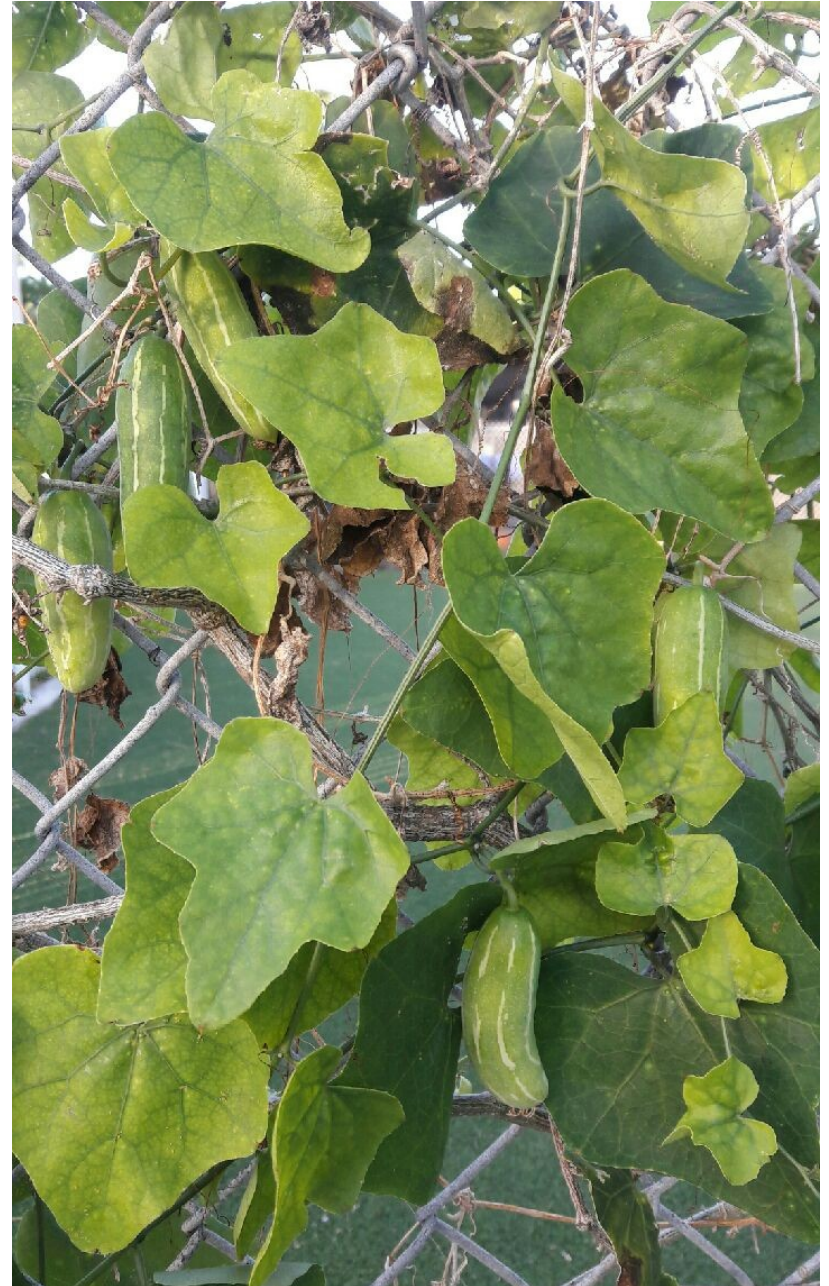
All thrive in the ground and in pots or planters

- Moringa leaves and flowers
- Chaya or tree spinach
- Longevity Spinach and Brazilian Spinach
- Eggplant for up to 7 years
- Herbs - parsley, thyme, Cuban oregano, Lemon grass, curry leaf, rosemary, garlic chives & chives
- Hot peppers and Seasoning peppers for cooking
- Ivy gourd or Tindora
- Turmeric, Ginger and Aloe - useful medicinally
- Weeds - purslane, amaranth, spanish needle

Veggie Mix

Pay Off

Ivy Gourd



White fingers

Eggplants

Thai green



Edible weeds



Purslane – grows every where. It is fat and succulent as the weather cools. Use in salads, soups and smoothies. Very high in Omega 3s

Amaranth - leaves are edible in soups or stir fry. Called callaloo in the Caribbean

High Value Fruit “Trees”

- Citrus- limes, lemons, kumquat, calamondin
- Papaya - fruit or vegetable non gmo please
- Banana - fruit or veg, dwarf cavendish, red
- Mango - can be kept dwarfish
- Carambola and Fig
- Mulberries
- Tropicals – Avocado, barbados cherry, governors plum, canistel, dragon fruit, etc

Down Right Finicky Crops

Poor chance of success or bounty

- Cucurbits- succumb to powdery mildew
- Spinach - doesn't thrive in heat
- Corn - not enough plants to pollinate
- Really Big Juicy tomatoes - give up growing tomatoes like the ones you ate from the farmers field in NJ or (fill in the blank) when you were a kid. You can do it...,,they will cost you \$25 each and not be that good

Fun but Less productive Crops

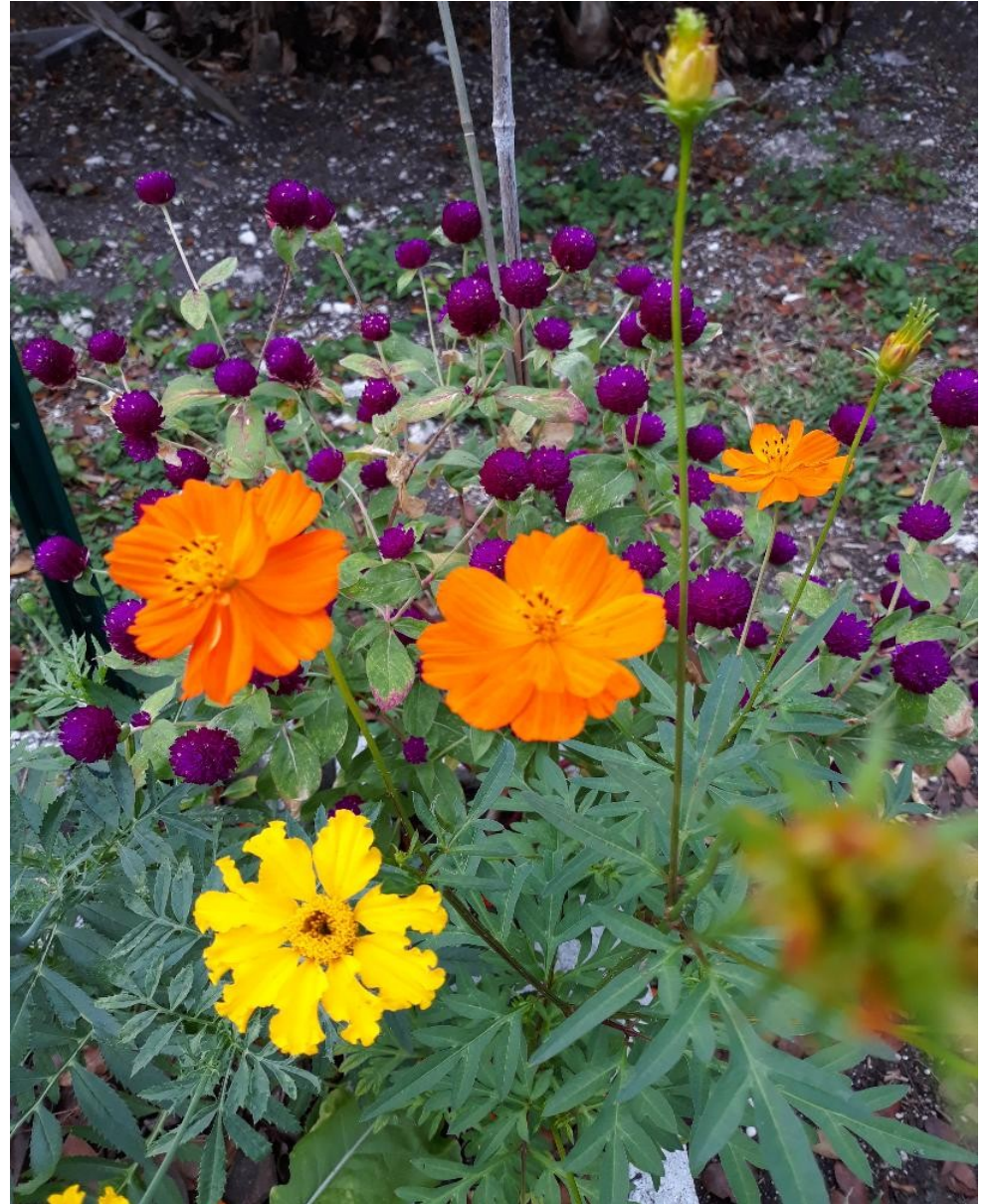
- Peas
- Beets
- Kohlrabi
- Dragon fruit
- Asparagus
- Roselle
- Cucumber
- Corn
- Spinach
- Potatoes

Edible and beautiful...

Roselle



Gomphrena/Cosmos



To Prolong & Increase Production Harvest daily

- Fruiting plants like eggplants, tomatoes, peppers, beans and okra and even broccoli shoots produce more, over a longer period if harvested regularly
- Greens like loose leaf lettuce, Asian greens, arugula, kale, collards & parsley produce more if the outer leaves are harvested rather than the whole plant...keep 'em coming a long time if you harvest this way

Love is always the answer

- Learn to love what grows here easily. Cultivate the garden and your palate.
- Mulch, mulch, mulch.... then more mulch.
- Water sufficiently - but not too much
- Plant cultivars that are likely to succeed in our climate at the right time of year
- Get growing..just do it...Start Today...
When Love is there the skill will come...

Get Growing....



- GrowKeyWest.org is an active resource hub for successfully growing organic food yourself.

We are happy to share information, experience, seeds, seedlings, cuttings and enthusiasm.

Get Growing....



- GrowKeyWest.org is an active resource hub for successfully growing organic food yourself.
- We are happy to share information, experience, seeds, seedlings, cuttings and enthusiasm.

End of UKGC talk 20250916