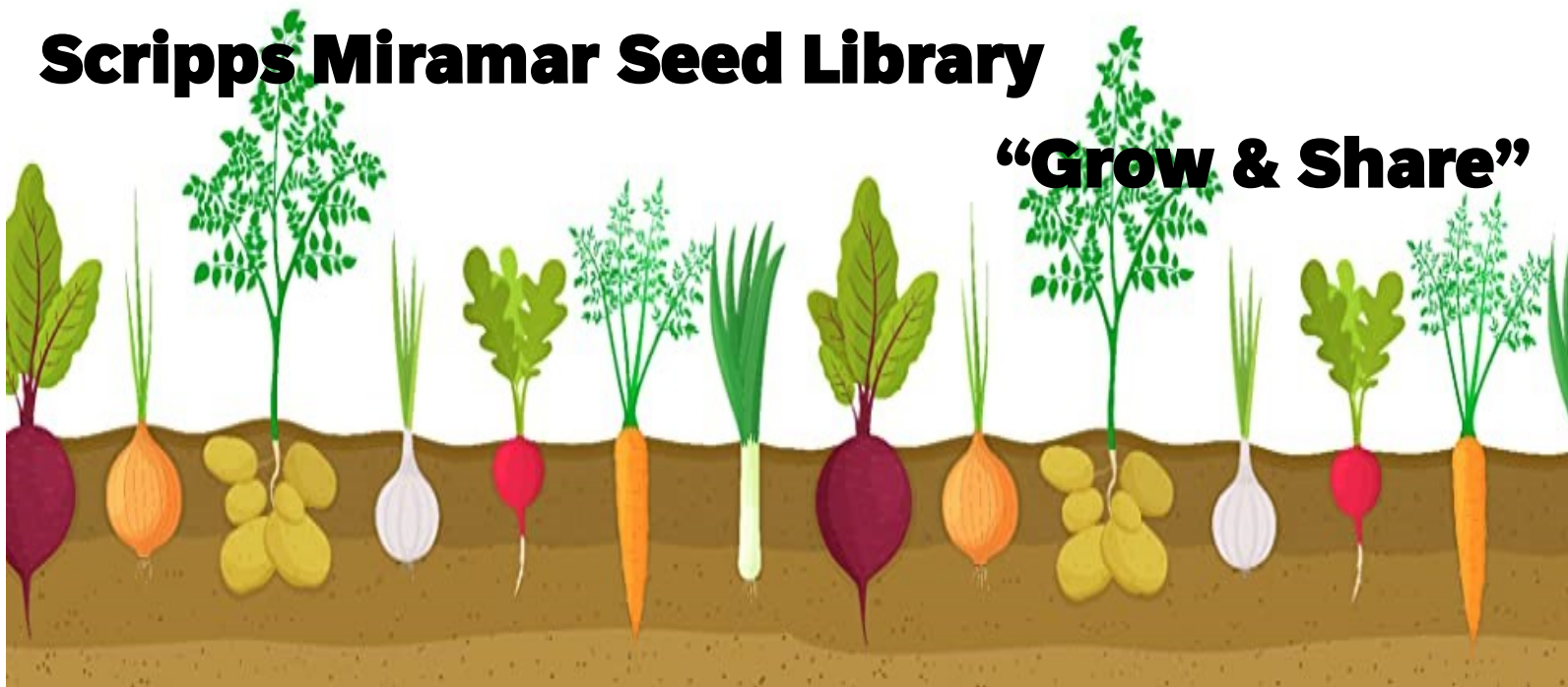


Scripps Miramar Seed Library

“Grow & Share”



Newsletter

March 23

COMPANION PLANTING

Just like people, plants are searching for the perfect companion. Someone who brings out the best in them, makes them feel comfy and keeps the bad influences away. Plants hunt garden wide for their “soil mate” and as gardeners, we must help these veggies



Companion Planting is defined as the establishment of two or more species planted in proximity that culturally benefits each other by deterring pests and attracting helpful insects. This keeps the soil healthy and improves the flavor of the edible plants.

Nowadays, companion planting is an effective way of cutting out the need for chemicals and reducing labor simply by placing the right plants next to each other in the garden. An example of this is when both plants assist each other physically. One plant may offer shade for

the roots of another plant, while the other plant attracts necessary pollinators.

History

Companion plants known as the “three sisters” have been planted for centuries by traditional Native American gardeners, who believed that the sisters—corn, beans, and squash—should never be separated.



Corn stalks offer support to beans by giving them something to climb on. Beans also capture atmospheric nitrogen and place it in the soil, which is beneficial for all three vegetables. Squash’s large leaves protect the threesome by creating living mulch that offers shade, keeps the soil cool and suppresses weeds.

In China, the companion planting method is at least 1000 years old. An example is Azola (mosquito fern) was planted with rice crops. This increased the nitrogen level in the soil and thus, reduced the oxygen level where mosquitos lay eggs, decreasing the number of mosquitos that hatched.

Different type of Agriculture

Monoculture means “a field composed of a single crop rather than multiple crop species”.

Polyculture mimics the diversity of a natural ecosystem by planting a community of codependent plants that fully utilizes the available growing space. It also involves choosing plants that mature at different rates and can benefit one another. For example, a fast-growing plant with large leaves can give shade to the tender plants of another species.



Permaculture comes from the terms “permanent agriculture”. It is defined as “the development of an agricultural ecosystem intended to be sustainable and self-sufficient.”

Biodynamic is a spiritual, ethical, and ecological approach to farming, food production, and nutrition. Founded in the early 1920s by Rudolf Steiner, it excludes the use of artificial chemicals and fertilizers.

The magic and mystery of companion planting is intriguing and fascinating. Vegetable growers found that companion planting provides many benefits, one of which is protection from pests. The main enemy of the carrot is the carrot fly, while the leek suffers from the onion fly and the leek moth. When the leeks and the carrots are grown together, the strong smell of the partner plants repels the insects. It is also important to realize that certain companion plants can diminish each other’s natural repelling ability as they grow together. Examples of this are listed in the following paragraphs.

What to grow together:

Tomato and basil have similar requirements, and both can be planted in the late spring. Regular watering and ample sunshine are their most important requirements.



Beans and potatoes look dissimilar, but they get along splendidly. Beans prefer to grow high and like full sun, but potatoes prefer shade and grow close to the ground.

Carrots and onions have similar likes and dislikes. They both can tolerate a chill and not too damp conditions. However, weeds adversely affect their growth.



Spinach and pepper have different tastes but can be planted together. Spinach prefers cool and moist conditions whereas, pepper likes warm soil and abundant sunshine. However, when pepper leans its leaves on the spinach to give it shade to thrive while spinach helps to shelter pepper’s fruits from the scorching sun.

Cabbage takes time to mature but **dill** grows more rapidly, attracting beneficial insects. The predatory wasp attacks plant pests and is an illustration of this interaction that protects cabbage.



Garlic is good for every garden because its strong odor helps deter pesky stalkers and it doesn’t need much room to grow. However, beans, potatoes, and peas are not good combinations for it.



What to avoid growing together

Beans should never be planted near fennel and onions.

Broccoli shouldn't be placed next to tomatoes, pole beans and strawberries.

Cauliflower, tomatoes and strawberries should be grown away from each other. Do not plant tomatoes near corn because the tomato fruit worm or corn ear worm will attack either plant.

Onions should be separated from peas and beans.

Benefits of companion planting

Companion planting to reduce pest pressure utilizing luring, trapping and deterring pests to keep vegetable garden damage at a minimum.

Companion Plants can serve as a living mulch to reduce weed pressure through crowding and shading.

Soil structure and fertility of the soil through nitrogen transfer can be improved by using certain plant partnerships.

Pollination can be improved by carefully selecting companion plants that encourage and support the specific species of bees known to pollinate target crops.

Partnering plants that attract and support pest-eating insects results in greater biological control and fewer pest outbreaks in the garden.

The aesthetics of companion planting come with additional benefits, such as making your home garden more beautiful with mixed-planting designs.

The gardener plays another key role in successful companion planting by evaluating and recording your own results. This allows for assessment of different plant combinations and their ability to achieve desired outcomes.

Seed Library Pick- Recipe- Garlic Aioli



What you need

Garlic cloves (chopped) 6

Large eggs 2

Lemon juice (freshly Squeezed) 2 tbsp

Parsley (chopped) 2 tbsp

Kosher salt and freshly ground black pepper

Olive oil 1 cup

How to cook

Combine garlic, eggs, lemon juice, parsley, salt and pepper in a food processor or blender and puree. Add the oil in a slow stream and continue to process until the mixture has formed a thick emulsion. This traditional spread goes well with grilled or steamed veggies, fish, or poultry.

Seed Library Plant pick – Garlic and its close

relatives include onion, shallot, leek and chive.

It is native to South Asia, Central Asia and north-



eastern Iran. It was

known to the ancient

Egyptians and had

been used as both a

food flavoring and in

traditional medicine.

China is the largest cultivator of garlic, produc-

ing 76% of the world's supply. It is easy to grow

and can be grown year-round in mild climates.

In colder areas, garlic is planted in the spring.

Spring-planted garlic bulbs will likely be a bit

smaller than those planted in autumn. This is

due to the colder weather, which allows the

garlic bulbs to grow larger.

Seed Library Book Suggestion

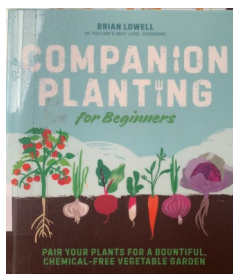


Plant Partners—This book offers more than just specific plant pairing: it encourages us to think about the relationships between plants, so that we can grow our best garden ever.

Call Number 635\Walliser

Companion Planting for Beginners-

Author Brian Lowell will show you how to use evidence based companion planting strategies to create a thriving, bountiful chemical-free vegetable garden.



Call Number 635.04\Lowell

Garden Events @ Scripps Ranch Library

The library has several events going on this month if you are interested.

Compost Comparison- March 18th 10 am



Compost Comparison *Find the Composting Method that Works for You*

Saturday, March 18th, 2023 • 10:00 AM • Community Room

Want to compost but not sure how to start? Scripps Ranch resident and master gardener Heather Holland will discuss how to compost and will detail four different methods to help make composting part of your routine.

Scripps Miramar Ranch Library
10301 Scripps Lake Dr., San Diego, CA 92131
facebook.com/scrippsmiramaranchlibrary • 858-538-8158



Garden Share - March 18th 11-1 pm

Companion Planting and Crop Rotation -March 28th 5:45 pm



Garden Share

Saturday: March 18th, April 15th, May 20th 2023
Garden Share @ 11-1pm
SR Library Courtyard

Join us with your friends and family to share your garden. Bring what you have to share; take home something you really want. Be sure to bring a bag to take home your finds!

What to bring: Any extra bounty from the garden (produce, fruit, herbs, flowers, plants in pots), seeds, seedlings, tools. Anything garden related is welcome.

Come meet your fellow gardeners and share your experiences!

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SCRIPPS MESA GARDEN CLUB PRESENTS

COMPANION PLANTING & CROP ROTATION

March 28th Tuesday @5:45 pm
Location: Community room

A Talk By Master Gardener: Shilal Parikh

Understanding plant families and the role they play in companion planting. Understanding the role of companion planting in soil amendment. Cycles of companion planting. Rotating between beds, seasons and annually. Complex science and unproven ideas.

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Seed Library Patron 's share



If you want to share the pictures of your garden please send them to seedlibrary@srfol.org

References: Alway, Sara (2010) "Soil Mates"
Published by Quirk Books

Walliser, Jessica (2020) "Plant Partners".
Published by Storey Publishing

There are multiple sources available at the Scripps Ranch Library that are not cited here.

We request that you tell us about your experiences, which can be helpful for other gardeners. Also, we invite you to send in your garden related questions and we will answer them in the next newsletter .

This newsletter is composed by Ashu Agarwal & edited by Jeff Lash

For any questions, please contact Matt Beatty (MBeatty@sandiego.gov)

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10301 Scripps Lake Dr. San Diego 92131

858-538- 8158



**Scripps
Miramar
Seed Library**

TAKE A SEED, GROW A SEED, RETURN A SEED