Companion planting can maximize the efficiency of planting vegetables. Just about every vegetable grown, there is likely a beneficial companion plant that will help increase soil nutrients, chase away pests and provide other benefits.


There are many reasons why certain plants should not be planted together. Sometimes it is a matter of height. For example, a tall tomato plant will steal the sun from smaller plants nearby. Or it could be a matter of moisture. Mint, a water seeking plant, and a desert cactus will not do well next to each other since they have conflicting needs.

Another problem is plants that are susceptible to the same diseases. For example, I live in a very humid environment and have problems with a fungus on my squash. If I plant melons too close to the squash, they will also be infected. By keeping them separate, the melons survive long enough to produce a crop.

Additionally, there are plants that chemically damage other plants or prevent their growth. These plants are called allelopathic plants. They leave behind chemicals that can harm or kill certain other plants. Many of the plants mentioned in this article are allelopathic. You may be planting these plants together and then wondering why your plants aren't doing well, especially if you have a small garden where the plants are all snuggled in together.

Allelopathic plants make planning your garden more difficult. Most home gardeners have not considered allelopathic chemicals, and simply plant wherever they have space. I suspect that allelopathic chemicals are probably the source of many of my crop failures over the years. Now that I know about these plants, my crops are more reliable.

Here are some plants that do not grow well when planted together:

## Potatoes

Potatoes have problems with many plants. I tend to stick them off in a far corner of the garden because they don't grow well with many of the plants in my garden.

Potatoes and tomatoes are members of the same family, but they do not grow well when planted together. Potatoes slow the growth of the tomato plant and themselves become more susceptible to Phytophthora, known as potato blight, when the plants are together. When rotating plants, do not plant potatoes or tomatoes where the other grew the previous year.

Potatoes also don't play well with cucumbers, melons, tomatoes, squash, turnips, or sunflowers.

## Beans and Peas

Both peas and beans have negative effects on some plants including all kinds of peppers, sweet and hot. Beets are also affected by pole beans of all kinds.

## Broccoli and Cauliflower



Neither broccoli or cauliflower will grow well near peppers, strawberries, tomatoes, and squash of all types, including zucchini, yellow squash, and winter squash like pumpkins.

## Cabbage and Cauliflower

When cabbage and cauliflower are planted together, they are more likely to be affected by Plasmodiophora brassicae, also known as club root. The fungus causes the roots to swell and become unable to take up water and the plant quickly dies. Radish and tomato also do not do well near cabbage and cauliflower.

Related: 5 Survival Foods Your Grandmother Used To Make Asparagus


Asparagus does not like other plants growing too close, so give the bed a little space. It is especially vulnerable to poor growth when planted next to onions, garlic, and potatoes.

## Brussel Sprouts

Another cruciferous vegetable, brussels sprouts don't grow well next to strawberries or tomatoes.


Kohlrabi is a cruciferous vegetable in the cabbage family and like other members of the family it does not like to be planted near pole beans, tomatoes, or strawberries.

## Carrots

Carrots don't grow well when planted too close to dill. I learned this one the hard way. I had conditioned the soil perfectly for those carrots, but they ended up small and malformed. The dill had a very noticeable effect on the crop. Now, I know to keep them separate. Carrots don't like to share space with parsnips, either.

## Celery

Celery is a little difficult to grow under normal circumstances, but for best results, it should never be planted near potatoes or parsnips.


Corn and tomatoes should be separated due to their susceptibility to a common fungal infection. If your tomatoes become infected, they will infect the corn if they have been planted too close together. Both plants are also susceptible to cotton bollworm, also known as corn earworm and tomato fruit worm, another good reason to keep them apart.

## Cucumbers

Cucumbers are one of the first vegetables that many new gardeners plant and they usually give good results. However, they do not like to be planted near potatoes, tomatoes, cauliflower, or any of the strong aromatic herbs like cilantro, basil, rosemary, thyme, or lavender.

Related: How To Pickle Cucumbers Onions and The Allium Family

Onions, garlic, leeks, and shallots have a discouraging effect on beans and peas. When planted nearby, plants in the Allium family, like onions, stunt the growth of beans and peas. But, beans and peas have their own effects on other plants.

Related: Why Put Onions in Your Socks Before Sleeping


Beets do not grow well near mustard plants or any member of the bean or pea family.

## Sunflowers

Sunflowers emit a chemical from their roots that prevents nearby plants from growing and competing for nutrients. This chemical affects an area of at least 12 inches around the plants. The seed shells also contain toxic chemicals that will kill grass and other plants, so harvest the seed heads before the seeds begin to drop. Don't plant other plants within 12 inches of sunflower plants. Also be aware that they grow very tall and can shade out sun loving plants.

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Marigolds are a popular addition to the vegetable garden because they keep away so many pests. However, they have a detrimental effect on beans and peas. Pole beans, bush beans, and peas should be planted far away from the marigolds.

Planning your garden is hard enough when you are limited in size and adding this information will make it even more difficult. However, it is work considering the effects that plants have on each other when you draw up your garden plan. Otherwise, you may end up with a disappointing yield and never understand why.

## Lettuce

Lettuce is easy to grow when planted away from beans and beets. Surprisingly, they also do not like to be near parsley.

## Melons

Melons are also susceptible to funguses caught from squashes and also should not be planted near potatoes or cucumbers.

## Tomatoes

Cucumbers, cilantro, and tomatoes are delicious together, but they do not like to grow too close together.

