

Jericho High School
@Pathto2030

In Depth Review Of Garden Plants

Disclaimer: Gardening is a huge passion of mine, I've done it for nine years!

Coneflower (Echinacea)

Native to North America, coneflower is a perennial plant that is highly adaptable, thriving in various soil types including clay, loamy, and sandy soils. Its deep root system not only grants it drought tolerance but also aids in soil stabilization, preventing erosion and contributing to overall soil health. Additionally, Echinacea is resistant to most plant diseases, reducing the need for chemical interventions and thereby benefiting the soil and reducing the garden's carbon footprint. Its flowers attract a variety of pollinators like bees and butterflies, which is important for the ecological balance of the garden and beyond. In terms of human health, Echinacea has traditional medicinal uses, mainly believed to boost the immune system, and a garden filled with flowering plants can also contribute to psychological well-being through stress reduction.



Zucchini

Zucchini's relatively short growing season means it can be harvested quickly, making it a productive choice for my garden. When it comes to soil health, zucchini plants are known to be good companions for crops like beans, as they can help suppress weeds with their broad leaves, reducing the need for chemical herbicides. The flowers of the zucchini plant are also a magnet for pollinators, enhancing biodiversity in the garden. For climate considerations, zucchinis are relatively drought-tolerant compared to other vegetables, requiring less water once established. Finally, for human health, zucchinis are a nutritious vegetable, rich in nutrients like vitamin C and potassium.



Tomatoes

For soil health, tomatoes can be rotated with legumes like beans to improve soil fertility, as legumes fix nitrogen that tomatoes can later utilize. Their deep root systems also help in soil stabilization, mitigating erosion. In terms of climate impact, tomatoes are suitable for vertical growing methods like trellising, which maximizes space and allows for more efficient land use. When it comes to human health, tomatoes are a rich source of nutrients like vitamins A and C, and lycopene, a powerful antioxidant. They are a versatile food crop that can be consumed fresh or used in a variety of dishes, from salads to sauces, promoting a balanced and healthy diet.



Legumes

Legumes have a symbiotic relationship with nitrogen-fixing bacteria, which allows them to convert atmospheric nitrogen into a form that plants can use. This enriches the soil, reducing the need for synthetic fertilizers and enhancing fertility for future crops. Regarding climate impact, legumes are generally low-maintenance plants that require fewer inputs like fertilizers and pesticides, thereby reducing their overall carbon footprint. Additionally, they are typically well-suited to a variety of climates and can grow in less-than-ideal soil conditions, making them resilient and adaptable. For human health, legumes are nutrient-dense foods rich in protein, fiber, and essential minerals like iron and potassium. They are also versatile in the kitchen and can be incorporated in salads and stews to plant-based protein alternatives.



Kale

In terms of soil health, kale is a crop that can thrive in less-than-optimal soil conditions, making it a good option for places with challenging soil types. It also has a relatively deep root system that helps in soil stabilization and nutrient uptake. Kale is a cold-hardy plant that can extend the growing season, allowing for a more continuous harvest and efficient use of garden space. It's also a low-maintenance plant that generally requires fewer inputs like water and fertilizers once established, contributing to a reduced carbon footprint. From a nutritional view, kale is packed with vitamins A, C, and K, as well as minerals like calcium and potassium.



Marigold

Marigolds are known for their ability to repel a variety of soil-borne pests and nematodes. They can be planted as companion plants alongside vegetables like tomatoes to provide natural pest control. Marigolds are drought-tolerant plants that require relatively little water once established, contributing to water conservation efforts. They're also adaptable to a range of soil types and conditions, making them a resilient choice for different climates. Marigolds also have the ability to attract pollinators like bees, which benefits the garden as a whole and indirectly contributes to food production and biodiversity.



Agricultural And Climate-Friendly Practices

In my nine years of gardening, I've already implemented some sustainable practices. Here are a couple practices I have already adopted and am considering adding. Rainwater harvesting is a practice I have implemented in my own garden to reduce reliance on municipal water, which saves water, energy, and money. I also use cover crops and mulch for better soil moisture and health and it reduces the need and use of synthetic fertilizers. Lastly, I am looking into Integrated Pest Management (IPM) to limit the use of chemical pesticides, with the goal of improving soil and water quality. This planned practice, alongside my existing methods, are steps toward a more sustainable and lower-impact garden.

Garden Sketch



Photos From My Garden

