

WATERING BASICS: ESSENTIAL TECHNIQUES AND FAQS



Proper watering is a fundamental aspect of maintaining healthy plants and ensuring a thriving garden. As a gardener, understanding the basics of watering is crucial for your gardening success. In this article, we will explore the importance of proper watering and delve into various techniques and FAQs to help you become a more confident and knowledgeable gardener. We will cover the factors influencing plant water needs, watering principles, techniques for different plant types, and special considerations, along with addressing common watering-related concerns.

Importance of Proper Watering for Healthy Plants

Vitality and Growth

Water is essential for all living organisms, and plants are no exception. Adequate watering promotes optimal plant growth, leading to healthier and more vigorous plants.

Nutrient Absorption

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Water acts as a medium for plants to absorb nutrients from the soil. It facilitates the movement of vital minerals and ensures they reach the plant's roots effectively.

Photosynthesis and Energy Production

Water plays a vital role in photosynthesis, the process by which plants convert light into energy. Sufficient water levels help plants produce food and thrive.

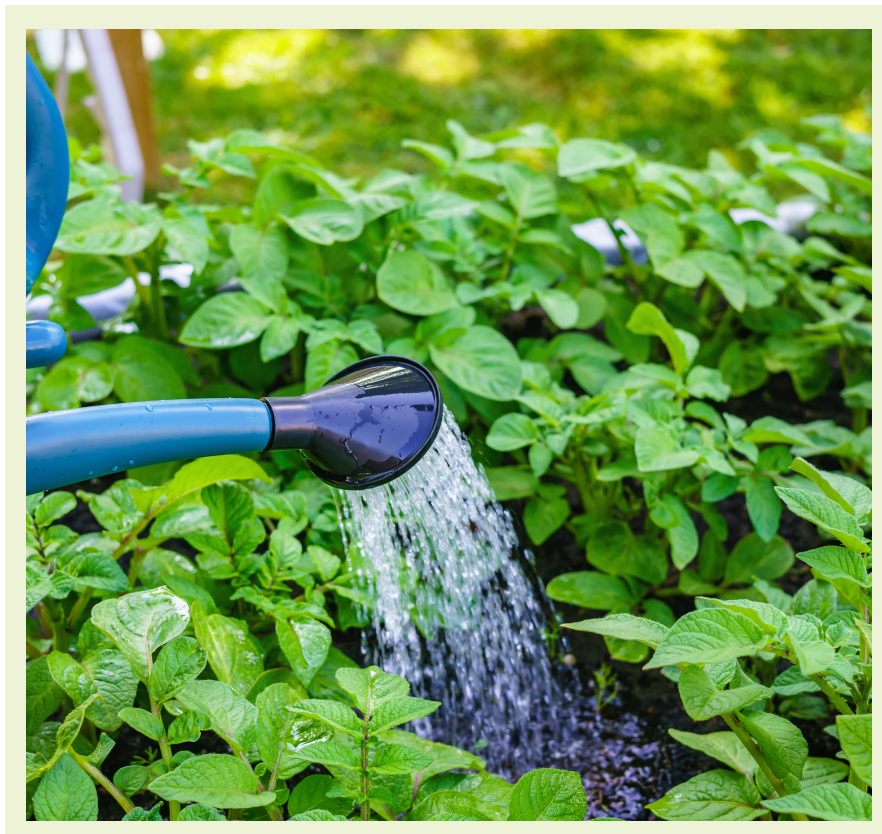


FACTORS AFFECTING PLANT WATER NEEDS

Understanding the factors that influence plant water needs allows you to tailor your watering practices accordingly. Several key factors include:

Soil Type

Water retention varies depending on the type of soil. Earth soils will generally hold water for longer periods, while sandy soils channel water all the more quickly. The type of soil you have will help you figure out how often and how long to water. Even though plants have begun to wilt, some soils may still feel damp because plants cannot extract every drop of water from the soil. This will in general occur in clay soil types. Plants can extract more water from sand than clay, but clay soil can hold more water than sandy soil. In contrast, even though plant roots may still have access to moisture, sandy soil may appear dry. Compared to clay, sandy soils typically require less frequent and smaller amounts of watering. By adding organic matter to your soil, you can make it better at holding water.

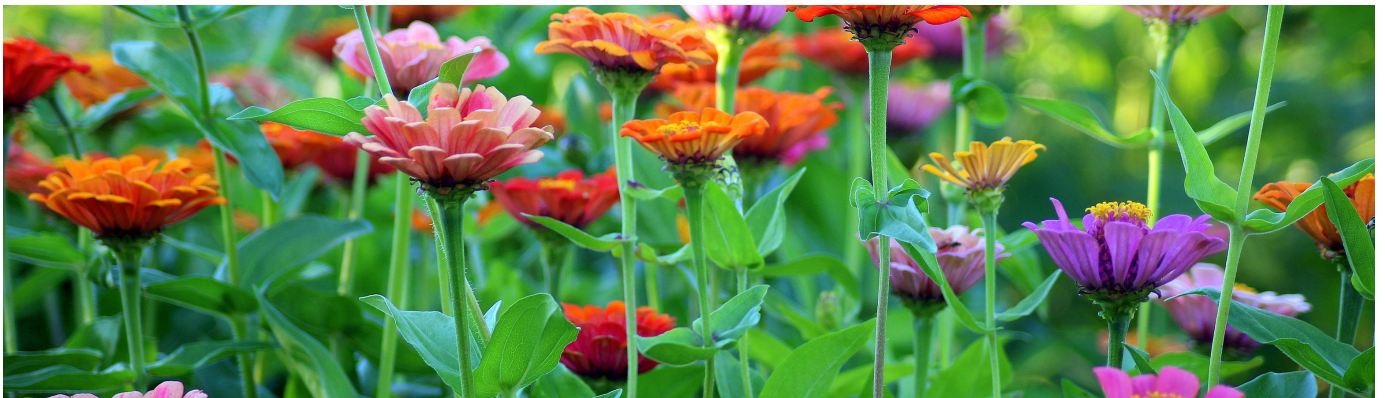


Climate

The rate at which water is used will be influenced by the season, weather, and climate of the area (e.g., rainfall, number of hours of sunshine, temperature, wind, and humidity). In general, plants require more water during the warmer months of the summer and less during the cooler months of the winter. Additionally, in hot, sunny, and windy weather, they will use more. Prolonged periods of dry weather will necessitate increased watering frequency (light showers are of little use to plants because the water either evaporates or only wets the soil's surface, where there are few roots).

Plant Size, Species & Stage of Growth

Water requirements vary between plants. Some plants are more tolerant of drought, while others thrive in conditions that remain consistently moist. Really get to know the water prerequisites of the particular plants in your garden. A plant's watering requirements are also affected by other factors, such as how many leaves it has and how much water it loses and how much nutrients it needs to grow flowers and fruit. Because these are mostly absorbed by the roots and dissolved in water, flower and fruit production typically requires more water.



Plant Location

If the plant is growing in a border, container, or in an area where its roots are restricted, such as next to a wall, this can also affect how much water it needs. When compared to a border plant, a large plant in a small pot will require more frequent watering. The roots in a border are free to grow wherever they can find water, drawing moisture from a significantly larger volume of soil than in a pot. Plants that are potbound, or have more roots than compost, dry out quickly.



THE PRINCIPLES OF WATERING

When to Water: The need for watering is indicated by drooping leaves or dry soil, which are indicators of dehydration. Watering in the morning permits foliage to dry before evening time, lowering the chance of pests and diseases. Morning watering is best because it keeps the foliage and soil surface dry longer than evening watering, which discourages slugs, snails, and mildew diseases. Evening watering is likewise fine as the cooler temperatures allow for less water to be lost to evaporation. It is not recommended to water during the middle of the day because the soil will lose water through evaporation.

How Much to Water: Adequate soil moisture is vital. Each plant needs different amounts of water to grow, so you should adjust your watering schedule so that it works best for your plants. Water until the main 6-8 inches of soil are wet. Do not overwater, as it can prompt root decay and different issues. Add 10% of the container's volume to each watering when watering container plants; for instance, a 10-litre pot will require 1 litre of water. Slowly pour it into the pot, trying to keep it in and prevent it from draining out of the bottom.

Watering Frequency: Consider seasonal variations and plant growth stages. Generally, water more frequently during hot and dry periods, while reducing frequency during cooler and wetter seasons.

Getting water to the deeper root tips is made easier by watering more thoroughly but less frequently. Because the roots are extracting water from a smaller volume of soil than if they were growing freely in the border soil, it may be necessary to water the plant more frequently where the roots are restricted, such as in containers or growing next to a wall.

Watering efficiently where drainage is poor is very difficult. It's better to improve the drainage or choose plants that are appropriate for conditions such as sunlight exposure and environmental temperatures.

It is better to water the garden before drought sets in, to keep the soil moisture levels even and avoid the soil being continuously dry. But it's just as important that the soil doesn't always need to be very wet because plant roots need air and water to grow well.

Whenever drought has set in, there is worth attempting to cure this by light watering over a wide region. Heavy watering may encourage surface moisture more than deep root moisture, leaving plants more susceptible to drought. Make an effort to water in the cool of the evening or very early in the morning so that less water is lost to evaporation right away.



SIGNS YOUR PLANTS NEED MORE WATER

Signs Your Plants Need More Water:

- Less foliage, flowering & fruiting
- Dull leaves or stems
- Leaves curling or aiming downwards
- Leaves wilting (This is also a sign of overwatering so be careful)
- Potted plants are lighter in weight or keep falling over in the wind
- Symptoms of powdery mildew



Surface moisture is not always the best indicator of soil moisture. If you choose to use the touch test, push your finger down into the soil to at least knuckle depth to see if the soil is damp.

For more information about when and how to water your plants, read our article [Different Irrigation Methods](#).

Tools for Watering

Selecting the right watering tools can make your gardening tasks more efficient and effective:

1. Hose: A garden hose with an adjustable nozzle provides flexibility and control for watering larger areas.
2. Watering Can: Ideal for watering smaller plants, seedlings, or containers. Opt for a can with a narrow spout for precise watering.
3. Drip Irrigation: An efficient method for conserving water and delivering it directly to plant roots. Drip irrigation systems can be customised for different garden layouts and plant types.

WATERING TECHNIQUES FOR DIFFERENT PLANT TYPES

Flowers

Annuals vs. Perennials: Annual flowers typically require more frequent watering due to their shorter lifespan, while perennials have deeper root systems and generally require less water. In hot, dry conditions, herbaceous perennials frequently require watering to improve performance. Plant choice is crucial if you aim to achieve a drought-proof border.

Flower Beds and Containers: Water flower beds thoroughly, ensuring the water reaches the root zone. Containers may need more frequent watering, as they can dry out faster.

Vegetables

Water Needs of Different Varieties: Leafy greens generally require consistent moisture, while root crops benefit from deep watering. Research the specific water requirements of the vegetables you're growing. Because they have new, shallow root systems, spring-grown vegetables will likely require more water than autumn-grown vegetables.

Raised Beds and Vegetable Gardens: Water raised beds deeply to encourage roots to grow deeper. Consider installing soaker hoses or drip irrigation systems for efficient watering.



Shrubs and Bushes

Unique Water Requirements: Newly planted shrubs, younger than 5 years, require more frequent watering until their root systems establish and reduce the chances of it suffering from drought-related stress. Mature shrubs generally have deep roots but still benefit from occasional deep watering during dry spells.

Establishing New Shrubs and Mature Plants: Water new shrubs deeply and regularly for the first few weeks. For established shrubs, water deeply but less frequently to encourage deep root growth.

Trees

Watering Guidelines: Young trees need more frequent watering as they establish their root systems. Established trees require infrequent but deep watering to encourage deep root growth.

Deep Watering Techniques: Use a slow-drip method or a soaker hose to allow water to penetrate deeply into the soil and reach the tree's root zone.

Special Considerations for Watering

Avoiding Overhead Watering

Some plants, such as those prone to fungal diseases, benefit from avoiding overhead watering. Instead, focus on watering at the base of the plants to minimise moisture on leaves.



Watering Delicate Plants

Delicate plants, such as those with fuzzy leaves or susceptible to leaf spot diseases, should be watered at the soil level to avoid wetting their foliage.

Mulching

Apply mulch around plants to retain soil moisture, reduce evaporation, and suppress weed growth. Mulch also helps regulate soil temperature and improve overall water efficiency.

Tips For Economical Watering

Design your garden to cope with drought and minimise your need to water. Improve soil with organic matter so that it helps hold more water and use water collection and storage as part of your design, so you can minimise the time and energy spent watering. Check out our article on [drought-resistant gardening](#) for more inspiration and solutions for economical watering.

FAQs about Watering

How Do I Revive Underwatered Plants?

Gradually rehydrate the plant by watering deeply and consistently. Avoid overwatering, as this can cause stress to the plant's roots.

What is the Best Time of Day to Water?

Morning is generally the best time to water, allowing foliage to dry before evening. However, if morning watering isn't possible, late afternoon is an acceptable alternative.

What is the Impact of Watering on Plant Diseases?

Overhead watering can increase the risk of fungal diseases. Watering at the soil level minimises moisture on leaves and reduces disease prevalence.





Can I Water Plants During Drought Conditions?

During droughts, prioritise watering your most valuable plants. Deep, infrequent watering is more effective than shallow and frequent watering.

How Do I Water Potted Plants and Containers?

Ensure proper drainage in containers and adjust watering frequency based on the size of the container and the plant's water needs.

What Do I Need to Know About Watering Indoor Plants?

Be mindful of indoor plants' watering needs and adjust accordingly. Avoid overwatering by allowing the soil to dry slightly between waterings.

By following these guidelines and addressing common watering-related concerns, you'll become a more confident and successful gardener. Embrace the joy of gardening and adapt your watering techniques to the specific needs of your plants, ensuring a lush and thriving garden.