



## Bronx Green-Up • THE NEW YORK BOTANICAL GARDEN

Bronx Green-Up, the community gardening outreach program of The New York Botanical Garden, provides horticultural advice, technical assistance, and training to local gardeners, urban farmers, school groups, and other organizations interested in improving neighborhoods through greening projects. At the heart of Bronx Green-Up are the community gardens, school gardens, and urban farms of the Bronx. For additional information, contact Bronx Green-Up at 718.817.8026 or [bronzgreenup@nybg.org](mailto:bronzgreenup@nybg.org), or visit [www.nybg.org/green\\_up](http://www.nybg.org/green_up)

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### Using Water Wisely

Water is critical for plant growth and health. Not watering enough or watering too much will cause your plants to be water-stressed. This can negatively affect plant yield. Plants that are water-stressed are more susceptible to pests and disease. Watering too frequently not only wastes a precious resource but also interrupts plant growth. Over-watering leaches minerals into the subsoil, out of reach of most plant roots. Additionally, over-watering can cause erosion, washing away topsoil and nutrients in the process.

- Knowing your soil type is helpful for knowing how often and how much to water your plants. Clay soil holds water more easily, so you can water less frequently. Be very careful not to over-water. Sandy soil holds water less easily, so you may need to water more often. If the soil is loamy, which is optimal for vegetable gardening, water until the soil is deeply soaked.
- If you don't water deeply enough, little water reaches the root zone. This slows plant growth and may cause plants to die. Frequent light watering moistens only the surface of the soil, encouraging roots to grow only in the uppermost layer. The plant will then dry out more quickly and be less likely to survive under drought conditions. In addition, the roots will not grow deep enough to take up minerals lower in the soil.
- The best way to know if your garden needs water is to probe down about 3 inches into the soil. If the soil at this depth is dry and will not stick together, it is time to water your garden.
- The best time of day to water is early morning or early evening. Watering then will help your plants achieve the maximum water absorption, with less water lost to evaporation.
- Pay attention to your plants for signs that they need water. Some wilting in the afternoon is normal on a hot day, but if your plant does not recover as the temperature cools later in the evening, this is usually a sign that it needs water.
- During the flowering and fruit set stages, plants are more sensitive to drought and water stress.
- Seedbeds containing directly sown crops with small seeds need light and frequent watering. Beds sown with crops with large seeds need less frequent, slightly deeper watering. Be careful not to wash out your seeds, or they won't sprout where you planted.

**Drip irrigation** is a very efficient method for watering, particularly for crops planted in rows. It delivers water right to the roots, and little water is wasted in evaporation. There are two types of drip irrigation: long tubes with holes at each plant or long tubes with tiny holes all along the length of the tube.