

## Chapter V

### How to Prepare Your Garden for a Heatwave and Drought

#### Introduction :

Intense Summer heat has become a new fixture in the Algeria and it's important to know how to prepare your garden for a heatwave and drought. Chances are, you've spent a lot of time watering your garden and watching for heat or drought-related stress this season! Read on for heat and drought preparation and recovery advice to help your plants survive and thrive this Summer.



Watering

#### V.1. How to Prepare Your Garden for a Heatwave

When a heatwave is on the horizon, it's important to do some prep work in the garden to help prevent heat and drought stress to your plants:

- 1) Water plants early in the morning or late in the evening to avoid water loss from evaporation.
- 2) Go low and slow—water the soil around the plant, not the leaves. Deep watering (providing slow, gentle water over a longer period of time) is more effective than pouring a large volume onto soil which may just run off.
- 3) Mulch bare soil in garden beds and around plants to prevent evaporation and water loss and to keep plant roots hydrated. For best effects, mulch using 2-3 inches of organic compost to add nutrients back to the soil.



Mulch bare soil

- 4) Use umbrellas or shade cloth to protect tender, vulnerable plants from the hot sun. Pay special attention to new plantings—give them first priority when providing water and shade.



The shade cloth

## V.2. Extreme Heat and Drought Recovery Tips

Slowly evaluate your plants and devise a recovery plan. Keep in mind that some plants may be better off transplanted to a more ideal location this fall.

- 1) **Fertilize** container plantings and hanging baskets with full-strength fertilizer to replace nutrients that were flushed out by frequent watering.
  - 1.1) Never fertilize a dry plant! Water first, then fertilize.
  - 1.2) Feed veggies with organic, slow-release fertilizer like Tomato, Vegetable and Herb
  - 1.3) Be careful about fertilizing heavily to push, vulnerable new growth at this time; a diluted, slow-release feeding is better for recovery.
  - 1.4) Kelp meal or liquid seaweed is a gentle nutrient that provides potassium and trace minerals to help the plant handle stress without pushing much new growth.
- 2) **Deadhead spent blooms, and prune or remove damaged leaves.**
  - 2.1) If stems are still green, dormant buds may still be able to grow and refresh the plant over time, so cut back brown, dead wood but avoid pruning deep into green growth.
  - 2.2) Be cautious about doing any severe pruning during hot Summer months; removing the top layer of foliage can often expose a more vulnerable layer underneath that will be more sensitive to sun and likely to burn.
  - 2.3) Slow-growing plants such as Camellias and Rhododendrons may take several years to recover from sunburn.



**3) Don't overwater! Overwatering and root-rot are potential problems when we are focused on watering for extreme heat.**

**3.1)** New plantings or plants that have suffered from drought stress do not have extensive root systems and can only take up and store so much water at one time.

**3.2)** Watering too frequently before the soil has dried out a little can cause plant roots to rot and collapse, and this is often fatal.

**3.3)** Early signs of root-rot include wilting of the plant and general loss of color.

**4) Watch for pests! Plants weakened by stress are more vulnerable to pests and diseases; several years of mild winters have allowed insect pest populations to grow.**

**4.1)** Spider mites are a common problem during or following periods of hot weather; watch for signs like yellowing or browning leaves and fine webbing.

**4.2)** Scale is common in sheltered areas (against house, underneath eaves), especially on broad-leaf evergreens and conifers; common signs are shiny, sticky residue on foliage or black mildew substance on leaves.

**4.3)** Pests are often on undersides of foliage or hard to see due to their size and color.

### **V.3. Signs of Watering Stress and Trouble from Heat**

Even if you follow these tips for how to prepare your garden for a heatwave and drought, the intensity of both phenomena may negatively impact your garden. Here are some quick guidelines:

**1) Wilting leaves:**

Wilting leaves occur when there isn't enough water to support all of the plant's tissue. However, wilting foliage is not always a sign that the plant is dry! Some plants partially wilt during mid-day in extreme heat and recover once the sun has become less intense.

**2) Tip burn:**

When roots cannot take up water, the youngest foliage and new plant tissue are the first to suffer and may wilt or burn. The cause could be dry soil, curling or coiled roots, very poor drainage causing root-rot, or other issues.

**3) Little leaves:**

Smaller than average leaves and flowers are signs of long-term drought conditions or drought stress.

**4) Few fruits:**

Poor fruit yield, small fruit, or lacking flavor can be caused by drought stress.

**5) Sunburn:**

Early red foliage color, extreme fall leaf color, or shriveled leaves with brown edges are all signs of drought stress.

**6) Light green leaves:**

Light green leaves, continued wilt even in moist soil, or yellowing of inner or bottom leaves are signs of overwatering and potential root-rot.

**7) Blossom-end rot:**

Blossom-end rot on tomatoes (dark patch on bottom of fruit) is often caused by inconsistent watering or from allowing plants to dry out too much between waterings.

**8) Bitter flavor:**

Lettuce or tender salad greens can turn bitter when allowed to get too dry too often.

**9) Loss of flowers:**

Perennials, Annuals, and Vegetables like Cucumbers and Squash will often abort their flowers and/or will not set fruit if not watered adequately during development.

**Glossary:**

Heatwave = Canicule

Kelp meal = Is a popular fertilizer for gardens and farms. It is made from kelp (Algae), a type of seaweed that grows in cold, shallow waters. Kelp meal is rich in nutrients, including nitrogen, potassium, and phosphorus. These nutrients are essential for plant growth.

Foliage= Feuillage