

# THE ROSE GARDEN IN THE SUMMER MONTHS

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## WATERING

Of all the advice on growing roses, keeping the plants in good condition during the hot summer months can be a challenge. Paramount in any strategy is WATER. Yes, plain and simple water! The rate of transpiration of moisture through the pores on the foliage can be tremendous. These losses must be in balance with water taken up by the root system, otherwise the foliage will wilt - the first sign of the need to water. In general, it is recommended that during the hot days of 90F and higher, watering on alternate days is best (about 3 gallons should suffice an HT). Be on the lookout for the signs of over watering - yellowing foliage at the base of the bush, so often encountered with heavy clay soils which retain the moisture. The best time for watering is early morning. But on extremely hot days a fine misting of the plants will help the foliage recovery their turgidity.

## WATERING CONTAINER GROWN ROSES

Maintaining container grown plants is somewhat easier during the summer months. The use of saucer below the container to trap excess water and fertilizer is a sure fire way to detect when a plant needs watering. Excess watering will merely spill over the saucer avoiding over watering and yellowing lower foliage.

## PLANT TURGIDITY

Keeping a plant in the maximum state of turgidity (fully hydrated) during hot days is essential to future growth. Water is a vital element and an ample supply must be provided to not only compensate for loss through the foliage pores, but also to keep stems and roots in a fully hydrated state. When there is a marked decrease in turgidity, the flow of moisture up the stems is reduced and also the flow of nutrients down the stems from the foliage to the roots. This two way system can break down on wilting and reestablishment can take several days to permit full recovery.

## RETAIN THE FOLIAGE CANOPY

Foliage surfaces are the manufacturing sites that use sunlight (photosynthesis) and the various nutrients taken up by the roots to produce the molecular building materials for blooms, stems and foliage. Retaining as much foliage as possible maximizes the canopy for capturing the energy of the sun in building a stronger and healthier plant. Therefore, when deadheading, try to keep as much foliage as possible. Removing only yellowing or dead foliage is best. When Fall returns, then grooming stems to a pencil thickness produces the best results for future bloom cycles.

## FEEDING

During the hottest days of summer, the biochemical processes that produce long stems and elegant blooms slows down. However, these symptoms do not mean that fertilization should be reduced or stopped. On the contrary, feeding should continue as roses store nutrients in the white pith of the canes for future use. Besides, the root system may be expanding for increased bloom production in the Fall. If using a water soluble fertilizer, be sure that watering is done before feeding to prevent damage to the fine feeder roots that exist about 4-6 inches below the soil. The summer months are a good opportunity to use organic sources that decompose gradually providing much needed humus to increase fertility.

## **MULCHING**

Good horticultural practices demand that mulching is highly beneficial for several reasons. One, it proves to be valuable in water conservation, minimizing moisture loss from the rose beds after watering, and hence wilting. Two, the organic materials decompose over time, providing an ample natural source of humic acid - humus being the end product of that decomposition. The humus can then invade the lower soil levels improving fertility. Three, many mulches are natural barriers to the growth of weeds offering a safe approach to the alternate use of herbicides.

## **DIAGNOSING PESTS & DISEASES**

In the quest to keep the rose bushes well watered, examination of the health of the plants is often overlooked. Hand watering offers the bonus of spending time looking at the foliage and health of the plants. In the summer months, for instance, spider mites can often defoliate a plant in a matter of days. If the foliage indicates a bronzed look, it is usually indicative of the onset of spider mites. This diagnostic detection then alerts the gardener to apply either water misting to the undersides of the foliage or spray with a miticide such as Avid. Aphids, both the green rose variety and the black peach aphid are easily detectable on the peduncle (that part of the stem just below the bloom). They can be washed off or sprayed with an insecticide such as Merit. This advanced detection while watering can lead to healthier plants.

## **AVOID DISBUDDING**

During the summer months, there may be no need to disbud to produce stems suitable for exhibition. Avoiding disbudding and allowing the stems to develop naturally can improve the overall health of the plant. The main benefit is the production of auxins, growth regulators. As the bud is forming, a biochemical called Indole Acetic Acid (IAA) prevents side growths from maturing rapidly. This is the main reason the central bud in a floribunda spray is removed to allow the side growths to quickly develop. This IAA is transmitted down the stem to the root system to trigger increased root development. Therefore, removal of the terminal bud would greatly reduce the production of IAA. Allow natural growth development of sprays and the plant will benefit in the long term.

## **GARDEN CLEANUP**

Cleanliness is always desirable in a gardens setting for it prevents pests from invasion and fungi from finding as home. Removing leaf litter and other decaying leaves not only improves the appearance of the rose beds, but also the photo synthetic environment around the bud union where new basal growth will develop, and emerge to form next year's major canes. An application of Epsom Salts (magnesium sulfate) has been credited with stimulating basal activity. Application rates of about ½ cup per hybrid tea bush are normal. It can be applied dry and then watered in. While there is no direct scientific evidence to support these claims, rosarians have continually credited Epsom Salts are highly beneficial to roses. It may be that magnesium along with iron is required for the photo synthetic process to operate at full capacity. These processes in turn produce more nutrients to the root system and hence improved basal activity. Whatever the mechanism, rose growers swear by Epsom Salts and so the myth was created. Some soils contain ample magnesium, but not always in a soluble form available to the plant.