

ROSE FRAGRANCE FACTORS

Like many other plant processes, the fragrance of a rose is a mysterious and magical biochemical process that happens at the cellular level of a rose flower. It is the oil produced in the petals, at the base of each flower, that is responsible for the fragrance of any particular rose. When we smell a rose, our olfactory picks up the minute amounts of these oils evaporating from the flower petals. This is exactly what pollinators are attracted to. There are many different and distinct scents that have been identified in roses, such as rose, of course, but also nasturtium, violet, apple, lemon or citrus, clover, hyacinth, orange, anise, wine, iris, marigold, geranium and raspberry, to name a few.

Generally, the most highly scented roses are darker in color, have a high petal count and have thick or velvety petals. Red and pink roses are most likely to have a scent of a "rose". White and yellow blooms commonly have scents of iris, nasturtium, violet, verbena or lemon. Orange to peach colored roses tend to favor fruit scents and nasturtium, violet, iris or clover scents. If you are particularly attracted to or have a good sense of smell for some of these individual aromas, then you might lean toward choosing a particular color of rose.

Along with their color, petal texture and count, several other factors will affect and alter the degree of fragrance of a rose. As already mentioned, evaporating oils are responsible for the level of fragrance, but there are also many environmental factors that change rose fragrance, for instance:

- Rose fragrance will be strongest on warm, sunny days
- Moist soil around plants enhances fragrance; hence, mulched plants produce more scent
- Bloom fragrance is most intense in cool, early morning hours
- First blooms of the season are more fragrant than later season flowers
- Plants with age produce blooms with more fragrance
- Half-opened blooms are most fragrant, when blooms are most attractive to pollinators
- Fully opened blooms at the end of the day will be least fragrant
- Heat and humidity affect fragrance positively or negatively
- Drought conditions reduces bloom fragrance
- Cutting blooms often intensifies fragrance, even if briefly
- Mildew and presence of other fungal diseases reduces fragrance

Some rose varieties that are good at keeping their fragrance, despite environmental changes are: **Abraham Darby® #25702**, **'Chrysler Imperial' #23603**, **Dee-Lish® #23644**, **'Double Delight' #23656**, **Firefighter® #23708**, **'Fragrant Cloud' #23723**, **Golden Celebration™ #25720**, **Heritage® #25726**, **'Julia Child' #24525**, **'Mr. Lincoln' #23999**, **Princess Charlene de Monaco® #24101**, **Sentimental™ #24655**, **'Sunsprite' #24673**, **Sweet Spirit™ #24224** and **Winchester Cathedral™ #25769**.

Similar to the "nose" of a fine wine, the aroma of a rose bloom will be complex and have many minute layers to explore. Enjoy!

