

## Rose fragrance no influence on vase life, researchers find

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Connoisseurs of cut roses often believe that the most fragrant blossoms are also the quickest to wilt, but a new University of Florida study disproves that notion and indicates breeders can develop varieties that smell great and last long.

Researchers with UF's Institute of Food and Agricultural Sciences found that the strength of a rose's fragrance is independent of its "vase life," the length of time it looks good after harvest, said Terril Nell, a professor and chairman of environmental horticulture.

"We can select for both (fragrance and long vase life) and get them in the same rose," Nell said.

That's good news for consumers because many cut-rose varieties were developed for visual appeal, disease resistance and other characteristics, and their fragrance is understated, at best.

The study was published online this month by the journal *Postharvest Biology and Technology*.

Researchers investigated 12 popular rose varieties, half of them considered fragrant. The flowers were harvested and placed in monitoring rooms where the scientists tracked vase life, volatile chemicals emitted and respiration rates.

Vase life ranged from four to 12 days, depending on variety, and had no

relationship to fragrance strength. Similarly, vase life wasn't linked to respiration or production of ethylene gas, a naturally occurring plant hormone, Nell said.

Previous studies have revealed the composition of some rose fragrances, as well as genes controlling production of many components, he said. The latest study may give plant breeders new impetus to develop varieties that appeal to consumers' noses as well as their eyes.

If breeders are able to develop a cut-rose variety with extended vase life and a strong fragrance, the flower would likely be a success, said Jeff Wyckoff, president of the American [Rose](#) Society in Seattle.

The floral industry would welcome such new varieties, said Jennifer Sparks, vice president for marketing with the Society of American Florists, in Alexandria, Va.

"This (study) is great news, as research shows that [fragrance](#) and longevity are important attributes in the value consumers place on flowers," Sparks said.

In 2009, the nation's cut-rose crop had a wholesale value of about \$17.7 million, according to the U.S. Department of Agriculture.

Provided by University of Florida

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