



UCCE Master Gardeners of Lake Tahoe

A gift for the gardener in your life: forcing paperwhite bulbs (*Narcissus tazetta*)

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The paperwhite bulb (*Narcissus tazetta*) is in the same family as daffodils but is a tropical flower. Unlike daffodils, the paperwhites do not require a cold period to grow. They require little less than to be potted (with or without soil) and watered to produce clusters of fragrant blooms. The white, fragrant flowers usually open up within 2-3 weeks of planting. The bulbs can be planted in soil, stones or decorative rocks in shallow bowls or jars. Just add a little water and the bulbs rapidly form roots, grow leaves, and shoots. The only drawback with these beautiful indoor winter plants is that they tend to get leggy and wilt over.

Researchers have found some easy solutions to deal with the "leggy problem." Research conducted by the Flowerbulb Research Program at Cornell University has found a simple and effective way to reduce stem and leaf growth of paperwhites. The "secret" is using dilute solutions of alcohol. Properly used, the result is paperwhites that are 1/3 to 1/2 shorter, with equal sized flowers that last as long as normal.

Plant the bulbs on pebbles or glass marbles in a 2- or 3-inch-deep dish, and add water up to the bottom of the bulbs. Place the dish where the plants will get bright light. After a week, when the green shoots are 1 to 2 inches tall, pour off the water, and refill the pot with a 4 to 6 percent solution of alcohol in water, and use the same solution each time you water your paperwhites. The reason to pour off the initial water is to simply maximize the alcohol level around the roots.

The exact concentration of alcohol is not important as long as you stay well below 10 percent, because a higher level will cause growth problems. Moderation is the key as with all living things. Once the plants are flowering, move them to a cool area to prolong flowering.

Here is how to get a 4 to 6 percent solution of alcohol in water:

- * Mix one part of 70 percent isopropyl, or rubbing, alcohol with 11 parts of water;
- * Mix one part of 90 percent rubbing alcohol with 15 parts water;
- * Mix one part of a 40 percent distilled spirit (gin, vodka, whiskey, rum, tequila, etc.) to seven parts of water. Avoid using beer, wine or any sweetened alcohol.

How does this work? The researchers theorize that mixing alcohol with water reduces the plants' intake of water and puts some "water stress" on the plants, thus reducing stem and leaf growth. After Paperwhites finish blooming, we recommend that you throw the bulbs out or toss them on the compost pile. They won't bloom again indoors.

References:

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