

# Aquilegia Vulgaris Winky Series

perennial  
solutions



By Paul Pilon

This award-winning columbine series is uniform in growth and flowering habit. Its dwarf size reaches 10-12 inches in containers and 15-18 inches in the landscape.

In recent years, there have been numerous aquilegia cultivars introduced into the industry with improved characteristics. The Winky series from Kieft Seeds Holland is an award-winning series of columbine that is becoming increasingly popular with today's growers.

The entire series is incredibly uniform in growth and flowering habit. Many growers appreciate its dwarf growing habit: It reaches 10-12 inches high when blooming in a container and 15-18 inches tall in the landscape. The Winky series produces upward-facing flowers (as if they are "winking" at you) and consists of various color combinations: Red-White, Purple-White, Blue-White, Rose-Rose and Double Red-White.

Columbine are clump-forming perennials often utilized in rock gardens, border plantings and containers and as potted plants. In the spring, the Winky series produces an abundance of spurred blooms above mounds of attractive medium-green foliage. The blooms may be used as cut flowers or to attract both butterflies and hummingbirds. Aquilegias prefer full sun, although in the South they perform best when grown under partial shade. They are both heat and cold hardy in AHS Heat Zones 8-1 and USDA Hardiness Zones 3-9.

With its superior growing habit, floriferous nature and extended flowering, the Winky series has established itself as a reliable and desirable plant in perennial programs across the nation. With these attributes, 'Winky Blue-White', 'Winky Red-White' and 'Winky Rose-Rose' have been awarded the Fleuroselect Quality Medal and 'Winky Double Red-White' was awarded the Fleuroselect Novelty Medal.

## Propagation

The Winky series is easily propagated by seed. Many aquilegia cultivars require a cold treatment prior to germination, but the Winky series does not. It will easily germinate in 10-14 days. Although light is required for germination, it is beneficial to cover the seed lightly with germination mix or vermiculite after sowing. The covering helps maintain a suitable environment around the seed during this phase.

The seed flats should be moistened and moved to a warm environment where the temperatures can be maintained at 65-70° F for germination. Many growers utilize germination chambers during this stage to provide uniform moisture

levels and temperatures, although aquilegia seed will germinate successfully in the greenhouse.

Following germination, reduce the moisture levels somewhat, allowing the growing medium to dry out slightly before watering to help promote rooting. For the remainder of the plug stage, they can be grown at 65-68° F. Fertilizers are usually applied once the true leaves are present, applying 100-ppm nitrogen every third irrigation or 50 ppm with every irrigation using a balanced, water-soluble source. When plugs are grown at 65° F, it takes 9-10 weeks from sowing for 72-cell plug flats to reach a transplantable size.

I recommend growers consider the size of the final container prior ▶



'Winky Blue-White' (left), along with 'Winky Red-White' and 'Winky Rose-Rose' (right), received the Fleuroselect Quality Medal. (Photos: Kieft Seeds Holland)

Brought to you by

**Yoder**  
...something better to grow on®

**Green Leaf**  
Perennials™

**Summit  
Plastic  
Company**

**JānorPot**

to sowing plug flats. For growers producing small pots, such as 1-qt. containers, of the aquilegia Winky series, plugs containing a single plant (seed) per cell are acceptable. If large containers, such as 1-gal. pots, are being produced, it is beneficial to utilize plugs containing 2-3 plants (seeds) per cell.

Utilizing multiple seeds per plug cell when producing large container sizes will allow growers to improve quality by producing fuller-appearing pots with more blooms per container. Another option for producing large containers is to plant multiple plugs per container at the time of planting.

## Production

Aquilegias perform best when grown in a moist, well-drained medium with good aeration and water-holding capacity. When planting, be careful not to plant the plugs too deeply as this could lead to poor plant establishment and possible crown rot. The top of the starter plug

should be even with the soil line of the finished container. I would recommend applying a fungicide drench using a broad-spectrum fungicide, such as Banrot (thiophanate-methyl and etridiazole), after transplanting.

Fertility can be delivered using water-soluble or controlled-release fertilizers. Growers using water-soluble fertilizers either apply 100- to 150-ppm nitrogen as needed or feed with a constant liquid fertilization program using rates of 50- to 75-ppm nitrogen with every irrigation. Growers commonly apply time-release fertilizers as a top-dress onto the media surface using the medium rate or incorporated into the growing medium prior to planting at a rate equivalent to three-fourth to 1 lb. of nitrogen per yard of growing medium. The pH should be maintained at 5.8-6.4. When providing irrigation, water thoroughly and let dry between waterings.

The Winky series maintains a compact habit throughout production and only reaches 10-12 inches when in bloom. Controlling plant height with growth regulators is usually not required. Before using chemicals to reduce plant height, it is usually beneficial to provide adequate space between each plant, which will reduce the competition between plants for light and prevent them from growing taller. If PGRs are required, B-Nine (daminozide) at 2,500 ppm or tank mixing B-Nine at 1,875 ppm with Sumagic (uniconazole) at 3 ppm are both effective at controlling plant height of aquilegia.

**What happens to the chemical that you spill between plants when drenching?**



The **CD2-Chemdose** puts the chemical right in the pot.



Accurate Doses



Easy to Program



Portable

Perfect for precise PGR and systemic insecticide applications.

Call to learn how the CD2 can accurately dispense your chemicals.

## DRAMM

Integrated Plant Health  
 information@dramm.com  
 www.dramm.com  
 920.684.0227

## Insects And Diseases

Aquilegia can generally be grown relatively free of insects and plant pathogens. Occasionally, aphids, leaf miners, twospotted spider mites and whiteflies may appear causing only a minimal amount of crop injury. The primary diseases growers should watch for are Ascochyta leaf spot, Botrytis and powdery mildew. To control these diseases, it is best to manage the environment by providing proper plant spacing and adequate air movement and controlling the humidity, or if desired, follow a preventative spray program using the appropriate chemicals.

None of these insects or diseases requires preventative control strategies. Growers should have routine scouting programs to detect their presence early and to determine if and when control strategies are necessary.

Write in 710



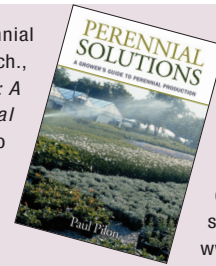
'Winky Double Red-White' was awarded the Fleuroselect Novelty Medal.

Holland ([www.kieftseeds.com](http://www.kieftseeds.com)). Plugs are available from a number of perennial plug suppliers across the country. 

### LearnMore

For more information related to this article, go to [www.gpnmag.com/lm.cfm/gp040707](http://www.gpnmag.com/lm.cfm/gp040707)

Paul Pilon is president of Perennial Solutions Consulting, Jenison, Mich., and author of *Perennial Solutions: A Grower's Guide To Perennial Production*. The book is a guide to propagation and growing containerized perennials with chapters on media, fertilization, insect and disease manage-



ment, weed control, propagation, forcing, plant growth regulators, overwintering, and individual cultural programs and schedules for many of today's most popular perennial species. Pilon can be reached at (616) 366-8588 or [paul@perennial-solutions.com](mailto:paul@perennial-solutions.com). Get a copy of his book at [www.perennial-solutions.com](http://www.perennial-solutions.com).

### Forcing

Producing blooming plants of aquilegia is relatively easy provided a few guidelines are followed. The Winky series has a juvenility phase and plants in the series are not capable of flowering until 9-12 leaves are present. Aquilegia need to be bulked or grown for a period of time until they have reached a mature stage and are capable of perceiving the additional factors necessary for flowering. Columbines reach maturity better when grown in containers rather than plug flats.

Most growers have the best success when planting large plug liners into the final container during late summer or early fall prior to desired spring sales and overwintering them as a potted plant. Spring planting vernalized plugs in large containers does not allow the plants to produce a "full" pot prior to blooming.

The Winky series requires cold to bloom. It is recommended to vernalize them for 9-12 weeks at temperatures of 35-45° F. Following the cold treatment, they can be produced at natural photoperiods, as they are day-neutral plants that will bloom under either short- or long-day conditions. Plants forced under long-day conditions tend to grow taller than those grown under short days and may require additional applications of plant growth regulator. It is recommended to force aquilegia under natural photoperiods.

Following vernalization, the time to bloom is a function of temperature. The aquilegia Winky series can be successfully forced into bloom when grown at temperatures between 55 and 65° F. I recommend growers use production temperatures of 60-65° F to force aquilegia cultivars; this produces plants with the largest flower size and best overall plant appearance. At these temperatures, the Winky series will be blooming in approximately 6-9 weeks.

### Availability

The aquilegia Winky series was brought to the market by Kieft Seeds

# The One For All

**Floramite controls mite pests in all life stages.**

Make Floramite® SC miticide the cornerstone of your mite control program. A single application stops tough two-spotted spider mites, from eggs to adults. Floramite miticide delivers more than 28 days of residual control. Its unique mode of action and highly selective activity goes easy on predacious mites and beneficial insects to help extend your IPM program. Safe on ornamentals and bedding plants, Floramite is economical and user-friendly. Ask your chemical supplier for Floramite, the one that controls spider mites in all life stages - the one for all.

**Chemtura**  
www.chemtura.com

Always read and follow label directions. Floramite is a registered trademark of a subsidiary of Chemtura Corporation. ©2005 Chemtura Corporation FL-ad01-0705 CCP-10905

Write in 708