



Rainlily, *Zephyranthes* and *Habranthus* spp.: Low Maintenance Flowering Bulbs for Florida Gardens¹

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What is a rainlily?

Rainlily refers to any of about 70 species of *Zephyranthes* and *Habranthus*, all of which are flowering bulbs that share common names of rainlily, fairy lily, rainflower and zephyrlily.

These small bulbs earned the name "rainlily" because they often flower within a few days after rainfall. From spring through fall, rainlily can produce flushes of star-shaped, crocus-like flowers that are white, pink or yellow, depending on the species. Flowers of some new hybrids are in shades of peach, orange and red, and some have multicolored flowers in striped or picotee patterns. Rainlily's easy care, broad adaptability and beautiful, starry flowers make it ideal for gardens in Florida!

Rainlily flowers in spring, summer or fall, depending on species and garden conditions. Each six-petaled, funnel-shaped flower is perched at the top of a stem that ranges in height from 2 inches to more than 12 inches. *Zephyranthes* spp. have a single, upward-facing or slightly nodding flower on each stem, whereas *Habranthus* spp. flowers are held at an angle and occur in groups of two or three per stem.

Each flower lasts just a day or two, depending on sunlight and temperature, but typically new flowers continually develop for several days, creating flushes of flowering. Rainlily flowers best when triggered by rainfall. Irrigation can stimulate flowering, but not to the extent of rainfall.

Rainlily bulbs produce clumps of narrow, grass-like leaves that range in length from a few inches to as long as 14 inches. In the wild, rainlily bulbs adapt to seasonal dry weather by losing leaves until rainfall resumes. In the garden, soil moisture usually is sufficient for most species to retain their leaves throughout much of the year. Most rainlily species are hardy in US Department of Agriculture Zones 7 – 11, an area that includes all of Florida and most of the rest of the southeastern United States (<http://www.usna.usda.gov/Hardzone/ushzmap.html>). However, even in these zones, rainlily leaves may die back after a hard freeze or during extended drought.

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Where should rainlily bulbs be planted?

Rainlily grows best in rich, moist, well drained soil with a slightly acid to neutral pH. Most rainlily species will flourish under full sun to part shade. Bulbs should be planted in fall or winter about an inch deep and at least 3 inches apart. Rainlily bulbs also are well adapted to growing in containers, provided plants are watered regularly to maintain adequate moisture. Rainlily divisions (small clumps resulting from dividing large clumps) or plants (as purchased in containers from a nursery) can be planted in the garden anytime and often flower and multiply faster than plants established from dormant bulbs.

How much care does rainlily require?

Rainlily is one of the easiest bulbs to grow in Florida. When planted in an appropriate site, rainlily needs little care after planting; it tolerates most soil conditions and will not need fertilizer, irrigation or replanting. Rainlily seems to flower best when clumps are left undisturbed.

Like other bulbs, rainlily adapts to drought and other harsh conditions by going dormant. Leaves will reappear when conditions again are suitable. Unfortunately for gardeners in Florida's coastal areas, most rainlily species are not salt tolerant.

How can rainlily be used in the garden?

Rainlily can be used like any bulb or other small, flowering perennial in the garden. Rainlily is very effective when planted as part of perennial beds, flower gardens, rock gardens, groundcover beds and containers. Rainlily especially mixes well with other bulbs since the evergreen foliage of most rainlilies is an effective foil for other flowering bulbs. Because rainlily foliage resembles liriopse and mondo grass, rainlily can substitute for these plants when used as a border, as an edging for beds, or to line pathways and sidewalks. Rainlily species such as *Z. candida* can be used in water gardens.

What pests affect rainlily?

Few pests affect rainlily. Bulbs and other plant parts of *Zephyranthes* and *Habranthus* species contain the poisonous alkaloid, lycorine, and other components that can cause vomiting, diarrhea, convulsions and sometimes death in humans and other animals. Although rainlily bulbs are considered to have low toxicity, homeowners should be aware of the poisonous potential of rainlily, particularly if small children and/or pets are present. However, these poisonous components make rainlily resistant to damage from deer, rodents and insects. Snails and slugs are the only pests reported to feed on rainlily leaves.

The disease red blotch (*Stagonospora curtisii*) occurs occasionally in rainlily during cool, damp weather. As the name of this disease implies, it appears as a streak or blotch of dark red on leaves. This disease does not significantly harm rainlily, but primarily affects the plant's appearance, and leaves forming at times other than during cool, damp weather will not show red-blotch symptoms. Rainlily is not as susceptible to this disease as is amaryllis (*Hippeastrum* spp.).

Where is rainlily native?

Species of rainlily are native to warm-temperate and tropical parts of the Americas, including Florida and the rest of the southeastern United States. Rainlilies are often found in swamps, marshes, prairies and moist soils. In recent years, plant breeders have been hybridizing rainlily to develop new flower colors, such as peach, apricot, orange and red.

Rainlily species are members of the amaryllis family, which includes other bulbs that are popular among gardeners, including amaryllis (*Hippeastrum* spp.), daffodils (*Narcissus* spp.), snowdrops (*Leucojum* spp.) and hurricane lilies (*Lycoris* spp.). The scientific name for rainlily, *Zephyranthes*, is derived from Zephyrus, the Greek god of the west wind that typically brought the rainfall with which these plants are associated.

How can rainlily be propagated?

Most rainlily species are easily propagated by bulbs, division or seed. Depending on the species, bulbs range in size from 1/2 inch to more than 2 inches in diameter.

The easiest way to propagate rainlily is to divide clumps. Large clumps of bulbs need to be divided every few years. Divisions of rainlily clumps establish and flower more quickly if each division consists of a grouping of three or more bulbs. The best time to divide clumps of bulbs is when they are dormant (winter for most types).

Most rainlily species rapidly produce offsets or bulblets, small bulbs at the base of the parent bulb. Each bulblet can be detached and planted separately. However, individually planted bulbs or bulblets often take longer to develop into flowering clumps. The number of growing seasons required for a bulblet to reach flowering size will depend on the kind of bulb and size of the bulblet.

For many rainlily species, as the flowers fade, they develop small capsules that contain viable seeds. These shiny black seeds can be collected from the capsules when they turn yellow and begin to split. Because seed viability rapidly decreases after harvest, sow fresh seeds on a moist potting soil and lightly cover. Germination will occur in two to six weeks. Under ideal conditions, seedlings will flower in eight to 12 months.

Common Rainlily Species and Selections

Zephyranthes atamasca is native to Central Florida, North Florida and the rest of the southeastern United States. This lily – commonly known as atamasco lily, rainlily or Easter lily – booms in these regions in March and April. Flowers are large – 3 inches wide or larger, white, and funnel-shaped. The flowers are perched on 10-inch stems and will fade to pink.

This rainlily is often found in rich, moist soils in swampy forests and coastal prairies and seen in roadside ditches. Clumps of broad, grassy leaves

emerge in early winter and die down in late spring or early summer.

Zephyranthes candida, commonly known as fairy lily or white zephyrlily, is native to Argentina and Uruguay, where it is found along rivers and in marshes.

This rainlily rapidly forms thick clumps of dark-green, upright, rush-like leaves. The clumps are up to 10 inches tall. In the late summer and fall throughout North Florida and the rest of the southeastern United States, fairy lily produces 1- 2 inch, white, crocus-like flowers. This rainlily – evergreen, even in North Florida – is often seen naturalized along roadsides and in ditches in North Florida.

Zephyranthes citrina – commonly known as yellow rainlily or citron zephyrlily and sometimes sold as *Z. sulphurea* – is native to the Yucatan peninsula of Mexico.

Throughout Florida during late summer and fall, these lilies produce small, deep-yellow flowers on stems 8 – 10 inches long. Leaves of this rainlily are up to 12 inches long. This plant does not offset much, but produces large amounts of viable seed.

Zephyranthes grandiflora – also known as pink rainlily or rosepink zephyrlily and sometimes sold as *Z. rosea* – is native to Central America and the West Indies islands.

Considered by many to be the best of the genus, this rainlily produces bright-pink, funnel-shaped flowers all summer long. Individual flowers are up to 4 inches across and 3 inches long and perched on stems 10 – 12 inches tall. Each bulb produces clusters of dark-green, strap-like leaves up to 12 inches long. Bulbs rapidly form large clumps and can display up to 20 flowers at once.

Given the presence of this rainlily in the West Indies islands, the plant is reported to be somewhat salt tolerant.

Zephyranthes 'Grandjax', 'Grandjax' rainlily, is a hybrid of *Z. grandiflora* × *Z. 'Ajax'* (*Z. candida* × *Z. citrina*) with light-pink, sterile flowers. Without the burden of producing seeds, this plant flowers

heavily and also is very fast growing, resulting in large clumps of bulbs that can be separated and planted.

Table 1 contains descriptions of these and other rainlily species and hybrids.

Where are rainlily bulbs and plants sold?

Rainlily bulbs or plants can be found at garden centers and Internet or mail-order nurseries.

Gardeners can plant rainlilies and forget them and still be rewarded with flushes of cheerful flowers that seem to appear overnight.

Try planting rainlily; you won't be disappointed!

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Table 1. Characteristics of rainlily species and selections at the University of Florida/IFAS North Florida Research and Education Center (NFREC), Quincy, Florida. Characteristics of most species and selections are based on performance in a trial garden at NFREC.


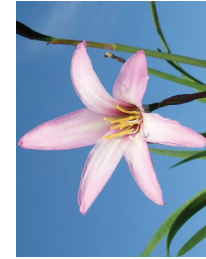
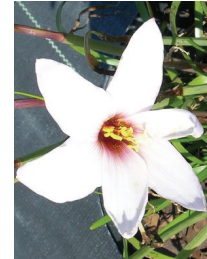
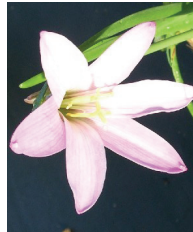
Name	Flower Color	Picture	Bloom Time	Clump Size after 20 Months ¹	Leaf Damage from Severe Freeze (2009) ²	Comments
<i>Habranthus brachyandrus</i>	Orchid-pink with burgundy throat		Late summer	+++	Severe	Large flowers; native to Argentina and Brazil.
<i>Habranthus</i> Cherry Pink	Rose-pink with dark throat		Summer	+	(deciduous in winter)	Gray-green leaves; a cultivar of <i>Habranthus x floryi</i> , a hybrid of <i>H. robustus</i> and <i>H. brachyandrus</i> .
<i>Habranthus martinezii</i>	Pale pink with burgundy throat		Late spring - summer	N.A.	N.A.	Native to Argentina.
<i>Habranthus</i> Pink Flamingos	Rose-pink		Summer	N.A.	N.A.	Hybrid of <i>Habranthus robustus</i> .
<i>Habranthus</i> Purple Base	Rose-pink with dark throat	Photo not available	Summer	+	Severe	Large flowers; a cultivar of <i>Habranthus x floryi</i> , a hybrid of <i>H. robustus</i> and <i>H. brachyandrus</i> .

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<i>Habranthus robustus</i>	Lavender-pink	Photo not available	Summer	N.A.	N.A.	Shallow-growing bulbs; not as cold hardy as other rainlilies; often sold as "Zephyranthes robusta".
<i>Habranthus tubispathus</i> var. <i>texensis</i>	Orange-yellow		Late summer - fall	N.A.	N.A.	Common name is "copper lily"; small flowers; seeds freely to form patches; performs best in drier soils; native to central Texas and northern Argentina.
<i>Zephyranthes</i> Apricot Queen	Pale apricot		Late summer - fall	+++	None	Seedlings usually come true-to-type; hybrid of <i>Zephyranthes pulchella</i> .
<i>Zephyranthes</i> Aquarius	Cream-yellow		Fall	N.A.	N.A.	Allegedly bulbs multiply rapidly; hybrid of <i>Z. candida</i> and 'Ajax'.
<i>Zephyranthes atamasca</i>	White		Mid-spring	++	None	Native to damp or boggy areas of Florida and the southeastern United States; common names are "atamasco lily" and "wild Easter lily"; leaves emerge in early winter and die down in late spring.

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<i>Zephyranthes</i> Big Dude	White with pink tips		Summer - fall	++++	None	Large, rounded, white flowers with pink edges; a selection of <i>Labuffarosa</i> .
<i>Zephyranthes candida</i>	White		Late summer - fall	++++	None	Distinct, upright, dark-green, sedge-like foliage; very floriferous; native to Argentina; often found naturalized along North Florida roadsides.
<i>Zephyranthes</i> Capricorn	Pastel orange		Late summer - fall	++	Slight	Floriferous in trials at NFREC in Quincy, FL.
<i>Zephyranthes citrina</i>	Intense yellow		Late summer	++	None	Adapted to drier soils; very hardy; floriferous; few bulb offsets develop, but the plant seeds freely, forming large patches; often sold using the incorrect name, " <i>Zephyranthes sulfurea</i> ".

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<i>Zephyranthes</i> Cookie Cutter Moon	White		Late summer - fall	++++	None	"Floppy," white flowers; very floriferous; one of the best rainlilies for fast growth and lots of flowers; native to Mexico; probably a form or hybrid of <i>Zephyranthes lindleyana</i> .
<i>Zephyranthes</i> El Cielo	Pale pink		Late spring - summer	+++	Slight	Needs shade; native to northern Mexico.
<i>Zephyranthes</i> <i>flavissima</i>	Yellow		Summer	++	None	Grows best on damp, acid soils; can tolerate standing water; native to Argentina and Brazil.
<i>Zephyranthes</i> <i>grandiflora</i>	Pink		Summer - fall	+	Severe	Flowers up to 4 inches across; one of the most beautiful rainlilies; cultivated form is sterile; bulbs rapidly multiply in rich, acid soils; native to tropical America.

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<i>Zephyranthes</i> Grandjax	Pale pastel pink		Late summer - fall	++++	None	Floriferous; bulbs rapidly multiply; the most floriferous rainlily in trials at NFREC in Quincy, FL; hybrid of <i>Zephyranthes grandiflora</i> and 'Ajax'.
<i>Zephyranthes insularum</i>	White	<i>Photo not available</i>	Late summer - fall	+	Slight	Native to the Caribbean and not as cold hardy as other rainlilies.
<i>Zephyranthes jonesii</i>	Light yellow		Late summer	++	None	Small flowers; native to Texas.
<i>Zephyranthes</i> Krankatau	Pastel red-orange turning peach the second day		Summer	N.A.	N.A.	A new hybrid from Indonesian rainlily breeder, Fadjjar Marta.

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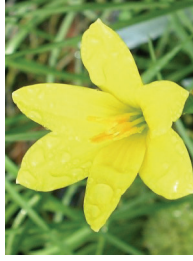
Name	Flower Color	Picture	Bloom Time	Clump Size after 20 Months ¹	Leaf Damage from Severe Freeze (2009) ²	Comments
<i>Zephyranthes labuffarosa</i>	White to pink		Late summer – fall	++	Slight	A species or naturally occurring hybrid native to Mexico; long bloom season; one of the best overall rainlilies; allegedly can bloom in moderate shade.
<i>Zephyranthes macrosiphon</i>	Deep pink		Summer	+	Severe	Large, pink flowers; needs rich, moist soil; not as cold hardy as other rainlilies; died out in 2008 at NFREC in Quincy, FL, but grown successfully in a home garden in the same area; native to Mexico.
<i>Zephyranthes primulina</i>	Pale yellow		Summer - fall	+	None	Native to Mexico; not as cold hardy as other rainlilies.
<i>Zephyranthes pulchella</i>	Deep yellow		Late summer	+	None	Native to moist soils of the western Gulf Coast of Texas and Mexico; narrow leaves emerge in winter and die off in summer.

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Name	Flower Color	Picture	Bloom Time	Clump Size after 20 Months ¹	Leaf Damage from Severe Freeze (2009) ²	Comments
<i>Zephyranthes reginae</i>	Pale yellow		Summer – fall	+	Slight	Few bulbets form, but the plant seeds freely, often resulting in large patches; good tolerance to drought and cold; native to eastern Mexico.
<i>Zephyranthes rosea</i>	Deep rose pink		Late summer	+++	Severe	Small, 1-inch flowers; plant is low-growing to only a few inches tall; leaves are wider than other rainlilies; surprisingly floriferous in trials at NFREC in Quincy, FL; native to Cuba; not as cold hardy as other rainlilies.
<i>Zephyranthes</i> Ruth Page	Pink		Late summer	++++	Slight	Very vigorous and bulbs multiply rapidly; very floriferous in trials at NFREC in Quincy, FL; hybrid of <i>Zephyranthes rosea</i> and <i>Z. citrina</i> .
<i>Zephyranthes</i> Tenexico Apricot	Pale peach-pink		Summer	N.A.	N.A.	Drought tolerant; bulbs allegedly multiply rapidly; found in Mexico.

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Name	Flower Color	Picture	Bloom Time	Clump Size after 20 Months ¹	Leaf Damage from Severe Freeze (2009) ²	Comments
<i>Zephyranthes traubii</i>	White		Late summer – fall	+++	None	Floriferous in trials at NFREC in Quincy, FL; native to moist savannah and woodland in Texas and Mexico; needs soil that is more limy than what most rainlilies require.
<p>¹Relative size of rainlily clumps in March 2009 after planting five bulbs of each rainlily in July 2007; clump size ranges from small (+) to very large (++++); "N.A." means "not applicable" because the bulb is not planted in the trial garden.</p> <p>²Leaves were evergreen except where noted. Rankings are given for leaf damage resulting from a low temperature of 20F on January 17, 2009. Plants were evaluated January 23, 2009, and leaf-damage rankings range from none to slight to severe; "N.A." means "not applicable" because the bulb is not planted in the trial garden.</p>						