



New Guinea Impatiens Care for the Consumer

History

New Guinea impatiens are native to New Guinea, an island north of the continent of Australia. Their introduction into the commercial floriculture industry is rather recent, with the first commercial varieties appearing on the market in the early 1970s. The first plant specimens used in commercial breeding were collected from a joint plant exploration to New Guinea involving the United States Department of Agriculture and Longwood Botanical Gardens in Pennsylvania in 1970. These early specimens were somewhat gangly and poor flowering, but were unique in their brightly colored foliage and relatively large flowers. From these initial plant specimens and early breeding lines, New Guinea impatiens have been transformed into one of the most popular landscape and flowering potted plants for consumers. These modern varieties have extra-large flowers, excellent branching, and are easy to grow.

Why New Guinea Impatiens?

There are few crops that have been introduced into the floriculture industry that can compare to the success of New Guinea impatiens. Their popularity has soared over the past twenty years and consumers can select from a wide range of flower and leaf colors. Their popularity and success is primarily due to the plant's extra large, round flowers that are both colorful and visually attractive. Gardeners around the world love the overall beauty and versatility of New Guinea impatiens. They are commonly available for consumers in a wide range of pot sizes and hanging baskets, and are appropriate for landscape beds, patio containers, and mixed combination plantings. With adequate care, they will provide the homeowner and gardener with continuous color the entire growing season.

New Guinea vs. Seed Impatiens

New Guinea impatiens (*Impatiens x hawkeri*) differ from the popular elfin (bedding-type) impatiens (*Impatiens wallerana*) in several ways. New Guinea impatiens are started from vegetative cuttings and are difficult to propagate from seed, while elfin impatiens are easily and most commonly grown from seed. Elfin impatiens have smaller, but more numerous flowers than New Guinea impatiens and are most commonly used in landscape bed plantings. New Guinea impatiens, while used in landscape beds, are also very popular as holiday potted plants and for large outdoor containers. Both types of impatiens require similar growing conditions, such as a good, well-drained soil, adequate moisture, and afternoon shade.

Home Culture Tips for New Guinea Impatiens

Pre-Planting Care

Make sure to only purchase mounded, well-branched plants that have healthy root systems, smooth shiny leaves and many flower buds. Avoid tall, stretched plants with yellowing or dead foliage and poor root development (brown roots). This generally is a sign that the plants have not been adequately watered or cared for at the retail store.

When you get the plants home, don't let them dry out before planting. If you can't plant them immediately, place them in a bright location but avoid full direct sun. *Although New Guinea impatiens like shady conditions, do not store them in very dark areas, like a garage, for more than a day or two.*

Preparation of Soil, Beds, and Pots

Pots, baskets, window boxes, or other containers should be thoroughly **cleaned and disinfected** before use. A good disinfectant is 1 part Clorox to 9 parts water. The pots should be cleaned well with the solution and hosed off with fresh water to remove any residue that would harm the plants. If a disinfectant is not available, then wash the containers out with a soap solution and rinse well with fresh water. The **pot size** should be approximately 1.5 times the diameter of the potted plant purchased. That means a 6" plant should be planted into a 9" – 10" container. Three to four 6" plants should be potted into a 14" – 16" container. It's a good idea to ask your retailer about the varieties. Some variety lines, like the Super Sonics, are more vigorous growing than other lines, like Paradise or Sonics, and should be planted in bigger containers.

For maximum growth, your soil should provide adequate drainage.

- For container gardening **use only high quality commercial potting soil - do not use field or garden soil or poor quality inexpensive potting soil.** The best soil is mostly coarse peat moss with vermiculite and perlite. Avoid soils that have bark or wood chips unless it is well composted.
- If planting into flowerbeds, **make sure** to loosen the soil, and to add 30-50% compost or peat moss for increased drainage. Incorporate 1 pound of a complete dry-formulated fertilizer for every 100-sq. ft. of bed at the same time. Slow-release (controlled-release) fertilizers also work well and can be either incorporated into or top-dressed on top of the soil bed or container media.
- Automatic irrigation systems ideally should be designed to avoid wetting the foliage during watering - a drip irrigation system is preferred.

Location

New Guinea impatiens grow best with about 4 to 6 hours of afternoon shade. In northern areas of the .S. and Canada, or where day temperatures are more moderate, the plants can tolerate full sun. Too much sun will produce plants with pale and burnt leaves and flowers that are small and hidden in the foliage. Good shade during the hot hours, with morning or evening sun, will generally produce the healthiest and best flowering plants.

New Guinea impatiens should not be set outside until night temperatures are above 45 degrees F. They are not as cold hardy as many other annuals, such as geraniums or petunias. They grow best with day temperatures of 70 to 85 degrees and night temperatures of 55 to 65 degrees. If day temperatures are higher, providing extra shade in the hot afternoon hours and protecting the plants from drying winds will help reduce stress.

New Guinea impatiens can be used in variety of ways in the home landscape. They can be planted in mass plantings in afternoon-shade beds, but are also popular in a wide range of patio containers. They make a perfect choice for brightening up covered porches and other shady areas, and are becoming more popular in combination plantings with other annuals. New Guinea impatiens can also be grown inside if placed near a window with full sun.

Planting

The planting should not be done during the hot hours of the day. The plants should be planted at the same level of the original potting soil. Water heavily immediately after planting. Providing a mulch around the plants will help cool the soil and conserve moisture during the hotter summer months.

As a rule of thumb, for proper spacing in flowerbeds, allow enough space in between the plants to accommodate the same diameter of the plants you are planting. For example, space 4” pots on 8” – 9” centers, 5” pots on 10” – 11” centers, and 6” pots on 12” – 13” centers. Again, know your varieties and plant more vigorous varieties a little further apart. Most compact-medium growing varieties will reach a final height between 10-12”, while more vigorous varieties will reach up to 16” in height.

Watering

New Guinea impatiens prefer soil that is consistently moist but not soggy. Do not allow the plants to dry out completely. This will result in wilting and loss of flowers. If possible, avoid watering over the tops of the plants and flowers. Cut back on your watering frequency when conditions are cool and cloudy and the plants are still small shortly after planting. During these times the water requirements of the plants are relatively low until the plants become better established and the warmer weather arrives.

When the plants are actively growing, light rain showers or occasional sprinkling of the foliage does not provide enough moisture to constitute proper watering when the soil is dry. Although New Guinea impatiens wilt easily under water stress, they usually recover very quickly when given additional moisture. Consistent wilting, however, will result in poor flowering and burnt foliage. For best results, water well, keep the soil moist, and avoid plant wilting.

Fertilization

New Guinea impatiens do not demand a lot of fertilization to keep them growing and performing well in the landscape. A long-term, controlled-release fertilizer can be mixed into the soil before planting or applied around the base of the plant after planting. Common brands include Polyon, Osmocote, or Nutricote. The draw back with these methods is that it is hard to see (unless you are experienced) when the fertilizer is used up, or leached out by rain and irrigation. If controlled-release (resin-encapsulated) fertilizers are used, it is recommended to use them at the low to medium rate and with a slow 9-month release, as other formulations can release nutrients too fast under the hot summer conditions.

A preferred way to fertilize is to apply water-soluble complete fertilizers that include micronutrients every third watering at the low end of the recommended rate. This method is more time consuming but supplies fertilizer to the plants at a more programmable rate. If plants are completely dry, irrigate with plain water before fertilizing, otherwise the roots might get burned.

Removal of Old Flowers

Although not required, New Guinea impatiens maintain better overall attractiveness when old flowers are removed periodically. The plants shed their flowers naturally, but sometimes this can lead to messy plants and possible *Botrytis* fungal gray mold on the old, fallen flowers. Sometimes all that is needed is to shake the basket or container so that the old flowers fall to the ground.

If the plant is getting over-grown and leggy, it can be trimmed back to help keep a compact and bushy shape. Cut the stems back to a leaf node and provide good growing conditions to help the plant recuperate and re-flower.

Pest and Weed Control

The flowerbeds and containers should be kept free of weeds and monitored for pests. The most common insect pests are:

- Aphids – small green ovate insects, usually clustered together at the growing tip of the plants. A good indication of aphid damage is the “black sooty mold” on the leaves. This is a fungus that grows on the plant sap excreted by the aphids.

- Red Spider Mites – close to microscopic in size, the red spider mite is usually found on the under side of the leaves, very often within their delicate webbing. Because of their size, red spider mites are hard to detect without the use of a hand held magnifying glass. Spider mite damage resembles tiny pin holes on the leaves. They are worse under warm, dry conditions.
- Caterpillars – most caterpillars do their work at night. Look for circular holes in the edges of the leaves, freshly chewed flower stems, and dark brown to black excrement left on the surface of the leaves.
- Fungal Root Rot – root and stem rot can occur when the plants are planted in poorly drained soil or containers that do not have a drain hole. Plants will wilt and die unless better drainage and aeration are provided.

Treat, if possible, with environmentally friendly chemicals that are the least harmful to humans and animals.