



Mondo Grass

Mondo grass is one of several closely related, grass-like groundcovers from Asia common in Hawaii and other warm-weather areas. The most frequently used species of mondo grass is *Ophiopogon japonicus*, which has several popular varieties. A closely related genus is *Liriope*, or common lily-turf, which is often confused with mondo grass. Liriope has thicker, more tuberous roots and are more cold-hardy than ophiopogons. Neither of these popular groundcovers are really grasses—they are members of the lily family.

Mondo grass is drought resistant and tolerates full sun but prefers areas of moist soil and partial to full shade. The individual plants grow in tufts that consist of numerous grass-like basal leaves from $\frac{1}{16}$ to $\frac{1}{4}$ inch wide and up to 18 inches long, depending on the variety. Mondo grass spreads by underground stolons and tuberous roots. It seldom flowers in Hawaii, but when it does the small, inconspicuous, pale lilac and white flowers are held in short, terminal racemes and are almost entirely hidden by the foliage.

The advantage of using mondo grass is that most selections establish quickly and are generally drought tolerant and disease and insect resistant. Some varieties spread vigorously and are excellent for filling in large, shady areas where grasses do not grow well. Some of the dwarf cultivars spread slowly and are used for edging borders and in places where minimal maintenance is required. Variegated selections can be used as accent plants to add contrast and color.

Preparation of the planting area

New beds or borders of mondo grass should be properly prepared before planting to ensure rapid establishment and minimal weed problems.

To reduce weeds in the planting area before the mondo grass is transplanted, encourage weed seed germination by applying a complete fertilizer (containing nitrogen, phosphorus, and potassium) at $\frac{1}{2}$ lb nitrogen

per 1000 square feet to the soil surface and watering the area well for about two weeks. When the weeds have emerged, eliminate them with a contact systemic herbicide such as Roundup® or Finale®. Within 7–10 days after spraying the herbicide, the weeds will die.

Then, make a second application of complete fertilizer and cultivate it into the soil to a depth of 5–6 inches. This is the time to add soil amendments such as compost and, if the soil is acidic (pH <5.5), agricultural lime or dolomite. Rake the area level and water again for about two weeks to germinate weed seeds brought to the surface by the cultivation. When the second round of weeds has been killed with herbicide, the soil should be relatively free of weed seeds and prepared for transplanting the mondo grass.

Planting the mondo grass

Mondo is normally established vegetatively in Hawaii, rather than by seed. Separate mondo grass clumps into individual tufts, each containing roots or rhizomes, and transplant them 4–12 inches apart. Closer spacing results in faster cover. Plant the slow growing dwarf varieties 2–4 inches apart. Do not plant the crowns too deeply, but make sure that all of the roots and rhizomes are well covered by gently pressing the soil around them.

After transplanting, apply a pre-emergence herbicide according to the directions on its label. This will keep weed seeds from germinating during the establishment period. Newly planted mondo grass may be more susceptible to some pre-emergence herbicides than older plantings because the root system is not as well established. This susceptibility will be less severe if the roots and rhizomes of new plantings are adequately covered by soil and do not come into direct contact with the herbicide. Therefore, it is important not to disturb the soil of the newly planted area for several weeks. Once the planting thickens and covers the ground, its shade will help to reduce emergence of annual weeds. It usually

takes about three years for a mondo grass planting to completely fill in.

In Hawaii, mondo grass grows throughout the year, but it is more prolific during the summer months. It is therefore best to transplant in early spring so that the new root system has a better chance to become established.

Maintenance practices

The fleshy, tuberous root system of mondo grass gives it a very good tolerance of full sun and drought conditions. However, it grows much better when it receives partial to full shade and the soil is well drained and kept consistently moist.

In the landscape, most established mondo grass varieties will live indefinitely without supplemental fertilization. However, growth can be improved by regu-

lar, light fertilizer applications throughout the spring and summer months, with the objective of maintaining color and appearance without promoting excessive growth. For best results, use controlled-release fertilizer, organic fertilizer, or compost. The crowns can be injured by readily available inorganic fertilizers.

An annual top-dressing of ½ inch of compost spread over the mondo grass bed helps promote lateral spread of rhizomes and provides micronutrients and small, slowly released amounts of nitrogen. Compost is particularly beneficial during the first several growing seasons and will shorten the time to reach full cover.

It is reported that mowing mondo grass once or twice during the first few growing seasons stimulates growth, but this also temporarily reduces the size of the individual clumps, and the cut ends of the leaves may look unattractive until new leaves grow in. If you choose to

Commonly used types of mondo grass

Ophiopogon japonicus, **common mondo grass**, forms tufts or clumps of dark green, needle-like foliage. The leaves are 12–15 inches long, and the tufts may reach several inches in diameter. The species spreads rapidly by underground stolons, forming a thick carpet. It is often used to cover large, shady areas. Flower formation is negligible.

O. japonicus var. *nanus*, or ‘**Nanus**’, commonly called **dwarf mondo grass**, has dark green, closely cropped foliage with leaves about 3 inches long. The tufts are much smaller and tighter than those of common mondo, and they spread more slowly. Dwarf mondo has no blooms, grows best in full shade, and does not tolerate poorly drained or waterlogged soils. It is excellent for borders or between stepping stones and areas where stability and low maintenance is desirable.

O. japonicus ‘**Gyoku-ryu**’ or ‘**Kyoto Dwarf**’, commonly called **super dwarf mondo grass**, is a new arrival from Japan. It is the tiniest mondo grass, with very compact tufts consisting of dark green leaves less than 1½ inches long. It spreads slowly and is used in bonsai arrangements.

O. japonicus ‘**Kijimafukiduma**’ or ‘**Silver Mist**’ is a showy, variegated cultivar with stark, white-and-green,

needle-like leaves about 10 inches long. ‘Silver Mist’ is often used in very shady areas, such as under trees, where it shows up better than the green varieties and provides contrast and texture to the area.

Ophiopogon jaburan ‘**Variegatus**’, commonly called **aztec grass**, is similar to ‘Silver Mist’, with variegated snow-white-and-green foliage. However, its leaves are longer (about 12–18 inches) and its tufts are larger than those of ‘Silver Mist’.

O. planiscapus ‘**Nigrescens**’, commonly called **black mondo grass**, has unique coal-black foliage and pink blooms. The needle-like leaves grow 6–10 inches long, and the slow-growing tufts reach several inches in diameter. It spreads very slowly and is often used as an accent plant in low-maintenance areas. It provides a striking contrast to the variegated types.

O. jaburan ‘**Evergreen Giant**’ is a very tall, upright, clumping species of mondo grass with light purple to white flowers. It has coarse, solid-green leaves 18–36 inches long, and the clumps may reach 12 inches in diameter. Because this is a larger clumping type, it is normally used not as a groundcover but rather in groups of two to five clumps for accent and to provide depth and variability to a landscape arrangement.

try this, make sure that the mower is set high, because mondo grass is easily damaged by scalping. Use a stiff hand rake periodically to remove dead leaves.

The main keys to maximum growth and health of mondo grass are good soil preparation and adequate fertilizer and irrigation.

Disease control

The most serious disease of mondo grass is root rot caused by *Pythium splendens*, which affects dwarf mondo more than the long-leaf varieties. Symptoms begin as tip burn followed by gradual yellowing and browning. Eventually the crown will easily separate from the base when gently pulled. Heavy soils and poor drainage promote outbreaks of this disease. The soil-borne *Pythium* is difficult to control, but there are some fungicides labeled for drench application to mondo grass. Top-dressing with compost may also help, because it improves competitive soil microflora populations.

Pest control

The main insect problem with mondo grass is scale. Although this insect does not cause serious damage, it does cause unsightly spots on the leaves. Scale infestation can be controlled by spraying any of the oil-based insecticides that are labeled for ornamentals. The only other occasional pest problem may be slugs and snails.

Spreading one of the granular baits that are available effectively controls them.

Weed control in established plantings

When mondo grass has spread to cover the entire soil surface, the growth of most annual weeds is usually minimal. However, dwarf mondo and other slow spreading varieties may never completely cover an area sufficiently to choke out weeds. The pre-emergence herbicides used to prevent emergence of annual grasses and broadleaf weeds during mondo grass establishment can also be used in regular applications to established plantings.

Some control of perennial and annual grasses and broadleaf weeds that become established in a mondo grass planting can be obtained with postemergence herbicides. Most grasses (including lawn grasses) are effectively controlled by Fusilade II[®], Ornamec[®], Grass-B-Gon[®], or Vantage[®], but they do not control broadleaf weeds or nutgrass (purple nutsedge), and they will severely injure most turfgrasses if accidentally oversprayed onto lawn areas.

Nutgrass, crabgrass, kyllinga, and some broadleaf weeds such as chickweed and dandelion can be controlled in non-dwarf types of mondo grass by Image[®], which does not affect most lawn grasses. Image should not be used on dwarf and super-dwarf types of mondo grass, which it can injure by causing yellowing and permanent stunting of growth.

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