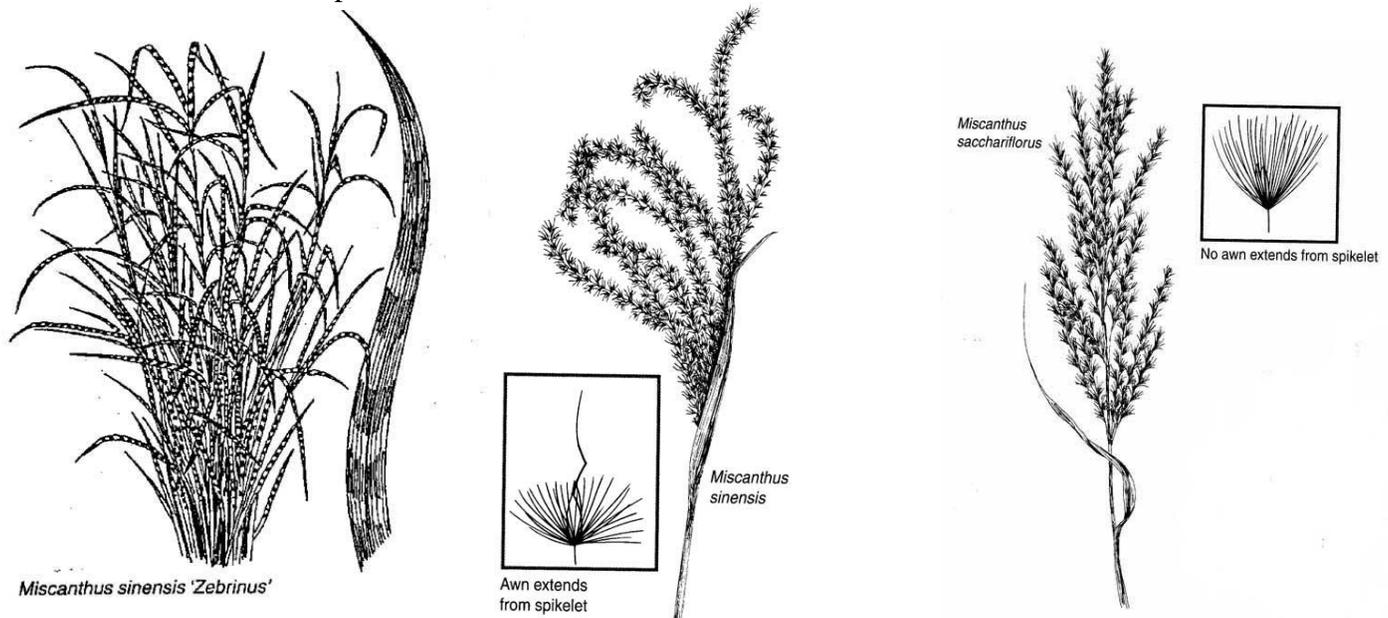


Fact Sheet and Management of *Miscanthus sinensis*

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Common names: Japanese silvergrass, Chinese silvergrass, susuki (in Japan), miscanthus, and pampas grass (regional)

Native Habitat: Southeast Asia, often along roadsides and disturbed places throughout much of Japan, especially at higher elevations 3,000'-4,500', in a variety of soil types including light, well-drained, nutrient-poor soils on semi-natural grasslands. Several other species are common in Japan, Taiwan, and other parts of southeast Asia; additional species are native to southern Africa.



Plant Description: Over 50 ornamental forms of *Miscanthus sinensis* are sold in the US nursery trade, including selections with green and yellow foliage and various flower colors, many of which have been popular garden plants for over 100 years. Mature plants have large, showy, and feathery flowers that appear in September and October. Most ornamental forms such as 'Zebrinus' and 'Variegatus' with striped or banded foliage set little or no seed, especially when grown as individual, isolated plants in a garden setting. Multiple *Miscanthus* grown together, especially in warmer regions such as USDA Zones 6 & 7, may set a significant amount of viable seed. Ornamental plantings are probably the source of the "wild type" *Miscanthus* that is now common in western North Carolina; near Valley Forge, PA; and in other areas in the Middle Atlantic States. This wild type grows on light, well-drained soils that are low in nutrients and marginal for crop production, such as roadsides, power right-of-ways, along railroads, and steep embankments. The wild type sets a significant amount of airborne seed. Seed is the primary method of disbursement of *M. sinensis*. Seed set, however, may be low or variable due to climatic conditions, such as drought or early frost. *Miscanthus sinensis* is a bunch- or clump forming grass, with very short, inconspicuous rhizomes. The predominate means of spread is airborne seed or from seeds in the soil (seed bank).

Management: Ornamental plantings should be watched carefully for self-seeding into nearby gardens, woodlands, or natural areas. In the fall, when flowers are conspicuous, usually October, is a good time to look for self-seeded plants. Individual plants can be hand-weeded or removed by digging out the entire root system, or at least the flowers can be removed to prevent further self-seeding. Removing seedheads as they appear will reduce the seedbank and control the spread of plants.

Chemical/Mechanical: For larger areas, control of *Miscanthus* is possible using chemical or mechanical means. Ideal control measures include the following steps:

1. In late winter or early spring, before new growth starts, remove previous year's growth by cutting (or burning, see below) the entire plant back to the ground. This removal ensures vigorous new growth and the lack of any dead leaves or culms creates ideal conditions for chemical control.
2. When new growth is 12" tall, in mid spring or early summer, spray all green tissue with glyphosate. Allow plant to die, and when completely brown, cut the dead foliage back to the ground. NOTE: If it is not feasible to remove the previous years growth, as indicated in step 1, wait until plants are 12-24" tall, usually early to mid-summer, to proceed with spraying. Coverage will be hampered by standing dead culms from the previous year.
3. If necessary, spray regrowth again in late summer or early fall when growth is 12" tall with glyphosate.
4. Repeat the process the following year, if necessary.

Chemical spraying of the cut surfaces after cutting plants back (often recommended for controlling woody plants) is NOT an effective way to control *Miscanthus*. An adequate amount of actively growing green foliage should be present for good chemical control.

Mowing: Repeated mowing, as short as possible throughout the growing season will kill *Miscanthus* usually in 2 seasons. But areas where there is a seed bank may require several years of mowing. At least 2 mowings per year should be done, ideally monthly, or mowing management similar to that needed for lawn or turfgrass care will provide the best control. *Miscanthus* cannot tolerate repeated mowing or cutting back DURING THE GROWING SEASON. Cutting the plants back in late winter or when dormant will provide NO control and can actually enhance growth if the cuttings are removed, similar to haying.

Grazing: Cattle prefer *Miscanthus* and in Japan it is easy to control by allowing cattle (horses, goats or sheep) to graze in fields beginning in June. Heavy grazing is a known method in Japan for controlling *Miscanthus*. However, this grass is NOT a valuable wildlife food. Deer, rabbits, and other North American wildlife DO NOT EAT THIS GRASS. It is of little value for wildlife, as food.

Burning: BURNING WILL INCREASE *MISCANTHUS* GROWTH, VIGOR, AND SEEDSET. BURNING SHOULD ONLY BE DONE AS A MANAGEMENT PRACTICE WHEN IT CAN BE FOLLOWED BY CHEMICAL CONTROL. Burning in late winter or early spring will remove all of the previous years growth. Plants will regrow with increased vigor, and, if allowed to flower, **the seed set can actually be enhanced after burning**. Burning, however, can clean an area so that all foliage will be green and actively growing for effective and efficient chemical control.

Other Species: *Miscanthus sacchariflorus* is another escaped species that differs from *M. sinensis*. Due to its large, very vigorous, conspicuous rhizomes. This species has limited ornamental value and is not as common in the nursery trade. *M. sacchariflorus* usually sets very little seed, although it has escaped in several locations in Iowa, Minnesota, and Wisconsin. In addition to rhizomes, *M. sacchariflorus* has softer, white flowers with no awns (see illustration) that form earlier and usually fall apart (disarticulate) by December. *M. sacchariflorus* prefers wet sites, such a roadside ditches and along streams or ponds. Predominate means of spreading is through the persistent rhizomes. Plants do not usually have viable seed. Manage or control by repeated mowing during the growing season. Use chemical control as listed above, if necessary.