

Brazilian Giant-Rhubarb

(*Gunnera manicata*)



Family name: Gunneraceae (Gunnera family)

Common name/s: Brazilian Giant-Rhubarb, Giant Rhubarb, Dinosaur Food



Brazilian Giant-Rhubarb (*G. manicata*) is a large perennial plant. In Ireland, it is considered an invasive species that can rapidly spread in wetland and riparian habitats. The plant spreads through both seed and rhizome fragments, making management challenging. Control strategies include mechanical removal, herbicide application, and preventative measures to limit its spread. If left unmanaged, Brazilian Giant-Rhubarb can significantly impact local biodiversity and increase the risk of soil erosion.

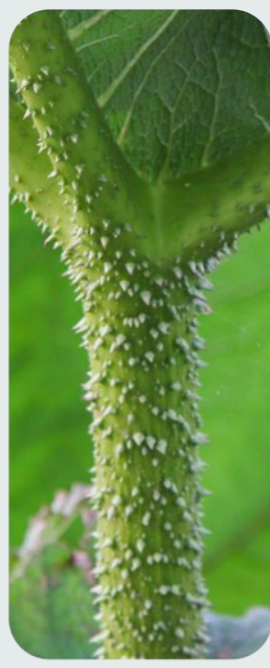
Description - Brazilian Giant-Rhubarb is noted for its enormous, umbrella-like leaves and tall flower spikes. It is widely cultivated as an ornamental plant in temperate regions for its dramatic appearance. It can become invasive in certain environments, particularly in wetland areas. It is often mistaken for the related *G. tinctoria*, but *G. manicata* has distinct characteristics that help to differentiate the two species.

Key characteristics include:

Height: Can grow to a height of 2.5 to 3 metres, with the flower spikes reaching up to 2 metres.



Leaf - *G. manicata* leaves are very large, often reaching 2-3 metres across, are deeply lobed and have a smooth rounded shape with jagged edges. The leaf texture is rough but not as coarse as *G. tinctoria* which are typically smaller, reaching up to 1.5-2 metres in diameter and are more deeply lobed, with more pronounced and jagged edges. The leaf surface of *G. tinctoria* are rougher, with more prominent veins and a coarser texture.



Leaf Stalks (Petioles): The leaf stalks are thick and fleshy, supporting the large leaves, and covered in bristles. *G. manicata's* petioles are long, often reaching up to 1.5 metres and covered with bristly hairs, but the spines are typically softer and not as prominent as in *G. tinctoria*.

G. tinctoria petioles are covered with small reddish-brown spines, providing a prickly texture. They are thick and fleshy but shorter than those of *G. manicata's* petioles.

Flower Spikes: Produces tall, conical flower spikes (inflorescences) that emerge from the centre of the plant. The small, reddish-green flowers are not showy and bloom in late spring to early summer. *G. manicata* flower spikes are tall, reaching up to 1.5-2 metres high, with an elongated, loose arrangement of flowers.



G. tinctoria flower spikes are shorter, reaching up to 1 metre high. Spikes are conical and dense, with greenish-brown flowers.

Fruit: The flowers give way to small, round, reddish fruits that contain tiny seeds, which can be dispersed by water or animals.



Root: Has a large, rhizomatous root system, which allows the plant to spread horizontally. The rhizomes are thick and woody, enabling it to form dense colonies.

Habitat - *G. manicata* is native to Brazil, particularly in the Atlantic Forest region, where it grows in moist, shady environments and is less widespread as an invasive species compared to *G. tinctoria* which is native to Chile and Argentina. *G. manicata* is less tolerant of cold temperatures, whereas *G. tinctoria* is more tolerant to cold weather, making it better suited to cooler climates. *G. manicata* prefers:

- Wetlands and Pond Margins: Thrives in boggy soils, near ponds, and along watercourses, where the soil remains consistently moist.
- Gardens and Parks: Frequently planted as an ornamental feature in gardens, parks, and large estates, particularly in damp, shaded areas.
- Woodland Edges: Can also grow in woodland edges and other shaded environments with rich, moist soils.

The plant prefers moist, well-drained soils and grows best in full sun to partial shade, although it requires sufficient moisture to prevent wilting.

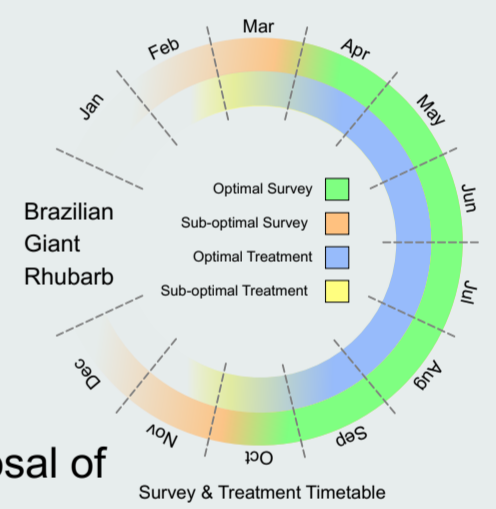
Status in Ireland - In Ireland, Giant-Rhubarb is considered an invasive species. It can spread rapidly in wetland areas, riverbanks, and coastal regions, where it outcompetes native vegetation and alters habitat structure.

Reproduction and Spread - While *G. manicata* can naturalise in some areas, it is generally considered less aggressive as an invasive species compared to *G. tinctoria* which is known to be more invasive in regions like Ireland. Brazilian Giant-Rhubarb spreads through both seed production and vegetative propagation:

- Seed Dispersal: Each plant can produce thousands of seeds, which can be dispersed by water, wind, and animals. The seeds can remain viable in the soil for several years.
- Vegetative Propagation: The plant also spreads through its rhizomes, which can regenerate new plants from fragments, allowing it to form dense colonies.

Management and Control - Controlling Brazilian Giant-Rhubarb requires a combination of mechanical, chemical, and preventive methods:

- Mechanical Control: Digging up the plant and removing the rhizomes is effective for small infestations, but care must be taken to remove all root fragments to prevent regrowth. repeated cutting or mowing the leaves can reduce the plant's vigour.
- Chemical Control: Herbicides may be applied to the cut leaves or rhizomes, particularly in larger infestations. Multiple treatments may be needed.
- Preventative Measures: Avoid planting Brazilian Giant-Rhubarb near natural water bodies, and ensure proper disposal of garden waste.



Ecological Impact - Brazilian Giant-Rhubarb can have several significant ecological impacts, particularly in areas where it becomes invasive:

- Competition with Native Species: Forms dense stands that outcompete native wetland and riparian plants, leading to reduced biodiversity.
- Alteration of Habitat Structure: The plant's large leaves can shade out other vegetation, changing the structure of the habitat and affecting species that require more light.
- Soil Erosion: When the plant dies back in winter, it can leave bare soil exposed, increasing the risk of soil erosion, particularly along riverbanks.

For further information and free advice, please contact:

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