

Dionaea muscipula – Venus Fly Trap

Dionaea muscipula, commonly known as the Venus Fly Trap, is a small herbaceous wetland plant characterized by unique hinged clamshell-like traps that spring closed to catch unwary insects. The Venus Fly Trap grows from a fleshy white rhizome which gives rise to 10 to 15cm rosettes of reclining leaves, each leaf consists of a relatively broad petiole (leaf stem) and a leaf blade which is modified into the trap. The perennial Venus Fly Trap blooms in Summer with white, five-petaled blossoms which are held a few inches above the foliage and about 6 - 8 weeks after flowering, the ovoid fruiting capsules mature, each releasing many tiny black seeds.

The trap of the Venus flytrap is one of nature's marvels - the outer edges of the two clamshell-like halves are lined with nectar glands and stout bristles and are normally held open at about a 60 degree angle, exposing a green, pale yellow or maroon lining. When an insect is attracted to the sweet nectar and enters the interior of the trap, it brushes against sensitive trigger hairs causing the two halves to close rapidly, trapping the unwary creature in a barred jail behind interlocking bristles. If the stimulus was just a raindrop or piece of debris, the trap opens back up; but if it was an insect, the trap closes tighter and the interior secretes digestive enzymes. Depending on air temperature and the size of the meal, it is digested and absorbed in 3-5 days, then, the trap reopens for another dinner guest.

Venus Fly Trap is native to bogs and wet seepage areas that lie between longleaf pine savannas and shrub bogs (pocosins) on the coastal plain in south eastern USA - North and South Carolina. Venus flytraps require a substrate that is constantly moist and an atmosphere with at least 80% relative humidity. They can tolerate brief periods of flooding and drying out. During the growing season, keep the planting medium constantly moist and then during the winter, keep it just barely moist. Never water with anything but rainwater. *Dionaea's* insectivorous habit compensates for the poor soil of the sandy bogs that constitute its habitat. All plants need certain minerals in order for their metabolisms to function properly and most obtain these exclusively from the soil. The soil of their natural home is both naturally deficient in essential nutrients and so wet that those nutrients which are present tend to leach out very quickly. The Venus flytrap's bug-eating jaws are an ingenious adaptation to poor growing conditions!

Outdoors, Venus flytrap thrives in full to partial sun with protection from full midday sun and potted plants need bright light. Venus Fly Traps usually die back to the ground in winter, but they will remain evergreen in protected sites and warmer climates.

Inside the typical heated home is too warm for Venus Fly Trap in the Winter, when they should be kept no warmer than 4°C. In the summer, they do best when temperatures stay below 26°C. Venus flytrap can be kept alive in cultivation, but not in an open flowerpot in the living room. These plants require cool temperatures, a constantly moist substrate and a humid atmosphere. Grow in a cool greenhouse or in a terrarium in bright light.

Propagation

When to sow – In a heated propagator at any time, otherwise in Autumn with fresh seed in a warm humid environment, germination will occur in about four to six weeks.

Growing Medium and How to Sow - Use a normal seed tray filled with moss peat and very gently firm ensuring the peat is not compacted. The seed should be sown on the top of the compost covered with a very fine layer of sieved peat, ensure the medium is damp by watering from the bottom by placing the tray on a gravel bed in a container with a layer of water to ensure the media is constantly moist and place the propagator in a light position (not direct sunlight), with the lid fitted and the vents shut.

Potting on – In late Spring the plants can be removed from the propagator and pricked out into individual pots, taking care not to damage the roots. Usually 4 or 5 seedlings can be repotted into a 75mm plastic plant pot using the same standard potting mixture or medium.

Division - As a plant becomes older and larger it will be noticed that it appears to have 2 or 3 centres from which the new traps are growing. At this point the plant can be lifted from the pot and the compost removed, it will be found the existing plant be easily divided into separate plants by easing the centres apart.

If the plants do not part easily then use a very sharp knife or similar to cut any joining tissue. The use of a blade ensures a clean joint that will tend to heal quicker and so reduce the risk of infection. Care should be taken to close as few traps as possible by accident when using this method.

Growing Medium – In the greenhouse, use a soil mix consisting of 3 parts of peat moss to one-part coarse sand. In a terrarium, at least 2.5cm of horticultural charcoal is needed to form a base, before adding the soil mix. If grown in containers, the container should be placed in a tray with at least 2.5 cm of water at all times.

Water must be distilled or rainwater because fly traps do not tolerate city or hard water. Do not fertilise or this will also damage the plants (if they live, they will not produce traps). During the winter months, they should be allowed to go dormant. Plants need to have winter temperature 5-10°C or the small bulbs should be lifted and stored in moist peat at a cooler temperature.