

Garden Clippings



Niagara College Greenhouse & Nursery Success Sheet No. 131

Asexual Propagation

Choosing Asexual Propagation

Asexual propagation is growing a plant without starting that plant from seed. A seedling is started from some form of existing plant material, known as a cutting. This method is quite often used commercially and can also be used in the home garden.

Asexual propagation is used for many reasons. Plants will develop more quickly and are often cheaper to start from cuttings. Unique plant characteristics can be passed down to new plants, often an impossibility when growing from seed. Propagating from seed may not be viable with some plants, such as seedless varieties.

Selecting a Type of Cutting

Main types of cuttings include stem-tip (terminal), stem-section, and leaf cuttings. Terminal cuttings are taken from the tip of the plant stem, are roughly 3 inches long and have leaves. The cut for a terminal cutting is made at a stem node (where a leaf joins the stem). This cutting generally develops faster than the other two and is the most common.

Stem-section cuttings are sections of the plant stem that contain at least one bud. The stem is planted, with the bud eventually developing into the new plant.

With leaf cuttings, a healthy leaf is used. One quarter of the leaf is removed, and the remainder is planted so that one third of the leaf is below the surface. Small plants should then develop from the leaf base.

Taking a Cutting

Using a sharp blade to make a clean cut will prevent injury to the parent plant and allow for a healthier cutting. A healthy parent plant will result in a stronger cutting.

Any flowers or flower buds should be removed from the cutting to focus all energy on root development. If desired, rooting hormones (generally available at local gardening stores) can be applied before planting to accelerate root development.

Planting a Cutting

Cuttings should be put into a growing medium that is sterile and capable of retaining moisture yet drains well enough to retain some oxygen for proper root development. Examples include soil, vermiculite, and a mixture of peat moss and perlite. The medium should be moist before cuttings are planted. If cuttings are being grown commercially, plant patents must be noted and heeded.

The soil must be kept moist, but new plants must not be drenched. Most cuttings do best with high humidity, indirect light and soil temperatures of 21° to 27° C. Ideally, this is done by keeping cuttings under glass or plastic in a partially shaded area.

Whatever method is chosen, asexual propagation can be a challenging yet rewarding experience.

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