How to Grow Glorious Gladiolus

Chapter Seven

GROWING GLADIOLUS FOR EXHIBITION

Occasionally someone will ask: What makes growing glads for exhibition so fascinating to you? It certainly is not a paying enterprise and it is difficult to understand how winning a Grand Champion Award can be so important. While this exact wording may not always be used, the meaning is the same.

Shows, whether horticultural, animals, fashion or whatever, can be much more than just participants showing off their products and skills. Much very valuable and important information, pertaining to the particular subjects on display, is made available to those who are alert, observing

and smart enough to take advantage of the opportunity. For example, just consider for a moment the amazing amount of brainpower, skill and experience that frequently assemble at a single gladiolus show.

Whether or not growing glads for exhibition is a paying proposition, depends to a great extent on one's point of view. For me, life would be dull and frequently discouraging if the only rewards were those shown in the plus column of a financial ledger.

If one's only incentive is the shows top award, the logical recourse would be to grow only the ten or twelve cultivars with the greatest Grand Championship potential. However, most exhibitors readily admit they grow **far too many** different cultivars. Why? It has been my very good fortune to know or have known many of the better gladiolus exhibitors in the United States and Canada. Although these growers have already established a reputation as consistent major award winners, still they are constantly seeking ways to improve the overall quality of their glads. They are always eager to discuss with others the pros and cons of various cultural practices, new cultivars, promising seedlings, or anything pertaining to gladiolus. It is not surprising they are successful with glads as they have also been successful in other fields of endeavor, so one might say it's their customary lifestyle.

What motivates these individuals? Pride and determination to grow and exhibit the very best gladiolus they possibly can. Shows are an important part of such an enterprise as they enable exhibitors to compare their own results to competitors' results. Gladiolus shows provided me the opportunity to become acquainted with this uniquely remarkable group of people. For this interesting and rewarding addition to my lifestyle, I will always be most grateful.

Very few backyard growers have a perfect location for growing gladiolus, so it is essential that one selects the planting site with the fewest undesirable features. This is not meant to give the impression that a perfect set up is absolutely necessary for success, but rather to suggest some alternatives. In fact, most exhibition growers have encountered various obstacles at one time or another but they did not give up. Instead, by combining common sense, ingenuity and the will to succeed, they either overcame or significantly relieved such problems.

Glads require plenty of sunlight (at least 75% of the available) and space. So growing them in shaded areas such as to close to buildings, trees, tall bushes and weeds tend to cramp their style. Not only will they grow too tall and spindly with more stalk and

foliage, and shorter smaller blooms, but lack of health can become a problem due to inadequate air circulation. While glads require plenty of moisture (especially during the month and a half prior to blooming) the excess must readily drain away. Like most garden plants, glads are adversely affected if the soil remains water logged for more than several days at a time. For this reason, it's an advantage if the planting location is on higher ground or slopes a little. While I would prefer an alternative, if one must plant a flat or low-lying area that drains poorly it may be wise to elevate the bed eight to ten inches by hauling in topsoil or removing soil from around the bed and placing it on the bed. Needless to say, this would be practical only on a very small planting area. Drainage can also be improved by adding coarse sands, organic matter, or both to your present soil. Some gardeners find it desirable to rent gardening space. Having followed this practice for almost forty years, I personally prefer renting for such reasons as: a more favorable location, better type soil, more opportunity for crop rotation, etc. Overall flexibility would probably best describe it. Of course, there are some drawbacks to renting, but as far as I am concerned, the advantages far outweigh the disadvantages. The fact that you are not close to a water supply and that you need to know what chemicals were previously used on this land, are two disadvantages that I can think of. Pre-emergence chemicals can carry over in the soil and hurt the next year's crop.

Frequently growers (especially the inexperienced or with limited experience) want to know the names of cultivars I recommend they grow. In a country with such varying growing conditions as the United States, an individual's selections may not always perform as well outside his local environment, thus giving a misleading impression. In other words, simply because a cultivar performs exceptionally well under some conditions is not a guarantee it will do the same under all conditions. Extreme variations have been experienced so frequently with other growers, as well as myself, that I suggest a different approach.

Each year the NAGC Bulletin (winter issue) gives the results of the current years Large and Small Flowered Gladiolus Symposium of exhibition cultivars. More than thirty growers from throughout the United States and Canada combine their wisdom and experience to provide this valuable information for your benefit. The Winter Bulletin also gives the results from a panel of twelve or more outstanding exhibition growers naming their Ten Best Bets for a Grand Champion (300-400-500 sizes). Ten Best Bets for Pixiola Champion (100-200 sizes) and Ten Best Bets for Recent Introduction Champion (R.I. period is five years including the year of introduction.) These exhibitors are also from throughout the United States and Canada. Finally, the Winter Bulletin gives the current years tabulation of winning gladiolus cultivars, i.e., Number of Major Awards, Grand Champions, Reserve Champions, etc., down through the blue ribbons won by the top one hundred cultivars. Needless to say, members of the North American Gladiolus Council are well advised as to cultivars with the most potential. While these cultivars have proven to be reliable in many different areas and under various growing conditions, still the best bet is to grow the cultivar yourself. A suggestion I will make, if your planting space is somewhat limited, concentrate on the Pixiola cultivars because up to three times as many plants can be grown in the space that would be required for the giant and large size cultivars. They are also much easier to handle as well as transport in newer downsized vehicles.

Success in growing glads for exhibition depends to a very large extent upon having

the best corms it is possible to obtain. By that I mean corms that perform the best under the growers particular conditions. Like gladiolus cultivars, various sizes of corms can perform differently when moved from one area to another. Older corms like jumbo and large sizes, frequently require a season to become acclimated. This can be especially true if you are purchasing corms from other Countries, such as Europe or Australia. Medium size corms are less affected by moving while small sizes and cormels may show very little if any effect. Begin by purchasing only from growers who have a reputation for high quality corms. Ask any of the exhibition growers who win consistently, as they know where the best stock can be obtained and are usually eager to pass on the information. Be especially wary of corms discarded by others and those from non experienced growers, in particular. Such stock frequently harbors insects and diseases which may be very difficult to get rid of.

Poor quality is never a bargain even if free as the price could be very high in the long run.

Obtain some corms of various sizes from two or three different sources. Keep a performance record and the source, number of corms of each size planted, number rogued out during the growing season and the number and quality of the corms harvested. It is also important to check how these corms performed the second year under your growing conditions. This simple experiment can help determine the best source, best size and the best cultivars to grow. Since weather conditions have such an impact on results, the same test should be run more than once. If disease problems are experienced, regardless of where the corms were obtained, a change of planting location would be a desirable alternative.

With so many factors involved, such as size of planting area, type of soil, equipment used, geographical location, etc., going into great detail on soil preparation and planting procedure could be more confusing than informative. Instead, I will comment on why I do certain things, thus, the readers can draw their own conclusions. It has been my experience that copying someone else's methods exactly seldom proves satisfactory, whereas working out one's own problems can be both gratifying and interesting. What I consider the most favorable locations for growing glads in this area have quite heavy clay soil over a gravel base. By applying organic matter and pulverized limestone if the pH tests below six, before plowing, along with the mulching material from the previous season, this soil can become a joy to work as well as very productive. Plowing is done, hopefully, about two or three weeks before planting time to a depth of a least twelve inches. The ground is left rough. No discing, as that only compacts the soil. Unless a soil test shows that either N-P-K is below a medium reading, no fertilizer will be applied. However, frequently potash is required and occasionally phosphate, but nitrogen is never added, in my planting. For me, no other cultural method has produced such high quality gladiolus as a medium fertility level combined with a high moisture level. However, do **not** be misled by this formula as clay soil with adequate organic matter retains nutrients exceptionally well, whereas these nutrients would rapidly leach out of light loam or sandy soils.

Immediately before the furrows are dug, fertilizer (if needed) is spread. Then the soil is rototilled to a depth of seven inches. The tilling not only makes furrowing easier, but also gets rid of weeds that have started. Spacing of furrows and corms in the furrow depends on the amount of planting space and the equipment used. The larger the plants the more growing space they require. For exhibition purposes, corms are planted six inches deep. Rows are spaced at least thirty inches apart and corms are spaced nine to twelve inches apart in the furrows. Corms used to produce exhibition spikes have more than one eye (sprout) but seldom will a corm perform to its maximum if more than one eye is allowed to grow. Check chapter four for de-eyeing procedure. The extra eyes can be cut out before planting by de-eying or sprouts broken off soon after they appear above ground. I prefer de-eying as it requires removing the husk, thus it enables me to detect and discard corms showing disease symptoms. When breaking off the extra sprouts, care must be used to avoid breaking the corm from the root system. Pixiolas seldom need to be de-eyed, but if more shoots than practical appear, break off the extras.

After plant growth is above ground, the cultural requirements are dictated by foliage development. At the third leaf stage, the flowerhead which was formed the previous season when the corm was maturing, now starts to develop. If growing conditions are favorable, the total number of buds will be maximum for the cultivar; large size cultivars nineteen to twenty-eight buds; miniature cultivars, fifteen to twenty-one buds. However if conditions are adverse, the bud count can be reduced by six or more. I use no chemical weed killer, as weeds are not a serious problem. Shallow cultivation on a bright sunny, breezy day will kill most weeds.

The use of insecticides and fungicides should be a preventive measure so it is important to begin at least as early as the third leaf stage. If insects or insect damage is visible, it may already be too late. For me, spraying will be much more effective if done in early morning or late evening when the foliage is damp. Continue throughout the season at eight to twelve day intervals or after a heavy rainfall. Alternate spraying with two different insecticides can prevent insects from building up a resistance to the spray material. Using a liquid insecticide after spikes appear avoids unsightly residue. Do not spray open or partly open florets with sprays that leave a residue and do not use spray concentrations stronger than recommended as this may cause foliage burn.

Watch closely during the growing season and pull out and destroy plants with off color, streaked or mottled foliage as well as plants lagging behind in growth. Likewise, destroy any plants that grow in a circle or have twisted or malformed features. These characteristics show disease is present that can be spread by insects to healthy plants.

At the fifth or sixth leaf stage at least four inches of soil will be ridged up around the plants and then a mulch is applied. I have been a strong advocate of mulching for well over thirty years, not just for glads, but for all garden plants. As an extra bonus, the value of the organic matter to our heavy clay soil cannot be over emphasized. As a soil conditioner, rotted leaves are unbeatable and they are free just for the hauling. As an extra bonus they contribute valuable trace nutritional elements to the soil. There are so many mulching materials to choose from that I consider the best one is the one which is cheapest and most readily available. If one's planting must depend entirely on Mother Nature for moisture, a mulch is really a necessity.

At the seventh leaf stage, the flowerhead will start upward within the plant and in fourteen to sixteen days will emerge above the foliage. Now the exhibition grower will stake and tie all promising looking spikes. Each day the ties will be carefully checked for stretch due to improper tie locations. Staking individual spikes will usually prevent flowerheads from breaking or strong, gusty wind causing spikes to damage one another, as well as maintain an upright position. When days are hot and nights cool, crooking can be a problem. Most crooks can be straightened if done carefully while the temperature is still high. Avoid doing it during the cool or early morning, as stems are then very brittle. Probably the most critical period is when the flowerhead has just emerged from the foliage. At this stage the stem on many cultivars may lengthen six to eight inches or more within twenty-four hours and be so flexible it is not self-supporting. Fastening one end of a plant tie to the stem at the base of the flowerhead (but not to the stake) and the other end to the stake at a point five or six inches above will usually prevent a bad crook or even a broken off flowerhead. Once this initial burst of growth is over the stem will firm up and can be fastened to the stake in the regular way. You may be amazed at the results a little practice and experimenting can produce. It also pays to be on the lookout for flowerheads that get stuck while not fully out of the foliage. Unless freed by hand within a short time, buds will be damaged or even broken off. This happens mostly in very dry weather when foliage tends to be stiff and dry.

While early morning is considered the best time for cutting glads, this is not always practical for many because of a work schedule. For this reason, I developed the habit of starting to cut about the time the sun is setting, and I still prefer this method. At this time of evening, temperatures are usually still quite warm and the chances of damage from handling is at a minimum. Not so in the early morning. With temperatures in the forty or fifty-degree range, which is not unusual for August in this area, spikes are so brittle and vulnerable to damage that the cutting operation takes much longer.

Another practice I have found very worthwhile is **selective propagation**. When cutting spikes I check each for desirable characteristics such as clean foliage, straightness and strength of stem and flowerhead, high bud count, reasonable number of well-formed florets open and proper facing and spacing of flowers. **Clear bright color** is essential, plus it usually indicates a healthy plant. I mark the plants that have the most of the special requirements and when digging keep these corms and cormels separate for special planting. By all means, be tough in your judgment. There will not be many of each cultivar that meets this *peak of perfection* standard, perhaps only one or two or even none at all. After all, the purpose is to propagate **only** the very best.

Since my method of transporting spikes to the shows requires they be rigid, soon after cutting each spike, it is fastened to a bamboo stake, then placed in a container of warm water, 110 degrees F, and stored in a cool place. If you have no refrigerating facilities, use your basement or garage, depending on which has the more suitable temperature.

Each exhibitor has their own method of transporting glads to a show. Some pack them with tender loving care, while others just throw them in the car trunk or on the back seat. Some are carried in containers with water and others are carried dry, depending on the exhibitor's preference. I carry the full opened spikes in the trunk, dry, by suspending them face down from one of the transverse rods that counter balance the trunk lid. Spikes that are not fully opened are carried in a container with water inside the car to take advantage of the sun and car heater if necessary. Three choice spikes will go into my cardboard *intensive care* box, because this box is practically draft proof. While drafts should be avoided at all times, severe damage can result if cut gladiolus are subjected to excessive air movement while in transit. Lack of headroom in a car can be overcome by tilting spikes face down, at a forty-five or fifty-degree angle. No problem with tips bending backward, as the unnatural backward curvature is easier to correct than the natural forward curvature.

Despite the mode of travel, one should arrive at the show location at least three to four hours before closing time for entries. Immediately upon arrival the flowers should be taken into the exhibition building and placed upright in containers of fresh cold water to become conditioned to the building temperature. After the exhibitor becomes familiar with the location of the various classes, the glads should be ready for setting up.

For many years there was a stigma attached to the practice of grooming a gladiolus spike for exhibition, yet at the same time exhibitors of other flowers, plants and even more so, animals, would use almost unbelievable means to improve the eye appeal of their exhibits. Thankfully the stigma has disappeared and instead, grooming is a plus factor on the Judging Standard. In fact, now exhibitors are requested to pay more attention to grooming as a means of improving the quality and appearance of the gladiolus exhibitions.

Soon after I began exhibiting glads, a wonderful friend, the late Clark Pickell, advised me that while everyone who grows gladiolus should be familiar with the values set forth on the judges' scoring sheets, it is extremely important that a hybridizer or exhibition grower thoroughly understand the entire judging and scoring process as well as the rules and regulations thereof. Although this advice was given many years ago, it is even more important for today's exhibitors because without such knowledge, grooming would be very difficult indeed. After all, grooming is simply a matter of adjusting certain features so a specimen will conform as nearly as possible to an approved standard. In this particular case, the North American Gladiolus Council's judging standard. In other words, exploit the plus factors while easing the impact of the minus factors. Except for choosing to grow certain cultivars that rate well for color value, beauty and appeal, floret form and substance, the grower has little control over the physical features of a specimen. However, the mechanical aspect is a different story, so this is the area in which the exhibitor can really use his skill, patience and ingenuity to pile up points.

Grooming begins early, even before planting. By removing the corms husk, disease symptoms may be exposed. After planting, make sure sprouts are not impeded or damaged by stones or hard packed soil. Always practice good weed and insect control. Remove side shoots but not the sheaths. Stake spikes to maintain upright growth as well as helping to prevent crooking. Before attempting to groom cut spikes (the same warning applies to spikes in the garden) be sure they are warm enough to be flexible, 72 degrees or higher. Frequently even a difficult crooking problem can be overcome by allowing the spike to wilt, then straighten by fastening to a stake. Place upright in a container of lukewarm water and store in a cool place to harden or condition. After grooming, study both the front and the back of the spike when reflected from a mirror. One's clothing can make a contrasting background. It's amazing the glaring faults you may have missed that this simple procedure can reveal.

Try to have show entries give a good first impression. Many a spike has been helped along toward the top by judges who were smitten at first sight. A plain petaled, weak colored cultivar with good facing, spacing and balance, should be groomed to perfection, although it may have a tendency to look artificial. On the other extreme, a cultivar that is big, bold colored and ragged, definitely isn't improved by trying to make it appear perfect. Groom to impress with its size, uniformity, physical stature and balance. Cultivars with outstanding beauty and color appeal should look neat, fresh and refined. Since no spike is perfect, a small defect may add warmth and character as well as overcoming an artificial look. In all cases, avoid excessive overlapping of petals by showing as much of each individual floret as possible without causing gaps in the spacing.

When a spike's taper suffers from midriff bulge, expanding the florets below and if necessary above the bulge with cotton wads can help. Before inserting the cotton, however, hold a narrow strip of paper or foliage in front of the reproductive organs as they can be easily broken. This procedure can really improve some of the 300 size cultivars that lack taper. Cotton wads are also used to shape florets, space florets and hold florets in the proper position, especially when transporting. Make sure all cotton as well as other props are removed before judging.

Many exhibitors hesitate to remove the bottom floret from a spike even though it is deteriorating, damaged, malformed, etc. In fact, some judges are very critical of this practice and penalize accordingly. However, the NAGC score sheet lists a one point penalty for the removal of the bottom floret, whereas if not removed, it could be penalized up to ten points, depending on how seriously it affected the spike's overall appearance. This would show that both the exhibitor and the show would profit by the removal. It is possible that there are instances where some gladiolus society rules and regulations differ from those of the NAGC. Therefore, I strongly recommend you know the rules of the show you plan to exhibit. Grooming requires extreme care and good judgment, so all but the final touches should be done at home. Last minute rushing at the show site may do more harm than good.

Exhibiting is an important part of the gladiolus business. If you are not already an exhibitor, you may be losing out on a rewarding experience. Most shows allow the new exhibitor to compete in novice or amateur classes, rather than against experienced exhibitors.

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