COMMON SENSE VS. TRADITION IN ORCHID CULTURE

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Orchid culture more than any other field in horticulture today is hamstrung by tradition. Almost all the literature in the field is based on old European traditional methods composed, in great part at least, of little more than "old wives tales."

The English were the first to really work in the field of orchid culture and great credit is due them for their pioneering in bringing plants from the wild and learning how to cultivate them in such a different climate. They eventually developed a set of rules to fit their conditions. Unfortunately, however, these rules were not general rules of why orchids should be grown under certain conditions. They were merely rules of how to grow orchids in their own limited climate. Ever since then European growers have been trained under these rules which they learned by rote, not by reason.

When these growers were imported to the United States they knew the business by rote. They knew how to apply and use certain methods but they were not interested in why. After all, there were certain traditional ways to grow orchids and those were the only ways.

From this attitude the orchid industry in the United States inherited a set of "closed-mind" rules. This was a deplorable situation. After all, as in other fields of horticulture, conditions for growing orchids vary from one locale to another and the same methods are not valid under all conditions. When faced with varying conditions for the culture of a plant there are two alternatives:

1. — adjust methods to fit conditions
2. — adjust conditions to fit methods

The traditional answer to this is to make the conditions conform to the methods. Doing this is, in effect, a matter of seeking the "lowest common denominator" and the result is very likely to be something less than optimum. It means that no matter where one grows orchids and no matter what conditions may exist there, for conformity's sake, all conditions must be reduced to the level of European conditions which are hardly optimum for tropical orchids by any standards. Most climatic conditions in our country are naturally superior for Cattleya culture to English conditions, for example. This is primarily so in the matter of sunlight and day length. Many American growers, however, being well indoctrinated in traditional methods, refuse to realize and capitalize on this. Tradition says that European methods are best, therefore United States growers must blindfold their natural conditions to meet the generally lower level of the European climate — then the "tried and true" traditional methods can be applied.

Some years ago most fields of horticulture were faced with much the same problem. Modern scientific methods applied to horticulture have done and are doing much to clear up these situations. Competition opens up the field for these better methods — forces traditional habits and methods out and allows room for scientific development. To make any real advances, however, there must be a certain amount of cooperation among the members of a field.

The orchid business has had little of this so far. The field was not really competitive until after World War II. Until then, for all intents and purposes, the business was a monopoly controlled by relatively few growers. One company produced 70% of the flowers sold in the United States. These growers had the public convinced that no one but a trained and properly anointed member of the group could grow orchids. Little or no truly scientific work was done except on seed germination. Growers were jealous of each other — would not cooperate and tried to keep so called "cultural secrets" to themselves. Most of these growers were trained with "grandfather's" methods and had no training, knowledge or even respect for scientific methods. The old ways worked, so why bother with other ways that seemed radical. Surprisingly enough they got along quite well as long as the field was small.
Since World War II, however, competition has grown until today the orchid business is very competitive. In these inflationary times the orchid business as a whole is in a deflationary cycle. Prices have steadily declined in the past five to seven years. Your orchid dollar will actually buy much more today than it would in 1946. Under these conditions, methods must change. Suddenly it is important to develop better methods — to learn to do the job of growing better and faster, and to produce more, and more quickly.

Unfortunately few growers are equipped either psychologically or scientifically to do this. Traditions, like habits, are hard to break but it must be done. Now is the time for a common sense revival in orchid culture. Methods worked out hit or miss in Europe 100 years ago are no longer good enough. Many growers realize this fact today. More are coming to the realization everyday. The Renaissance is coming. It has started in many places. In Hawaii, California, and here in Florida the movement seems to be strongest.

Traditional cultural methods limit the growth and productivity of orchids to a great extent. The plants do not grow as well or produce nearly as freely as they do in the wild. Obviously the fault lies in the conditions supplied by the cultural methods. A brief look at natural conditions confirms this. Almost all orchids receive a great deal more sun in nature than they do under artificially supplied growing conditions. The day length, too, is usually considerably longer during the winter months under natural conditions in the tropics and sub-tropics than it is in the temperate zones where most orchid culture takes place. In the wild the plants have a lot of food available to them, but under cultivation they are grown in osmunda which is relatively low in food value and the traditionalist says that orchids do not need, and indeed cannot stand, fertilizer in any form.

These are only a few of the differences between traditional cultural methods and the natural conditions under which the plants originally developed their growth habits. Is it any wonder that the plants do not respond as well under cultivation as they do in nature?

In England, for example, the climate dictates these substandard growing conditions to a great degree. They just don't have enough light in the winter months and in the summer can't give as much light as they do have because of the chance of too great and rapid change, resulting in sunburn. Also because of the relationship between amount of light available and the amount of food the plant can use, it is doubtful if the plants, under such conditions, need any more food than they get from the osmunda.

In this country, however, even in most of the northern states we do have much brighter weather in the winter months than in England. This being the case the plants could be given more light and therefore actually would need more food. Here in Florida, in Hawaii, and to some extent in California and the Gulf States, we have sub-tropical climates very similar to those natural to most commonly grown types of orchids. Therefore, under these conditions there is no valid reason why very nearly natural climatic conditions cannot be supplied to the orchids. The habits and dictates of tradition, however, oppose this use of our resources and many, if not most, growers continue to grow their orchids under conditions and methods optimum and indeed advisable only in England.

A little common sense, a little logical or scientific thought on the matter would clear up the whole situation but the habits and old wives tales of traditional orchid lore are so strong that they confuse the minds and close the eyes of almost all indoctrinated growers.

One example — greenhouses are traditionally built with a very steep slope to the roofs. It takes a great deal of glass to cover this slope. If the roofs were built with just enough slope to run water off when it rains, an additional bench could be added in the floor space gained by flattening out the roof and at little extra expense to the builder. In cold climates there is a good reason for this steep slope. It is done so that the snow will slide off, but here in Florida do people stop and realize that this is the reason? It doesn't appear that they do.

There are many such situations throughout orchid culture, situations dictated by tradition even though the reasons for these situations no longer exist. Common sense, an inquiring mind and an intelligent and logical approach to the matter can and must open the way for many and great horticultural advances in the field.
Much is already being done along these lines. In Hawaii, California, and Florida many types of orchids are being grown now in more natural conditions than ever before. Many orchids which until now were considered greenhouse plants are at present being cultivated out-of-doors. Some types are even grown as field crops. Many other types are now grown in lathhouses or under shade trees in gardens. In areas where cold weather is little or no problem, greenhouses are being replaced by lathouses and for more exact control of watering, lathouses are being equipped with glass tops in order to run off rainfall.

Lathouses are becoming quite popular in Hawaii and Florida because they have an open, fresh, well ventilated atmosphere, much more like natural conditions than the stuffy, closed conditions of a greenhouse. Greenhouses in climates like ours can be a definite liability. They incline to heat up excessively under the tropical sun and to counteract this they must be heavily shaded. The floor must be damped down often in order to build up humidity which also helps cool down the house. Unfortunately, however, this extra shading and increased humidity is not beneficial to the plants as it results in tall soft growth which is shy to flower and very subject to fungal and bacterial diseases.

Another branch of orchid culture is also receiving a great deal of attention these days. In Hawaii and here in Florida a great deal of experimental work has been done on hydroponic feeding of orchids. This feeding is done not by growing plants in beds as with most hydroponic systems but merely by watering the plants in their individual pots with a mixture of fertilizer in the water.

All of these advances in the culture of orchids have shown real results and growers are beginning to see the light. In general, these advances have resulted in larger, stronger, and heavier growth—growth that is made more quickly and more often and this in turn results in more flowers, both in number of blooms per growth and in number of growths per year. Also by supplying these better conditions growers have been able to cut down the length of growing time needed to mature seedlings. Under traditional methods it takes seven to eight years to bloom a seedling. Many growers here in Florida are now blooming Cattleya seedlings in five to six years. Down at the “Orchid Jungle” we are averaging somewhere between four and four and one-half years from seed to first bloom on Cattleyas and every year or so we manage to cut this by a few more days or weeks.

All of these deviations from the traditional methods are merely the result of the application of common sense. Anyone can do as well if they have the strength to question tradition and make a break from it, if potentially better methods show up.

Somehow though, it seems to be particularly hard to make this break, and those that do, find it a hard row to hoe because traditionalists boo and scoff at every turn. The trend is definitely started, however, and snowballing as it goes. It won’t be long, I’m sure, until the common sense approach will overshadow traditional methods. When this happens, the orchid business will really come into its own — a golden era for sure, when every gardener and housewife grows orchids as casually as they do roses, hibiscus and African violets today.

WHAT GRASS TO PLANT WHERE

ROY A. BAIR
Belle Glade

In this Atomic Age of scientific marvels the man in the street has become confused by the procession of miracles coming from the physicist, the chemist, and the plant breeder.

Sales resistance is abdicated in favor of gullibility provided only that the new, harmless cigarette, or the vitamin complex for rejuvenating aged bodies, or the perfect lawn grass variety is offered with appropriate ballyhoo as being the product of brilliant, exhaustive, and extensive scientific endeavor.

This pathetic faith in miracles makes it easy for rascals to sell “the perfect lawn grass” which of course does not exist and probably cannot, for several reasons which will be noted in the discussion of the several lawn varieties.