



Urban Harvest

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Success with Vegetables Requires Timing

Bob Randall

Gardeners are fond of dichotomies: plants are tender or they are hardy; are sun-lovers or shade-lovers; are native or exotic; deer susceptible or deer resistant; food plants or ornamentals, and so forth. But no dichotomy is more important perhaps than that between perennials and annuals.

Perennials must survive here for many years, so good gardeners search out species and cultivars survive here a decade or more. These native and adapted trees and non-woody perennials appreciate or at least tolerate our heat and winter cold, can stand our wet and dry spells, don't mind our soil or our occasional high winds, and still produce what we want: shade or fruit or flowers or all of them.

Annuals by contrast germinate, grow, produce and die in just a few months so they need to prosper over a much shorter time. So generally speaking, it is much less crucial to search out best varieties of annuals because if planted at the right time most of them will live the required 90 days. Annuals of course vary tremendously in quality, and even their humidity and pest adaptation to our area, but the fact is that annual gardeners can frequently succeed without knowing what is best, while perennial gardeners will have nothing but misery if they just purchase the first perennial they see on sale.

Almost all vegetables are annuals. There are some perennial vegetables: globe artichokes, asparagus, rhubarb, sunchoke, sweet potato spinach, taro, and yuca (tapioca root) are a few. The first three are usually unproductive here, but could be tried north of Conroe. The others survive in the warmest parts of the area but are knocked back by our winters.

Temperatures & Vegetables

By contrast, there are probably 15,000 varieties of annual vegetables you can grow here and nearly all of them will produce if you plant them at the right time. The right time is when soil and air temperatures are right for growth and will be for the 2-6 months the plant will live. As well, for some plants, it is important that air temperatures be right for pollination to occur; for others, day length must be correct along with correct temperatures.

Different vegetables originated in particular world biological regions (or biomes), and they generally grow best in those conditions. In many respects, successful vegetable gardening here hinges on our understanding of these diverse heritages. Gardeners need to plant tropical vegetables and annual fruits here when it will be hot for the lifetime of the plant—so okra, sweet potatoes, southern peas, butter peas, long beans, eggplant, basil, tropical gourds, cucumbers, squashes, watermelon and cantaloupe all get planted as soon in the spring as they will grow.

The last four of these will grow in warm soil and air, so they are typically planted here as seeds, sprouts or indoor-grown transplants in late March to April. That way they will be large productive plants by the time in late June, we have the longest days of tropical sun.

Warm Weather Veggies

Vegetables from warm (but not hot) summer conditions by contrast, need to grow and produce during the relatively brief periods of spring and fall when our high temperature is between 65-85° and our lows are above 55°. In the spring, Intercontinental Airport highs average above 65° after February 5, but nighttime lows do not get to 55° until April 1 when highs are about 76°. They get above 85° on May 16 when lows are 66°. So plants like green beans should be planted in March.

Sweet corn, for example, must have low temperatures above 59° and high temperatures above 66° to flourish. As well, it needs temperatures below 95° to pollinate. Since many of the best types of corn take nearly three months to produce, it is really important to get corn planted between mid-March and early April if you live inside the loop where summer temperatures are hotter than outside the belt.

If not destroyed by disease, in the right climate (not here!), tomatoes and peppers are long-lived plants. It is not uncommon in the warmest parts of our area to have them over-winter and even produce a second year or more. However, they do not grow in cool or cold weather, die at temperatures just below freezing, and pollinate their flowers only when both days and nights are warm, although chiles will often pollinate in very hot weather.

Tomato blossoms fall off when nighttime temperatures are over 76° and many will not tolerate more than 70° at night nor lower than 55°. Sweet peppers can pollinate as low as 64°. By the same token, tomatoes will not fruit once temperatures get above 85-90°, and most sweet peppers stop pollinating when temperatures are above 82°.

Tomatoes and peppers need six weeks of warm days to grow to transplant stage and another six to get to flowering stage. Temperatures are right for this to happen by April 1, with occasional good growing conditions before this in March, so plants covered with flowers about March 15 will usually produce the most fruit. To have this, in-door grown transplants need to be set out in the second or third weeks of February and then protected well from nighttime cold. Of course, if you live in a much colder part of the area, such as Conroe, you need to plant a few weeks later.

How to keep plants warm at night would be another article, but to keep the plant warm and growing, most people use some combination of a tomato cage, clear plastic, and sometimes inside the plastic: water in an unbreakable container. The best device for this purpose is the very long-lasting (and costly) Aqua Dome sold in online. Whatever vegetables you plant, pay attention to the weather and you will eat much better in the months ahead.

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2311 Canal Street, Suite 200, Houston, Texas 77003, 713.880.5540, urbanharvest.org