

Jeff Edwards

The strawberry in Wyoming is the first fruit of spring, often eagerly anticipated and can be quite appealing to grow in your garden. However, strawberry production for the home gardener and commercial producer can be a challenge here.

Before we get into some of these challenges, let's first look at the characteristics that distinguish the different varieties of strawberries.

Native to North America, the **June-bearing strawberry** is day-length sensitive and will produce one large crop with the harvest season usually lasting about 10 days. Depending on the cultivar, harvest can begin as

early as late May or end by mid-July. Some producers choose to plant a variety of early, mid- or late-season June-bearing cultivars, which extends a normal 10-day season to approximately eight weeks. June-bearing cultivars can be runner prolific and take over a garden in just a couple of seasons and must be managed to no more than six plants per square foot, otherwise, berry size and overall production will be reduced.

Also native to North America, **ever-bearing strawberries** produce two or three main crops each year in late spring and summer and again in the fall. Ever-bearing varieties tend to produce low fruit yields, making them less valuable to commercial growers.

The third type of strawberry is considered native but was bred to produce flowers and fruit from

summer continuously through fall. **Day-neutral strawberry** cultivars were developed from ever-bearing strawberry varieties at the University of California in the 1960s. If the temperature gets above 90 F, day-neutral strawberries stop producing until the weather cools.

The distinction between ever-bearing and day-neutral strawberries is a little fuzzy. Day-neutral strawberries are ever-bearing, but not all ever-bearing strawberries are day-neutral. Both day-neutral and ever-bearing strawberry varieties don't produce many runners. In the home garden, the compact growth habit makes ever-bearing and day-neutral varieties ideal for borders, terraced beds, hanging planters and above-ground containers, and as a ground cover. The few runners these varieties do produce can be used to propagate new plants.

There are numerous reputable internet resources available concerning the production of each of these types



Weather,
eager bugs confront

STRAWBERRY

of berries with key words “strawberry production guide”; however, let’s look at some of the challenges in Wyoming that can devastate strawberry production.

Frost Damage

Frost damage is the number-one challenge. June-bearing strawberries develop flower buds in the fall, and these buds will be ready to greet the spring, sometimes opening in late March, which can be a problem in Wyoming. Even those varieties that do not blossom until mid-May can be affected by frost. Try not to remove bedding straw from the berries until late April. This will keep these berries somewhat dormant and protect them from frost.

What does frost damage look like? It is called “black heart,” and the yellow composite portion of the flower will turn black after a frost. These flowers will abort, and no fruit will be produced. You may not even know this has happened. Subsequent flowers may not be damaged and still produce fruit on the plant. Each plant should be able to produce 1 to 1.5 pounds of fruit. The other thing to note about strawberries is the first fruit to develop will be the largest ... unfortunately, these are usually

Strawberry production for the home gardener and commercial producer can be a challenge in Wyoming.

the ones frosted. Search internet key words “strawberry flower damage.” Some of this damage can be alleviated by choosing June-bearing cultivars, which are mid- to late-season producers (this also means later blooming time and can avoid our late frosts).

Hail

Enough said. Hail and fruit just don’t mix. Damage by hail can be minimal such as holes in leaves and knocking some of the fruit off the plant, or it can be devastating and mow the plants off with no fruit for the entire season (I have experienced both).

Drought

If berries do not receive enough water, particularly when they are setting fruit, berries will be small and

hard, which is very disappointing. Strawberries will need up to 2 inches of water per week while setting fruit.

Fertilization

Do not fertilize berries when they are setting fruit. The fruit will be soft and/or mushy. Fertilize according to the production guides – usually in the fall.

Disease

Fortunately, Wyoming’s lack of humidity is also not conducive to the development of strawberry diseases; however, watering practices can create disease issues. Try not to water the leaf surface – use drip or flood irrigation. Do not water into the evening, which allows leaves to remain moist overnight.

Slugs

Yes we have them. Again, they like moist leaf surfaces and can skeletonize leaves in strawberry gardens – they usually feed at night and hide in leaf litter during the day, so you may not be able to see them. They can also feed on the berries, usually under the cap, and leave behind slime trails that are not very appetizing. Controls can include postponing fall mulching as long as possible – usually the week of Thanksgiving is appropriate. Shallow dishes of beer are recommended, but that seems like a

RRYGROWERS

trying to get fruit to maturity



waste of beer to me as this method usually does not eliminate enough slugs to significantly reduce the damage to the fruit. There are pesticides available (called molluskicides), usually in bait form but must be applied so they do not contact the plant.

Weeds

Strawberries do not compete well with weeds, particularly with spreading, grassy weeds. Several methods are available to control weeds; pulling and hoeing are most prudent and cost-effective. There are pesticides labeled for use in strawberry production that will eliminate grass weeds. Also, strawberries are tolerant to the original 2,4-D formulation (known as

Formula 40). This formulation can be key in a broadleaf weed control program in larger scale plantings. It is still available, but finding a supplier is difficult.

Insects

There are not many insect pests of strawberries in Wyoming; however, the number-one pest of concern will be the spotted wing drosophila (SWD), and it can be devastating. The best way to avoid SWD in strawberry production is by planting June-bearing varieties. Since there is only one crop and it occurs early in the season, this pest is generally not around in large numbers and should not cause problems.

Although SWD prefers raspberries, it will attack all fruit. It can become a significant problem in the later crops of ever-bearing and day neutral varieties. Damaged fruit will have brownish grey spots. SWD is a fly, and the fruit will have maggots in it. See "Insect pest new to Wyoming infests soft fruit crops" at bit.ly/spot-tedwing. The only method for managing these flies involves scouting for the pest and making timely applications of insecticides.

In general, strawberries are a wonderful gift of spring and can be very rewarding to grow. Just be aware there are many potential issues with growing soft fruit in Wyoming.

*Can you tell **Jeff Edwards** has battled the adversaries of strawberries in Wyoming? Edwards is the University of Wyoming Extension pesticide applicator training coordinator. He can be reached at (307) 837-2000 or jedward4@uwyo.edu.*