

Disaster Relief

Recovering Small Fruits

Storms damage small fruits in different ways, depending on how the crop grows and how near the storm hits to the crop. Wind and excessive water are the most common factors, but others, such as hail, can also cause significant damage.

Here are some suggestions for evaluating damage and making repairs:

- Where wind damage is heavy, prune as lightly as possible. If large areas of cambium are exposed, the plant may not survive without close attention. Make clean cuts to minimize the exposed cambium area and speed up the healing process. If the plant can be saved, several growing seasons may be needed to retrain it.
- Leaning, lodged, or uprooted plants can be reset if the root ball is intact. Once the plants are reset, secure them with stakes to immobilize them.
- Reshape altered dikes, terraces, or raised planting beds to protect the area; cover exposed roots with a medium to encourage new root growth. Use the smallest equipment possible to reduce compaction and minimize further root damage.
- Most strawberry plants will need to be replanted in plasticulture plantings. The cost of replanting is fairly small compared to irrigation, plastic mulch, and fumigation.

Premature defoliation caused by heavy wind weakens fruit plants. Defoliation, along with root damage, causes additional stress because the root system stores carbohydrates created by the leaves. This supplies energy.

Without it, the plants may appear saved in the short run, only to be killed in winter when cold temperatures or other stress factors are present.

Once the top damage has been pruned out and after the first freeze, apply nitrogen in a complete fertilizer at the rate of 30 pounds actual N per acre. This helps the plant start new root growth, which continues in winter as long as the soil temperature is above 45°F.

Soil concentrations of 3,000 ppm soluble salt make fruit culture very difficult. Some fruits tolerate salt better than others. Blueberries, strawberries, and blackberries are more sensitive to elevated salt concentrations than grapes, figs, pomegranates, and pecans.

If the soil salt concentration is high, irrigate frequently to help reduce the buildup of salt after evaporation. Test all irrigation water for salinity. If irrigation ponds have been contaminated, pump them out and refill with clean river or well water. Rainfall helps flush the soil.

If the sodium content is 250 ppm or more, internal drainage problems will occur. You can correct this to some extent by using gypsum as a soil additive. Apply gypsum at the rate of 2 ounces per square foot of area ($\frac{2}{3}$ tons per acre) and immediately irrigate to move the material into the soil profile.

Recovering storm-damaged small fruit plants demands attention and care. The process may take multiple years before the plant can be considered salvaged.

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