



Manage Fruit Crop Pests and Diseases

Learn how to manage fruit crop pests and diseases. You can balance the need to meet consumers' desire for attractive, organic fruits and use as few poisons as possible.

Rootstocks and Propagation

Fruit trees grown from seed produce inferior fruits and are best used as rootstocks for grafting.

Such rootstocks will produce full-size trees, which may not be desirable since such trees may be too big to prune, pick or spray.

For example, standard pear trees can grow from 25 to 40 feet tall.

Determining Size

This is the reason that stems (called scions) cut from fruit tree cultivars with desirable fruit characteristics are grafted onto rootstocks that will determine the tree's size.

Fruit trees on dwarf rootstocks mature at eight to 10 feet tall;

Semidwarf rootstocks mature at 12 to 18 feet. (Although dwarf trees can grow in more shallow soils than semidwarf and standard trees, they require much more pruning and training, and are hard to mow under.)

The life span of a semidwarf tree is 25 to 30 years; a full-sized tree's life span is 140 years.

Rootstocks also affect: Yield Years to bearing How well the tree will withstand drought, waterlogging, cold, disease and other adverse conditions.

Grafting to Propagate

Grafting is the best way to propagate most fruit trees.

Using this method, you can quickly start large numbers of trees of the same cultivar.

Grafting techniques take time to master and are best learned by working alongside an experienced tutor.

Although there are a number of different grafting methods to choose from, all of them bind two regions of actively dividing cells together as one.

Many detailed texts are available on specific techniques for different species.

-- Emily Goodman

Top No discussion of growing fruits can avoid mentioning pests and diseases.

These are a fact of life for fruit growers, and coping with them is of utmost importance if you wish to sell your produce.

You must strike a balance between: Controlling problems sufficiently to meet consumers' cosmetic requirements for fruits, and

Using as few poisons as possible to minimize ecological damage and meet consumers' desire for "natural" or organic produce.

Plant Choices and Care Matter

Head-off some problems before they start by planting disease- and pest-resistant cultivars of fruit plants wherever possible.

In some cases, native American plants are better adapted to local environments than Asian or European species.



Growing Techniques

Then, follow growing techniques that minimize problems: Maximize air circulation and sunlight for each plant.

Water and prune correctly.

Don't fertilize after midsummer because this will encourage tender new growth late in the year, when the plant is most vulnerable to winter damage and other problems after that.

Planting large numbers of the same plant in one place makes it easier for the insects and animals that eat them to have their fill, so interspersing different species can help control problems.

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When you encounter an insect or animal pest, try to minimize its damage with traps, barriers, and other physical deterrents so you don't have to utilize poisons.

For example ...

Birds adore mulberries, so planting mulberry trees can distract them from eating your other fruit crops--a win-win solution for everybody.

Encourage beneficial insects by planting the small-flowered, herbal plants they use as food and shelter near your fruit plants.

Use traps and sticky barriers to catch insects before they reach your fruit.

Pesticides?

Pesticides should be your last resort. They kill beneficial insects as readily as pests and can harm animals and humans also.

Organic pesticides, which are made from botanical or biological compounds, such as chemicals found in some plants, are just as toxic as synthetically derived chemicals, although they usually break down faster after use.

They are not harmless and must be used with appropriate care. Start lower on the poison chain with soap spray or baking soda compounds you can make yourself and work up. Aim to spray as little as possible throughout the year.

Try also to educate your customers. If people understood the chemical price they were paying for "perfect" fruit, they might learn to tolerate produce that looks different, but that's healthier, less polluting and often better tasting.

-- Lorraine Anderson

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This article contains excerpts from "The Art of Fruit Trees" by Lorraine Anderson and "Twisting Tradition in the Orchard" by Emily Goodman. Read the full articles in Popular Farming Series: Orchard, a publication with in-depth information for those who grow or would like to grow orchard crops. Buy one online or call (800) PET-BOOK (738-2665).