

## SOIL PRACTICES FOR ORCHARDISTS<sup>1</sup>

### Soil

Fruit trees will grow and produce on a broad range of soil types. The best tree longevity and yields occur on loamy, well-drained soil of at least 4 feet depth to bedrock or to a restrictive layer or horizon. Stony or gravelly soils are often preferred.

Good internal drainage is essential in order to give root systems plenty of air. Do not plant trees on sites where water stands for more than an hour following a heavy rain. If a hardpan or poorly drained clay layer is present, poor root development and eventual failure of the planting are likely to result. Sweet cherries and peaches are particularly sensitive to "wet feet".

Trees grown on thin, rocky or sandy soils require more attention and care than trees on deeper soils. On light sandy soils, water and nutrient deficiencies can occur frequently; however, such conditions are rare in West Virginia. On thin rocky soils, root penetration is limited which may cause poor anchorage; hence, some type of tree support may become necessary.

A choice of soil types usually is not available to the homeowner. Where soil is unsuited to tree fruit production, the site should be avoided or else it must be improved prior to planting.

### Soil Preparation

Preparation of the soil where fruit trees are to be planted should be as thorough as preparation of the soil for a vegetable garden. Take advantage of the soil testing service available through your local office of the WVU Cooperative Extension Service, and apply lime and fertilizer. Incorporation of organic matter is also desirable and will improve the planting site. If you plant in an existing grassland or lawn, spade up the areas to be planted and work in these amendments. Remember that you won't have the opportunity to adjust the pH and fertility of the subsoil for at least another 25 years. Modern commercial growers often use tissue or foliar samples as an indication of adequate nutrient uptake. Your County Agent has information on the types and costs of such analyses.

### Care of Orchard Floor

Permanent sod is widely used in home fruit plantings. It is attractive, easy to maintain and is a very good system as long as the grass is kept short by frequent mowing so that it does not compete too strongly with the trees for

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1. These suggestions were adapted by *Wan Eck* from the 1987 WVU Extension Service Bulletin publication "Home Orchard Management" by Tara Auxt Baugher, Henry W. Hogmire, Jr., John F. Baniecki and Morris Ingle and from review notes of Richard Zimmerman. All of them are available for further consultation (293-3408 or 267-4712).

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