Virginia Cut Holly Production: Orchard Layout and Planting

430-467

Bonnie L. Appleton, Extension Specialist; Ann D. Spivey, Graduate Student; and Susan C. French, Extension Technician; Hampton Roads Agricultural Research and Extension Center

If you decide to grow either evergreen or deciduous hollies and have selected a location, plan the physical layout of your orchard. After designing the layout and prior to purchasing plants, prepare your land by plowing/disking, incorporating recommended fertilizers, applying herbicides and/or establishing an alternative ground cover.

Layout Requirements

- Locate your holly orchard for easy access for monitoring, maintenance and harvest. Consider existing and additional roads needed.
- Allocate space for a shed or building for supply storage, equipment and post-harvest packing. A refrigeration unit or large cooler may be needed for short term storage of holly sprays.
- Whenever possible, locate near a water source (pond, stream, well) for irrigation. Access to electricity may also be necessary.
- Block evergreen species/cultivars together, and deciduous species/cultivars together, for pollination, pest control and pruning. (See VCE Publication 430-468 on holly pollination.)
- Plant spacing depends on several factors including species growth rate (height and spread), pollination distances, and equipment access for mowing, spraying and harvesting. In general, allow 20 feet on center for evergreen hollies, 10-15 feet on center for deciduous hollies.
- Make access roads between rows wide enough for maintenance and harvest equipment (trucks, tractors, mowers, etc). Also consider including roads for fire breaks.

Planting Block Directions

The most accurate way to lay out an orchard is with a surveyor's transit and compass. The next best way is to prepare a cord or rope with markers (e.g. colored tape) every 15-20 feet depending on plant/row spacing. DO NOT USE NYLON CORD - it has too much "give."

Lay out the long outside row first, marking where each holly will go with flags or stakes. Then lay out the short rows at right angles to the long row. Consider leaving the stakes or flags in place for a year or two to held locate plants when mowing, fertilizing or spraying.

Selecting Soils and Planting

Most species of evergreen hollies prefer a light soil (clay loam) with good drainage. Deciduous hollies will grow well in that same soil, plus in heavier, less well-drained soil (clayey).

If you have heavy clay soil, either relocate your evergreen hollies or improve drainage by
incorporating organic matter, making raised planting rows, or mechanically draining your field.

Use the following planting procedure:

- Dig a hole twice the diameter of the root spread or container width, and only as deep as the root ball height (Figure 1).
- Slope the planting hole sides to make the hole wider at the top. Roughen the hole sides if they glaze due to soil clays or use of an auger.
- If container-grown, remove container before planting. Place the holly in the hole and partially backfill with existing, unamended soil. Firm the soil by watering, then finish backfilling and water again.
- Apply 2-3 inches of mulch (coarse pine bark, straw or leaves) to conserve soil moisture and moderate soil temperatures. Cover the entire hole with mulch but do not place mulch against plant stems or trunks.
- If animal browsing may be a problem, consider surrounding each plant with a protective guard or caging (Figure 2).

Deciduous hollies can be planted in both spring and fall. Be sure that spring-planted hollies can be watered during the summer if dry weather follows planting. For fall planting, plant in October or November before the ground freezes.

For evergreen hollies, late winter and early spring (February/March) planting will help reduce winterburn problems the first year. As above, be prepared to supply water if the first summer is dry.

Figure 1. Dig a wide, shallow planting hole. Be sure to remove the container.
Watering

Young plants require at least one inch of water, from rainfall or irrigation, per week during the growing season. Withhold water in late summer (Aug./Sept.) to aid in inducing dormancy. Resume watering in the fall (Oct./Nov.) if the soil is dry, so that adequate moisture is available during the winter.

Evergreen hollies may "winterburn" (have dried leaf margins) if frozen ground in the winter prevents water uptake on sunny, windy days. It may be beneficial to apply an antidesiccant/antitranspirant during the winter.

Fertilization

If a soil test recommends P or K addition, or lime or sulfur for pH adjustment, incorporate these materials preplant.

Yearly applications of a slow-release nitrogen fertilizer will help root growth and foliage production. Do not exceed 1#-2# actual N/1000 sq. ft. of surface area. Surface broadcast fertilizer prior to rain, or apply, then irrigate.

Figure 2. A guard protecting a young holly plant.