CENTER FOR AGRICULTURE

Bird Protection for Blueberries and Other Fruit

Exclusion of birds using protective netting is the most effective way to prevent bird damage. Putting netting over mature plants is difficult and this activity could even challenge the patience of Job. This fact sheet describes a method of supporting and applying netting on blueberries that is successful and relatively easy. I'll also relate two other methods of deterring bird damage that have surfaced recently.

Net Frame

Blueberries frequently grow 6 feet tall or taller, thus the structure should be high enough to accommodate these tall plants and allow easy walking under the netting while harvesting fruit. I suggest purchasing 9 to 10 foot, 4 X 4 inch pressure treated posts and setting them in the ground at least 2 1/2 feet. This depth is appropriate for strength and to reduce heaving during the winter. Recommended spacing between posts is 15 to 18 feet. Figure 1 illustrates post spacing in my 18 X 36 foot blueberry planting. The tops of a 2 liter plastic beverage container should be cut off and then placed over each post. This will protect the netting from the rough surface on the top and edges of the posts. Wire is strung from post to post and it is also crossed in the center. I use synthetic and flexible grape trellis wire (Amberg's Nursery, Stanley, NY) but #11 or #12 galvanized wire will also work. Four pieces of wire are cut and strung to the corner posts.

Each length of wire should be long enough to span the distance between the posts plus about 8 feet on either end. Likewise two pieces of wire are cut to crisscross the planting (Figure 1). All wire is placed on top of the posts and then secured loosely with fence post staples, allowing for free and easy movement of all wires. One or two bricks are tied or secured on the end of each wire so that they hang about 1 foot from the ground. This arrangement assures that the wires will always be taught, regardless of the temperature. Wires and bricks are part of the permanent structure of the structure.

Installation of the wire over the blueberries is relatively easy. The netting is unrolled near the planting. I usually gather it so that the width is no more than 3 feet. The gathered net is then pulled up on the wires going over the post and pulled the length of the planting as indicated by the arrows (Figure 1). The net is then squared and spread out over the wire and posts and then allowed to drop down on all sides. Particularly cunning and avaricious birds will tunnel under the netting if it is not secured. I use pieces of fire wood to secure the edges from these aggressive birds.

Grape Kool-Aid

A product right off the grocery shelf can be used to deter birds. Grape-flavored Kool-Aid contains a grape compound called methyl anthranilate. The compound has a flavor that is very distasteful to birds. To repel birds in blueberries, cherries and grapes, mix 4 packets of grape Kool-Aid in one gallon of water and spray the plant and the fruit when the fruit begin to color and attract birds. Several applications during the season may be necessary. This product is also sold a "Re-Jex-It" as a bird repellant. This is an effective approach, but if bird pressure is great, combination with another method is recommended.

Spray Plants with Table Sugar

Birds can easily digest the simple monosaccharide sugars found in fruit such as glucose and fructose but many birds lack the enzymes necessary to digest disaccharides such as sucrose (table sugar). Recent work done at Cornell University has found that spraying plants with a sucrose solution significantly reduced bird damage on blueberries. Researchers dissolved 5 pounds of sugar in 2 quarts of water. Heating the water initially was necessary to dissolve all of the sugar. This provided 1 gallon of spray solution. This was then sprayed on blueberry plants when the blueberries started to ripen. It was necessary to reapply the solution after a rain.

Methyl anthranilate and sucrose are effective deterrents. However, it is recommended that better control can be achieve in years when bird pressure is high by combining these with scare devices such as terror eye balloons.

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