

# Commercial Strawberry Project for 4-H Club Members

By W. W. MAGILL

THE OBJECT of this project is to produce strawberries for sale, from a patch  $\frac{1}{8}$  to  $\frac{1}{2}$  acre in size. Strawberries grown in Kentucky have a ready market, and usually bring 8 to 10 times as much income per acre as corn. The strawberry project is not only profitable, but it is one in which a club member can do practically all the labor required on the project except usually some help in picking the berries.

This leaflet attempts to answer the questions which will arise in connection with this project. The club member and local leader should read and discuss the questions and answers in the leaflet. A sheet for keeping records on the project will be supplied by the county agent.

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**UNIVERSITY OF KENTUCKY**  
College of Agriculture and Home Economics  
Agricultural Extension Division

Thomas P. Cooper, Dean and Director

**Why plant strawberries?** They are generally liked; are easy and inexpensive to grow; will yield well on any type of good cropland; are the earliest fruit to ripen; seldom fail to bear, and any surplus above family needs can be sold readily at good prices.

**What is the best variety for Kentucky?** Blakemore.

**Is the Blakemore a good berry for eating fresh, preserving, jam, ice cream, and freezing?** Yes, it is a good all-round berry and yields well.

**Are everbearing varieties successful in Kentucky?** No.

**Where should I get the plants?** From a neighbor's berry patch or from a plant nursery.

**What should I do if the plants arrive during a wet season?** Keep the plants in a cool place until ready to set, but do not water. Better still, unpack the plants, cut the strings around the bunches of plants, and trench the plants out in open ground.

**When should I set out the plants?** Late March or early April, or the same time you plant early potatoes, onions, or lettuce.

**Where should strawberries be planted?** In the garden, on new ground, or on any fertile land used last year to produce a cultivated crop.

**How should I prepare the land for strawberries?** The same as for a garden.

**What is the best planting distance?** Rows 4 feet apart, with plants 3 feet apart in the row. This will require about 500 plants for  $\frac{1}{8}$  acre, or 2,000 plants for  $\frac{1}{2}$  acre.

**How deep should strawberry plants be set?** About the same depth as when they are growing in the matted row. Take care not to get the bud below ground level.

**Where do strawberries fit best in a Kentucky crop rotation?** Following tobacco.

**How about turning a sod field for strawberries?** Injury by cutworms and grubs is likely to follow.

**Do ants injure strawberries?** No, but the aphids or plant lice they carry to the roots of the berry plants injure the plants. Ants are often found around berry plants, especially where berries follow corn. Where ants are present you will find aphids (plant lice) on the berry roots.

**Does it pay to fertilize strawberries?** Yes. It usually pays as well or better than with any other crop raised in Kentucky.

**What kind of fertilizer and how much per acre?** The general fertility of your land determines how much fertilizer is needed for a good crop of strawberries. Land that will grow a ton of tobacco per acre will likely grow a good crop of strawberries, without fertilizer. On average land, strawberries especially need phos-

phate. A complete fertilizer (4-12-6, for example) broadcast or drilled at the rate of 1,000 pounds per acre in the first growing year, and 1,000 pounds per acre applied in the following January or February, broadcast on top of the mulch, should give a good yield.

**What method is best for applying fertilizer on strawberries?** Just like successful farmers in your neighborhood use in applying fertilizer to tobacco or truck crops.

**Will the plants bear fruit the same spring they are set out?** It is best not to let them bear during the spring you set the patch. Keep the blossoms pinched off. This will cause the plants to develop earlier runners.

**When and how should I cultivate strawberries?** Use shallow cultivation at week or ten day intervals, starting in late April and continuing until September. For cultivating between the rows use a tobacco cultivator (double-shovel, rastus) or a 1-horse spike tooth harrow. A hoe must be used for keeping weeds, especially crabgrass, out of the berry row. Covering the tips of the new runners with the cultivator or with the hoe also helps in developing a matted row during June, July, and August.

**How wide should the matted row be?** From 14 inches to 2 feet.

**When do Blakemore strawberries get ripe in Kentucky?** Late April and May.

**How long does harvest last?** Usually 10 to 25 days.

**How often should the berries be picked?** It depends on the weather —if cool, every other day; if hot, every day.

**What kind of package is used for marketing strawberries?** The berries are picked directly into quart-size wood-veneer baskets, or cups, and 24 of the quart cups are packed into standard ventilated crates. Where the berries are sold locally, the grower usually gets the empty crates back so they can be used again.

**Where can I buy the crates and cups?** Through your marketing association.

**How full should the berry cups be filled?** Mound up the cups from  $\frac{1}{2}$  to  $\frac{3}{4}$  inches so the cup will be full after it sets over night.

**How will the annual strawberry crop be sold?** Through cooperative strawberry marketing associations already in operation and through local sales.

**Should strawberries be graded before being sold?** Yes. Grade them either while picking them or immediately afterwards.

**What causes catface or dwarf tips on the berries?** The chief causes are light frosts during bloom and lack of phosphate fertilizer.

**What is a U. S. No. 1 strawberry?** A berry that is red, including the tip; clean, but not soft, moldy, or overripe; over  $\frac{5}{8}$  inch (the size of a one-cent coin); not blemished; calyx attached.

**Suppose I don't grade the berries?** Just like ungraded tobacco, the lot will sell at the price of the lowest grade in the basket.

**What is a fair selling price for strawberries?** During the past 25 years the price has varied from \$1.25 to \$15.00 per 24-quart crate. One of the cooperative berry associations in Kentucky during the 20-year period from 1922 to 1942 averaged \$3.25 per 24-quart crate.

**What is considered a good yield per acre?** Fifty crates is a poor yield; 100 crates is a good yield. Yields of 200 crates per acre are not uncommon.

**Is a mulch advisable, and when should it be applied?** Yes; it should be applied in early December.

**What material can be used for a mulch?** Straw (wheat, oats or rye) that is free of cheat and small grain. Broom sedge cut in July and kept in shocks makes an excellent mulch.

**Should leaves of trees be used for mulch?** No, because they tend to pack tight and smother the plants.

**How much mulch per acre?** One ton per acre (2 inches thick) scattered over the whole area.

**Suppose I don't mulch?** Should the temperature reach zero, with no snow on the ground and no mulch applied, your yield will likely be cut 40 crates per acre, and if the temperature should go to 10 below zero the yield would probably be cut 90 crates per acre. Such temperatures in December, January, or February kill the embryonic flower clusters in the crown of the plant unless the plant is protected by mulch or snow. A berry plant with the blossom bud killed is likely to develop many young runners by harvest time.

**Can the plants be protected if late frosts threaten?** Yes, by raking the mulch from the middles back over the rows when the plants are in bloom and frost seems likely.

**What other advantages do we get from mulch?** It keeps the berries clean, helps keep down weed growth, and holds moisture for the harvest season.

**What should I do with the patch after picking?** Immediately mow the patch. Rake the tops and mulch, and pile in shocks at the edge of the patch. Plow the original row to about 12 to 14 inches. Then thoroughly cultivate the middles through June and July. The patch should be profitable through second and third picking season.