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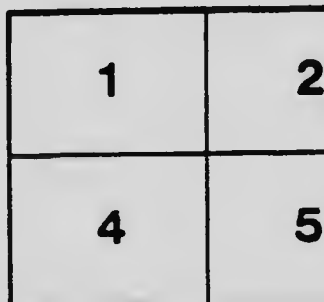
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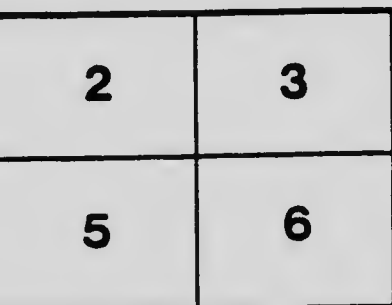
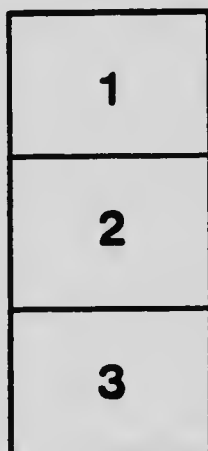
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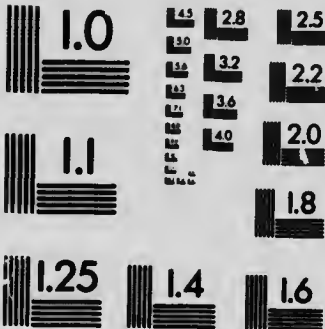
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# THE CULTIVATION OF SMALL FRUITS

BY

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## STRAWBERRIES.

Strawberries require a moist, rich, rather light and loamy soil to produce best results. The land should be in good condition and free from weeds. A heavy application of manure should be worked into the soil at time of planting, using well rotted manure, at the rate of 30 to 40 tons per acre. If impossible to obtain barnyard manure, turn under a crop of clover and use a fertilizer composed of 200 to 300 pounds muriate of potash (or 25 to 45 bushels of wood ashes), 200 to 300 pounds of either ground bone or acid phosphate, and about 75 to 100 pounds of nitrate of soda. Apply this broadcast at time of planting. Set the plants in rows 3 to 3½ feet apart and 18 inches apart in the rows, care being taken to see that the crowns are not set either too deep or too shallow. The crown (the place where root and stem are differentiated) should be level with the surface of the soil. Planting is done preferably on a cloudy day, and the young plants should not be allowed to become dry at any time.

In selecting runners for propagation, select good-sized, healthy plants in preference to small ones.

After planting, give the plantation a thorough cultivation with a fine-tooth cultivator. Continue cultivations at intervals of two weeks through the season and after each heavy rain.

The blossoms should be kept picked off the first season and the ground kept free from weeds. A few trips through the patch to place the runners properly should also be made. Thorough cultivation, weeding and attention to runners constitute the season's care.

After the ground is well frozen in late fall, a winter protection of straw, coarse marsh hay or litter should be placed on the plantation, covering the plants to a very slight depth. A light coat that will not lie heavily is all that is required. (See Cut 2.) This covering should be removed in early spring after the severe frosts are over. It may be removed to allow of cultivation at first and then replaced between the rows to make a mat for the fruit to lie on.

For best results only one crop should be taken from the plantation, although under most satisfactory management and conditions more crops may be profitably obtained.

### VARIETIES RECOMMENDED.

*Early.*—Bederwood, per., Splendid, per.

*Medium Early.*—Grenville imp., Pocomoke, per., Senator Dunlap, per., Williams, per.

*Medium to Late.*—Parson Beauty, per., Buster, imp., Sample, imp., Glen Mary, per.

*For the Prairie Provinces.*—Senator Dunlap, per., Bederwood, per., Crescent, imp., Lovett, per., Enhance, per., and Pocomoke, per.

When selecting varieties of strawberries for planting, be sure that at least one of the varieties to be planted is a *perfect* variety, and lay out the plantation in such a manner that every third row will be a *perfect variety*. Many failures in strawberry growing are due to the neglect of this.

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## DOMINION EXPERIMENTAL FARMS.

J. H. GRISDALE, B.Agr.,

Director.

W. T. MACOUN,

Dominion Horticulturist.

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## FALL-BEARING VARIETIES.

As the fall-bearing varieties do not runner much, they should be put 1 foot apart in the rows and rows not farther than 3 feet apart. If planted very early in the spring, a crop may be obtained the following fall without injury to the following year's crop. In this respect they differ quite markedly from other strawberries. The "Progressive" has proved the best variety at the Central Experimental Farm. "Americus" is also a good variety.

## RASPBERRIES.

Raspberries do best in a cool, moist and loamy soil. The soil must, however, have good drainage and not be waterlogged.

Raspberries are divided into two classes as to propagation, viz.: suckering varieties and tip varieties. The suckering class includes most of our best-known commercial varieties. These are propagated from the suckers or shoots thrown up by the mother plant. These suckers are best lifted when one year old and may be planted in their permanent positions in the spring or fall, making the fall planting during early September. At the time of transplanting cut back the suckers to about 6 inches from the ground.

The tip class, or Black Cup Raspberries, are propagated by the bending over of the tip of the cane to the ground where it takes root. The canes may be bent over and held in position by covering the tips with soil. The rooted tips, after being severed, should be planted not more than two or three inches deep.

Suckering and tip varieties should be planted in rows 6 feet apart with the plants 3 feet apart in the rows, and practise clean cultivation throughout the season. In the Prairie Provinces, where it is necessary to completely cover the canes with earth, plant in rows 8 feet apart.

As soon as the Black Cup varieties have attained a height of 2½ or 3 feet pinch off the tips. This causes a more stocky growth of the cane. Old wood canes should be removed as soon as the fruiting season is over, or early in the spring.

In the colder parts of the country the canes will require winter protection. This is accomplished by bending down the canes in fall and placing a few shovels of earth on them to keep them in position until covered by snow. In the Prairie Provinces, however, it will be necessary to cover the canes completely with earth. If it is not desired to cover the canes, they should be pinched back when about 2 feet high, so that they will not grow too tall and will be partly covered by snow during the winter. Tall canes may require some trellis or support, which is cheaply made of wire supported on cross-bars attached to posts at intervals of about 10 feet.

To grow a crop of raspberries successfully a rich soil is needed. A heavy application of manure is the best fertilizer to use, and should be applied once every years, in most cases.

### VARIETIES RECOMMENDED.

*Red, Early.*—King.

*Main Crop.*—Herbert for all districts, and Cuthbert for shipping and the more favoured districts.

*Extra Late.*—St. Regis Everbearing.

*Yellow.*—Golden Queen.

*Purple.*—Columbian, Shaffer.

*Black Caps.*—Hilborn, Older, Gregg.

*For the Prairie Provinces.*—(Red) King, Loudon, Turner, Sunbeam, (Purple) Columbian, (Black) Older.

## CURRENTS.

Like most other fruits, currants require a rich soil which should be cool and moist. In a hot, dry soil they will not succeed very well. At time of planting, unless the soil is rich, give a good application of manure, which should be well worked into the soil.

The best time to plant currants is in the fall of the year, as it is difficult to get them in the ground early enough in spring-time. Plant six by five feet apart and be sure that the plants are set deep enough and the earth well tramped around the young roots. Immediately after planting, cultivate the soil to form a light mulch on top. Cultivation will be necessary throughout the summer, giving enough cultivation to maintain a light mulch on the soil all through the season.

When the plantation comes into bearing, dressings of manure will be necessary, varying from once a year to once every other year. It is seldom that the soil for currants is kept too rich.

The pruning treatment for black currants and red currants differs somewhat. The black currant produces its crop of fruit on wood of the *previous* season's growth, while the red and the white currants produce their fruit on wood that is two years old or more. In the case of black currants then it is necessary to leave a liberal supply of one-year old wood, while the older growths may be removed. With red or white currants, however, only wood that is over three years of age should be removed, leaving all the one- two- and three-year wood to bear fruit.

Currants are readily propagated by cuttings. For this purpose well ripened, new shoots are used. They should be cut early in the autumn and may be planted immediately, using cuttings of 8 to 10 inches in length, with a square cut at the bottom just below a good bud, and with at least a half inch of wood beyond the top bud. If impossible to plant in the autumn, they may be carried through the winter by tying them in bundles and burying them upside down in light, well-drained soil. Five or six inches of soil will be required to cover the cuttings if heeled in outside over winter. If kept indoors, place in a cool cellar and bury in moist sand. When planting, put in nursery rows, with rows 3 feet apart and plants 6 inches apart in the rows. Plant in a deep trench so that most of the cutting is below the ground, leaving only the two top buds, at most, showing. These cuttings should be sufficiently rooted by the end of the first season, so that they may be lifted and planted in permanent positions. If cuttings are planted in the autumn in a wet climate, it is well to cover the rows with a few inches of soil, which should be raked off in early spring.

#### VARIETIES RECOMMENDED.

*Red.*—Red Dutch, Greenfield, London Red, Red Grape, Perfection in favoured districts.

*White.*—White Cherry.

*Black.*—Boskoop Giant, Victoria Black, Black Chamaelon.

*For the Prairie Provinces.*—Red.—Raby Castle, Stewards, Red Dutch.

*White.*—White Grape, White Dutch.

*Black.*—Beauty, Naples, Lee's Prolific, Saunders, Victoria.

#### BLACKBERRIES.

The blackberry is not what may be termed a hardy fruit, hence is not recommended for commercial planting in any but the mild districts.

Choose a soil which is retentive of moisture and not too rich in nitrogenous-material. Good clay loam is excellent in most cases and an application of well rotted manure will, usually, be found beneficial at the start.

Plant blackberries in the spring, as early as it is possible to properly work the land into condition. Set in rows 8 feet apart with bushes 3 feet apart in the rows. Constant and thorough cultivation will be necessary throughout the first season. When the plants have attained two feet in height they should be pinched back which will cause them to throw out laterals instead of growing to too great a height. In the autumn all canes but three or four of the strongest should be cut out.

During the second season pinch back all new shoots as soon as they reach two feet in height. This will require several trips through the plantation. This year five or six of the strongest canes may be left, removing all others. The removal of all canes that have borne fruit and also all but five or six of the strongest new ones will constitute the annual pruning after the second year. This is best done in early autumn. The laterals are cut back in the spring, the amount of heading back depending upon



the habit of the variety being grown, as some varieties bear blossoms farther out than others. In most cases not more than two feet of lateral is left.

Some sort of winter protection is generally advisable in severe climates. This is accomplished, as in raspberries, by bending down the tips and covering them with soil to keep them in position until the snows have covered completely the recumbent canes.

Blackberries are propagated by suckers, the same as raspberries. They may also be propagated more rapidly by division of the roots, the root being cut into pieces about three inches in length in the fall or in the spring. These cuttings should be planted to a depth of about three inches in nursery rows, and at the end of one season will have grown sufficiently for transplanting.

#### VARIETIES RECOMMENDED.

Agawam, Snyder, Eldorado.

#### DEWBERRY.

The dewberry is really a trailing blackberry and is handled much the same as the true blackberry. The dewberry is either tied to stakes 4 feet apart each way and 3 or 4 feet high, or trained to a trellis in rows 6 feet apart, with plants 3 feet apart in the rows.

In pruning dewberries it is only necessary to prune back the canes in spring if they are too long, and thin out to four or five good strong canes for each hill.

Propagation is carried on by the tips of the new growth falling to the ground and taking root.

#### VARIETIES RECOMMENDED.

Lucretia and Mayes (Austen Improved).

Blackberries and Dewberries are not recommended for the Prairie Provinces.

#### GOOSEBERRIES.

Gooseberries will not succeed in a dry soil; they require a cool, moist soil, preferably a heavy clay loam which is well drained. Like other bush fruits they require a soil with plenty of available plant food, which is best supplied by applications of well rotted barnyard manure.

Planting is preferable in the autumn, say about September. Place in rows 6 feet apart with the plants 4 feet apart in the rows. Shallow, but frequent and thorough, cultivation will be necessary during the summer months to retain the soil moisture.

Pruning is best done in the autumn and all wood over three years old should be removed, together with some of the younger wood. The amount of younger wood removed will depend upon the growth of new wood made by the bushes. Cut off at the ground all weak young shoots and any stray ones that are not required for fruiting. A moderately open head is best, and to maintain such it will be necessary to head or cut back the side shoots, and in many cases to totally remove them, but care should be taken to see that sufficient foliage-bearing wood is left on the top to shade the fruit in hot weather.

Gooseberries are best propagated by layering, although cuttings may be used. For layering purposes the bushes should be severely pruned in the autumn to induce a vigorous wood growth the following season. After the bushes have about completed their new growth, say from the first to the middle of July, earth should be heaped around the bush to be layered, making sure that the earth is also distributed through the bush. This is heaped up until only the tips of the young shoots show, after which it is tamped down, and then covered with a mulch of loose earth to prevent rapid drying out of the mound. By autumn most varieties of American gooseberries will have rooted, but the English varieties require two years to complete the operation. As soon as the shoots have rooted the soil is removed and the rooted shoots severed from the parent bush and planted.

#### VARIETIES RECOMMENDED.

Pearl, Downing, Josselyn, (Red Jacket).

*For the Prairie Provinces.*—Houghton.



