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PRUNING BLACK RASPBERRIES

The black raspberry always produces fruit buds in great numbers, flowers freely and "sets" a large percentage of the blossoms. The plant shown in Figure 1, a vigorous specimen, has ten canes, each of which averages at least 175 live fruit buds after allowance is made, for some dying back of the laterals during the winter. This means a total of 1,750 fruit buds. If every one of these buds should grow and produce a fruiting lateral with ten to fifteen flowers and fruits apiece, the plant would be forced to support 15,000 to 25,000 berries. Assuming five hundred to the pound, this would mean a total production of thirty-five to fifty-two pounds.

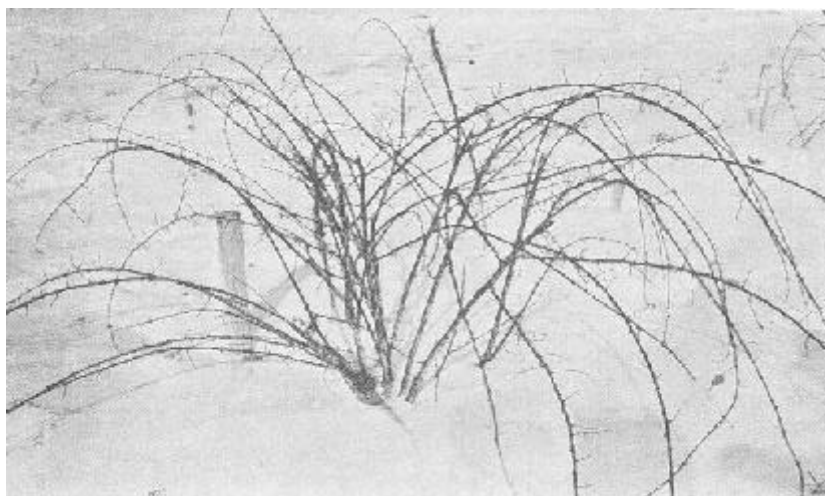


Fig. 1-A vigorous black raspberry plant before pruning.

No grower needs to be told that black raspberries do not bear that way. Actually, many of the fruit buds fail to grow, others start and then abort, some flowers do not "set," many that do set fail to ripen fruit and finally many berries are so small that it takes more than five hundred of them to make a pound. This much is clear, however, the plant naturally produces far more fruit buds than it needs and many can be pruned away without danger of reducing materially the size of the crop.

In a general way these facts are recognized by the grower and he prunes,

his plants, not with any intention of reducing his total crop, but with the idea of securing fewer berries of larger size and better grade. Figure 2 pictures the plant shown in Figure 1 pruned about as the average grower would treat such a plant. Six of the ten canes have been left, the six strongest, and their laterals have been shortened back to a length of twelve to eighteen inches.



Fig. 2-The plant shown in Fig. 1, after pruning of the kind usually afforded the black raspberry. This is not severe enough to secure the best results. Compare with Fig. 3.



Fig. 3-The plant shown in Figures 1 and 2, after being properly pruned. This looks like a severe treatment but it results in much better size of berry without reducing total yield.

Each one of these canes now possesses about a hundred fruit buds. Figuring their possible production in the same way as before, the plant theoretically could bring to maturity from 6,000 to 9,000 berries, or a total of twelve to eighteen pounds. However, growers know that these amounts are far in excess of what any raspberry plant actually produces.

Figure 3 shows still another view of the plant pictured in Figures 1 and 2. It still has six canes, but their laterals have been shortened back to four or five inches in length and the total number of fruit buds for the plant has been reduced to about 200. Calculating production as before, this is enough for a three to five-pound yield. Here again, however, actual production, seldom equals theoretical yield, because some fruit buds fail to grow and accidents of one kind or another overtake some of the others.

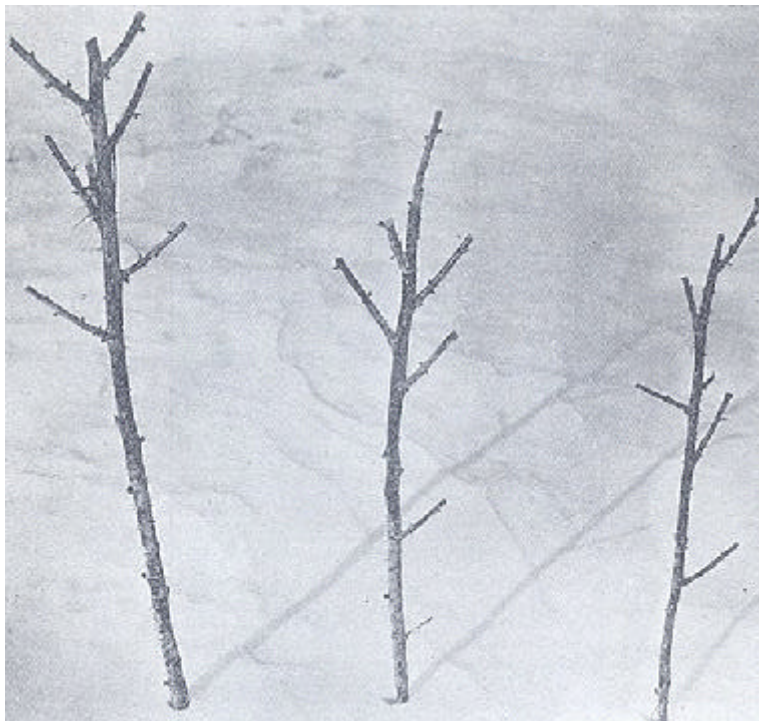


Fig. 4.-Good, medium and poor fruiting canes . The cane at the left is three quarters of an inch in diameter at the base, has seven laterals, carries 66 buds and may be expected to produce about a pound and a quarter of fruit; the middle cane is a half inch in diameter at the base, has six laterals, carries 44 buds and may be expected to produce about three-quarters of a pound of fruit; the cane at the right is three-eighths of an inch in diameter, has five laterals, carries 32 buds and may be expected to produce about a quarter of a pound of fruit.

However, two to three, even four pounds are likely to be harvested from a vigorous plant pruned in this way and for the most part they will be fine, large high quality berries, fruit that will bring top prices, on the market.

Experimental studies at the South Haven Experiment Station show clearly that the black raspberry should be pruned much more severely than has been the custom in commercial plantations in the past.

This pruning, however, should take the form of heading back the main canes and their laterals and should not remove either canes or laterals except those that are weak and slender. Good pruning is illustrated in Figure 3. This type of pruning is attended by greatly improved grade or quality, without a reduction in total yield. Figure 5 shows the head of a strong well pruned cane.

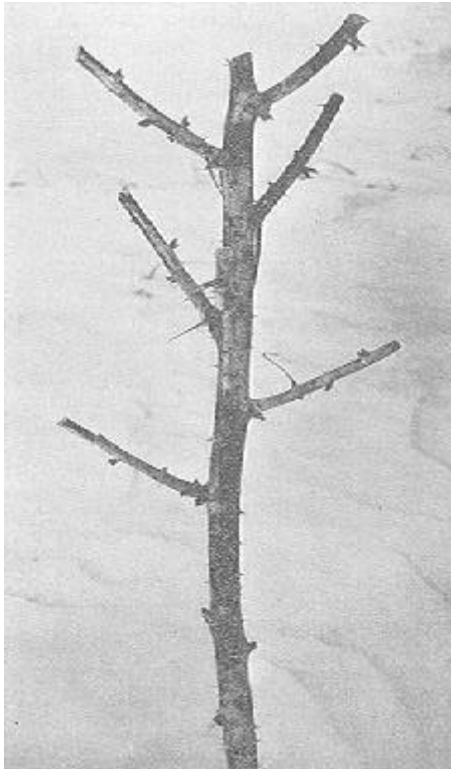


Fig. 5-The head of a vigorous black raspberry cane properly pruned.

The legend explaining Figure 4 brings out the advantage of vigorous canes over those that are weak. It should serve to emphasize the importance of after-harvest care of the raspberry plantation, for late summer growing conditions largely determine the relative amount of cane growth.

This bulletin presents in more condensed form the more important points covered in detail in Special Bulletin No. 143 of the Michigan Agricultural Experiment Station. A copy may be had upon request.
