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Repelling Birds Using Monofilament Line

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Birds can be pests in gardens and orchards and the damage from their feeding can be significant in terms of crop loss. Unfortunately, many of the methods used to repel birds can be relatively costly and inconvenient, and their effectiveness varies.

Exclusion, taste aversion and visual or auditory repellents have met with some degree of success in reducing bird depredations, but these methods may not always be practical. Barriers such as netting or other materials are sometimes used to cover crops but this can be expensive and harvesting is difficult without removing the netting. Scare devices or taste repellents may work for short periods but birds that have become accustomed to feeding on a crop are difficult to deter. Research has not proven sonic and sonar devices to be effective.

A new method of bird control using monofilament fishing line is inexpensive, easy to apply and highly successful. Monofilament line placed near crops repels birds.

The actual reason that monofilament line repels birds is not clear. It has been speculated that because monofilament line seems to appear and disappear, birds are repelled by the uncertainty of whether a barrier exists or not. Perhaps the fear of becoming entangled is part of the deterrent. The monofilament line does not pose a physical barrier to the birds and the lines are spaced far enough apart that the birds could easily pass between strands.

This monofilament line method is relatively new and has not been fully tested. Recommendations about optimum size monofilament line and optimum line spacing are still being developed. The technique works best on sparrows, but fails to repel robins and starlings, at least in New Mexico and Nebraska studies.

Row Crops

Most damage to garden row crops occurs as seedlings first emerge. To protect newly planted crops, suspend monofilament line directly above the row as soon as the seedlings emerge from the ground. Anchor it at each end of the row, and as the plants grow, gradually pull the stakes at the ends of the row out of the ground to keep the monofilament about 1 inch directly above the seedlings. (Figure 1)

Agriculture

Fruit Trees

To prevent tangling that would occur if the monofilament were placed directly on the branches of fruit trees, attach the line to the top of a pole placed in the center and extending about 2 feet above the top of the fruit tree. Run the monofilament line from the top of the pole to the



Figure 1. Row crops



Figure 2. Fruit trees

ground. Spacing at the ground is approximately 2 feet. Stake the monofilament to the ground. This forms a tepee over the fruit tree. If branches protrude beyond the monofilament line, outside the tepee, this will not pose a problem. The birds are usually repelled about 1 foot from the monofilament line. (Figure 2)

Bedded Crops

For bedded crops such as strawberries, suspend the monofilament lines 2 inches above the vegetation at 12-inch intervals over the entire bed. This allows berries to be harvested as they ripen, and still provides sufficient concentration of the monofilament line to repel birds that might be feeding on the berries. (Figure 3)

Bushes

For crops such as blueberries and raspberries use a combination of poles, as used to protect fruit, and 12 inch spaced lines as used to protect bedded crops.

Conclusion

It should be emphasized that this method is relatively new and there are many variables that have not yet been addressed. Normally, 20-pound test line is most suitable because it provides an acceptable degree of strength and visibility necessary for this method to be effective. Sunlight will damage the monofilament line over a long summer and it should be replaced each year. Normally wind damage will not harm the line unless the crops being protected are allowed to abrade the line.

Monofilament fishing line is available at most sporting goods stores and can be bought in bulk from several mail order sporting goods companies. As field tests progress, the methodology for using monofilament to protect crops from birds will be improved.



Figure 3. Bedded crops

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