

Development of repellents using non-preferred plants

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Abstract

We have wanted to make deer repellents with natural components to prevent damage caused by deer. We tried to make different repellents using plants that deer avoid. This experiment showed that it was the most effective to use Angel's Trumpets.

1 Introduction

As the deer population increases, damage caused by deer is also increasing. Deer repellents are being sold, but most of them included chemicals that affect the environment. As a result, making long lasting repellents using non-preferred plants of deer was attempted.

2 Theory and Experiment

Diluted extracts of toxic plants [Daffodil (*Narcissus tazetta*), red spider lily (*Lycoris radiata*), Long headed poppy (*Papaver dubium*)] and strongly fragrant plants [Marigold (*Tagetes*), Creeping Thyme (*Thymus serpyllum*)] lemon were sprayed onto violas at different concentration and combinations to determine an effective repellent.at a ratio of 2:1, sprayed onto viola plants.

3 Results

Overall, all samples suffered feeding damage from deer. Angel's trumpet exhibited repellent effects regardless of plant part. Additionally, repellent effects were observed in mixtures containing daffodil or red spider lily extracts. However, sample efficiency was reduced by rain in all samples.

4 Conclusion

The mixture of angel's trumpet with either daffodil or red spider lily exhibited the highest repellent effect; however, the effect could not be sustained for more than one week. Due to rain.

5 References

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