

# CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J1627** 

# **Project Title**

# Which Pest Resistant Plant Can Best Protect Adjacent Pansies from Garden Snails?

# **Objectives/Goals**

# **Abstract**

The objective of my project was to determine which plant that produces pesticidal compounds would best protect adjacent pansies from garden snails. I believe that the pyrethrum plant (part of the chrysanthemum family) will best protect adjacent pansies from garden snails.

#### Methods/Materials

Five Plants were identified to produce pesticidal compounds and resist garden snails.

 Pyrethrum  Chives  Lavender  Rosemary  Peppermint

We purchased 35 pansies - one pansy for each pest resistant plant in the EXPERIMENTAL group (25) plus ten pansies for the CONTROL group (group was without any pest resistant plants to protect them). To attract snails we poured beer into a pie tin and let it sit over night in the morning we collect the snails and placed there in the them in the center of each flat (there was a total of 6 flats) 2 snails for each flat. Only 12 snails were needed in this process left over snails were placed in aquarium for the next trial. In total there were 6 trial and 72 snails.

#### **Results**

After twelve weeks, the 25 pansies in the EXPERIMENTAL group were observed and the results were recorded. In the pyrethrum/pansy flat, 4 of the 5 pansies (80%) had no snail damage. In the chive/pansy flat, 3 of the 5 pansy plants (60%) showed no snail damage. Of the 5 pansies adjacent to lavender plants, only one (20%) had no snail damages. In the rosemary/pansy flat, only 1 of the 5 pansy plants was undamaged (20%). None of pansies (0%) adjacent to peppermint plants were left undamaged (all 5 had notable snail damage).

## **Conclusions/Discussion**

The hypothesis was correct. Of the five plants that produce pesticidal compounds, all of the pansy plants planted with pyrethrum plants were expected to survive the 12-week period without damage from garden snails. Overall, the pansies in the pyrethrum flat did very well; 4 of the 5 plants lived. One of the pansies was slightly damaged by snails.

## **Summary Statement**

Which plant that produces pesticidal compounds can best protect adjacent pansies from garden snails?

## **Help Received**

UCSD Master gardeners for plant advice. My parents proofing my report and helping me get the information I needed.