

A Survey of Nectar Glands and Nectar Guides in Chile Pepper Flowers

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Introduction

- New Mexico's chile industry = \$60 million at harvest
- Chile is the biggest cash crop to NM.
- Chile is a cultural icon to NM.

- Nectar glands are important to chiles because it attracts pollinators like bees to help pollinate the flower, thus more pods of chile.
- A plant flower provides nectar glands for itself to attract bees to pollinate them

- What are nectar guides



- What are nectar glands



Flowers with nectar glands



Flowers without nectar glands



Hypothesis

- I think that only certain species of chile will have nectar glands.

Objective

- To conduct a survey of capsicum species for the presence or absence of nectar glands and nectar guides.

Materials & Methods

- Chile Pepper Institute Teaching and Demonstration Garden
- NMSU Chile Breeding and Genetics Program Greenhouse.
- The nectar glands were rated on a (2, 4, 6, 8, 10) scale where 2 being the smallest and 10 being the largest, and non numbers were intermediate.

Scoring System on a point scale

2



8



Conclusion

- During my survey I found that The annum species had no nectar glands except for one flower out of 39 total that were observed.
- Of the wild species observed they all had nectar glands and nectar guides.
- Through the domestication and hybridization process of plants, the nectar glands and nectar guides might have been lost.