CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)

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Project Number

22188

Project Title

They're Off to a Great Start!

Abstract

Objectives/Goals

We have a dry, wind, and cold climate that#s not very good for growing plants. The purpose of tht experiment was to see how we could make the plants grow the best early in the season. There is a product called Wall-o-Waters that are available at garden shops. These products are known to help tomato plants early in the season, but they are very expensive. Our hypothesis was that plastic jugs filled with water and€ placed around the plants would work just as well as Wall-o-Waters in keeping the plants safe and warm.

Methods/Materials

We planted 12 tomato plants, and left four with no treatment as our controls. We put Wall-o-Waters around four, and put water filled plastic jugs around four. We measured the plants height and width, and made observations about their health and vigor, for the next five weeks.

Results

We found that the jugs worked much better than the Wall-o-Waters and the controls. The plants grown in the jugs were by far the largest and most vigourous of the treatments.

Conclusions/Discussion

We found that the jugs worked better than the Wall-o-Waters because the Wall-o-Waters completelyt sheltered the plants, so that no wind came through to help the plants become stronger. The jugs let some wind through so that the plants had some resistance once we removed the treatments. The Wallo-water plants were so thin that they fell over. We had to put wire cages around them. The control plants did okay but not nearly as well as the Wall-o-Waters and the jugs.

Summary Statement

This experiment tested whether plastic jugs filled with water and placed around tomato seedlings would protect them from the elements as well as the commercially available Wall-O-Water product.

Help Received

One of the fathers helped prepare the planting bed for the tomatoes. One of the mothers helped with the experiment design and advised us on the report. Another mother advised us on the display.

Preliminary