Comparison of Methods of Controlling Pocket Gophers in Utah

Mark Nelson, Nicki Frey, Earl Creech, Kalen Taylor, Jacob Hadfield, Linden Greenhalgh, Cory Farnsworth, Jody Gale, Melanie Heaton, Justin Clawson and Steve Price



Extension
UtahStateUniversity



Utah State University Extension, Mark.nelson@usu.edu

Introduction

Pocket gophers are a common agricultural pest in many areas of Utah, Nevada, and other western states. Pocket gophers are burrowing rodents that leave soil mounds on the surface of the ground. They are called pocket gophers because they have external fur-lined pouches that they use to carry food. Unlike other rodents, pocket gophers are active year-round. They cost farmers hundreds of thousands of dollars annually in control costs, damage to haying equipment and loss of crops. Several new methods of controlling pocket gophers have been recently introduced in Utah but very little research has been done to determine how effective these new methods are.



Setting Gophinator traps

Objectives

- Compare the effectiveness of different methods of controlling pocket gophers.
- Train farmers and landowners impacted by pocket gophers, about integrated pest management approaches to controlling gophers



Presenting gopher control information at annual crop school

New Control Methods

- Gophinator Gopher Traps are a new trap developed in California that is small and easy to set. This trap was used in gopher control trials in eight counties throughout Utah. We compared the Gophinator trap to using strychnine gopher bait.
- The Gophinator traps were checked three times each week for four weeks. We used a bait applicator probe to put bait into the burrow.
- The Gopher General is a new machine produced in Canada that meters a slow-release fumigant (aluminum phosphide) into an artificial tunnel.

We tested this machine in two counties in Utah to determine how effective it is in controlling the pocket gophers.

Results

- The plots that were treated with the Gophinator traps showed fewer new gopher mounds than the plots that were treated with strychnine gopher bait.
- The plots that were treated using the Gopher General showed some control, but it didn't last all season long. More testing needs to be done to determine how close together the tunnels should be placed.
- After holding many crop schools and gopher control trainings most farmers and landowners have implemented a pocket gopher control program.



Treating plots with strychnine gopher bait, using bait applicator probe

Impacts

- By conducting numerous field trials, we have scientific information on what baits, traps and fumigation methods farmers can use to control the gopher infestations.
- We are currently seeing a reduction of pocket gophers on the crop ground in Utah.
- USU Extension is in the process of producing a fact sheet on pocket gopher control.



Gopher caught using Gophinator trap



Applying aluminum phosphide using gopher general



Inserting Gophinator trap into gopher hole