Donkey Grazing on Plumeless Thistle

Purpose of Study
To determine if grazing, by donkeys can reduce plumeless thistle infestations in a pasture.

Cooperator:
Dan and Mary Hanson

Nearest Town:
Parkers Prairie

Trial Performed on:
Grass pastures (1st year data)

Date of Trial:
Pasture season 2002

Donkey Grazing on Plumeless Thistle
Otter Tail County

Blossom (number/plant) | Plant Height (inches)
----------------------|---------------------
Donkey area           | 11 26               |
Control area          | 45 34               |

*Averages from 125 plumeless thistles

Results
Plumeless thistle is a highly invasive biennial plant that reproduces only by seed. Long term management strategies for this plant needs to focus on reducing or eliminating seed production to allow infestations in pastures to decrease over time. At the Hanson farm demonstration site, six pastures were established in areas with abundant plumeless thistle infestations (three pastures with one donkey each and three check areas with beef cows). In September, plant height, blossom number and the presence or absence of seed was determined on 25 plants in each pasture. Observations made during the year include: 1) donkeys actively consume plumeless thistle blossoms and to a lesser extent leaves or stems; 2) donkeys did not graze actively on plumeless thistle if there was abundant grass or legume forage available; 3) blossom feeding by the donkeys stimulated additional branching and late blossom production by the plant; 4) there was no seed produced by the late blossoms on grazed plants.

Donkey Area
Control Area

Blossom Numbers
Plant Height

Source: 2002 On-Farm Cropping Trials Northwest and West Central Minnesota

2002 On-Farm Cropping Trials
For Northwest and West Central Minnesota

The University of Minnesota is pleased to provide you with the results of the 2002 on-farm field cropping trials conducted in northwest and west central Minnesota.

This is the fourth year for the trials booklet. It was developed to increase the awareness and impact of the many on-farm cropping projects conducted in Minnesota. The booklet contains summary information for projects on a wide range of management issues for corn, soybeans, small grains, and other regional crops.

This project was made possible thanks to the hard work of many people. This includes farmers, Regional Extension Educators, and specialists who conducted these trials and their names are listed with the results. Also, thank you to our task force and our graphic designer, Theresa Hébert.

The studies in this booklet are divided into either Research or Demonstration chapters. Included is a description of the difference between the two. Whenever possible, research plot data were analyzed using statistics.

For more information about any of the studies included in this report, please contact the Regional Extension Educator or specialist listed. We invite your input on priorities you believe are important for Minnesota crop producers and have included an evaluation on page 3 for you to complete and mail to the address printed on the back of the evaluation form.

Sincerely,

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