



FORAGE RESOURCES AND FARM MANAGEMENT FOR PASTURE-BASED BEEF AND DAIRY PRODUCTION

Myra Van Die
M.Sc. Student
Department of Plant Science
University of Manitoba

INTRODUCTION

Grass-fed beef and pasture-based dairy production

- Provides healthy meat and dairy products
- Maintains perennial pastures on our lands

Grazing annual forages provides

- Rest for perennial pastures during critical periods
- Opportunities for crop-livestock integration such as grazing cover crops or green manures



Organic pasture-based dairy cows

PROJECT DESCRIPTION

Complete farm case studies of organic grass-fed beef and pasture-based dairy operations

- Observational
- Document forage resources and grazing management

Complete a grazing trial using sheep

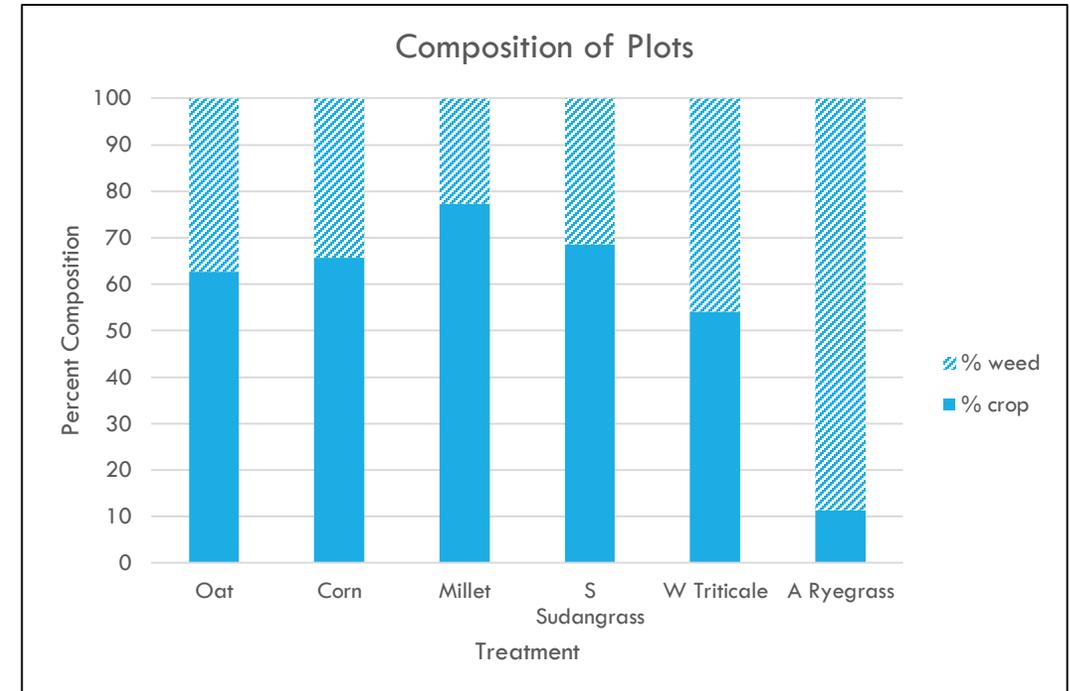
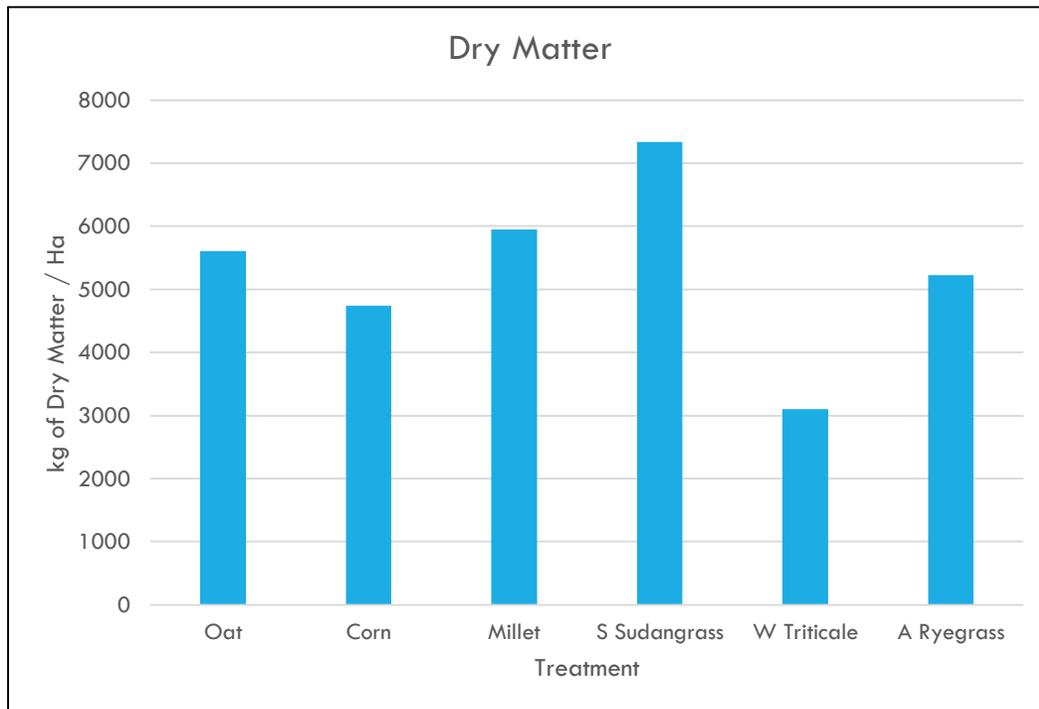
- Select annual species that fit within organic crop rotations
- Graze during the critical periods of mid-summer and late fall
- Analyze the forage quality of each species



Myra Van Die visiting a local grass-fed beef farm

PRELIMINARY RESULTS

Species studied include oat, corn, millet, sorghum-sudangrass, winter triticale, and annual ryegrass grown using organic methods



DISCUSSION

The millet crop was not palatable to the sheep

Sorghum-sudangrass produced the greatest biomass

Annual ryegrass was not competitive with weeds, however weeds provided valuable forage for grazing

Forage quality analysis results are forthcoming



Sheep were used to graze the forages studied

FUTURE PLANS

Project next-steps

- Case studies of 3 grass-fed beef farms and 3 organic dairies
- Complete second year of grazing trial

Ultimate goal of contributing to

- Improving the economics of pasture-based livestock production and reducing the loss of perennial pastures
- Increasing opportunities for crop-livestock integration in both organic and conventional cropping systems



A visit to an organic pasture-based dairy