

MSc. Defence

## "Switchgrass as a replacement for wheat straw in lactating rations"

Brigitte Lemay

Date: April 29th, 2021 at 1:00pm

The MSc Defence for Brigitte Lemay has been scheduled for Thursday April 29th, 2021 at 1:00pm. The defence will be held online via Teams: https://teams.microsoft.com/l/meetup-join/19% 3ameeting\_Yzc2MDRhMTktNWMOYi00Mzk0LWI0OTUtZTBINTgyNjc2YWEx%40thread.v2/0?context=%7b%22Tid%22%3a% 22be62a12b-2cad-49a1-a5fa-85f4f3156a7d%22%2c%22Oid%22%3a%22fbd28915-dda5-478f-8ecb-a3682dcf0c3a%22%7d

## The exam committee will consist of:

Examining Chair: Dominique Bureau

Advisor: Trevor DeVries

Adv. Committee Member: Gail Carpenter

Additional Member: Michael Steele

## Abstract:

This thesis is an investigation on the effects of replacing wheat straw with switchgrass in the ration of lactating Holstein cows on production and health. In two studies, midlactation Holstein cows were tested on various dietary rations, and yield, production components, and blood metabolites were measured. In study 1, n=24 cows were assigned a ration containing either switchgrass or straw for a 21-d period in a cross-over design. In study 2, n=12 cows were assigned a ration containing either switchgrass for 14-d periods in a 3x3 Latin Square Design. Milk production and components, along with performance were largely unaffected by the treatment rations. The results of these studies suggest that there is potential for switchgrass to be used as a replacement for wheat straw, and that fall-baled switchgrass may offer additional benefits.