

Demonstration of TillageRadish®, Pickseed Radish and Union Forage Radish Variety Trial

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Partners:

- Pickseed
- Union Forage
- Yellowhead County
- Tillage Radish®
- West Central Forage Association
- Har-De Agri Services

Introduction

Variety selection is an important part of production management because it affects yield, maturity and other agronomic characteristics which impact producer's bottom line. Variety testing continues to be important in providing agricultural producers with information on newly registered and established seed varieties. To serve these producers, regional trials need to be conducted in the region to provide local producers and extension staff with reliable agronomic information.



To encourage producers to grow new seed varieties, it is necessary to showcase its advantage within the area. This trial aims to demonstrate new radish varieties ability to establish in the west central region of Alberta, with the purpose of feeding cattle. In the 2015 growing season, three radish varieties Union Forage (UF), TillageRadish (TR), and Pickseed (PS) were seeded. Visual records were collected and results will be available to producers to help them make management decisions.

Objectives

- To compare growth of TillageRadish®, Union Forage and Pick Seed Radish.
- Document tuber and plant size for each variety.

Methodology

The demonstration plots were located at the West Central Forage Association Forage Research Site (SE 27-53-9- W5th) near Wildwood Alberta, which is located 120km west of Edmonton, in the gray wooded soil zone. In this soil zone the surface layer is leached of clay and plant nutrients. Soil and organic matter is low and crusting often reduces seedling emergence. Moisture is not as limiting as elsewhere in Alberta, but the growing season is shorter. Nitrogen is often the major limiting factor to high crop yields on gray wooded soils. The soil was tested for nutrients in the fall and this information was used to prescribe fertilizer applications.

Plots were seeded to a prepared seedbed on May 21st, 2015 using a small plot Fabro disc seeder (18 m long 5 rows at 22.5 cm) at a rate of 6 pound per acre. A glyphosate treatment was

administered prior to seeding. Pictures were taken on June 30th, July 20th and August 20th to determine the differences in growth.

Observations

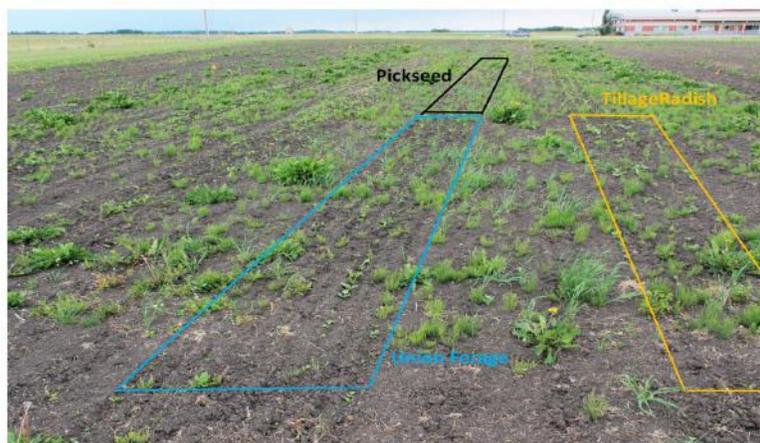
Stand establishment was good for all radish varieties despite pest and weed pressure and lack of moisture. See Picture 1 and Picture 2.

Growth at 44DAP was uniform with all three varieties at equivalent growth stages. By 60DAP growth stage differences become more apparent Picture 4 illustrate the difference showing (TR), and (PS) in the full bloom, while (UF) had not began to bloom yet.

On September, the plants were measure. The (PS) variety showed the harvest about the ground, with tops measure 1.1 m. (TR) and (UF) followed at 0.90 meters and 0.40 meters respectively. It is noteworthy to add that the tuber diameter was reversibly correlated with about ground plant matter height. The variety with the tallest tops had the smallest tubers, this is illustrated in Picture 7



Picture 1. – Radish plant showing pest damage at 20DAP in radish variety demonstration plots at Wildwood Alberta.



Picture 2. –Weed pressure 20DAP in radish variety demonstration plots at 20DAP



Picture 3. – Picture show no difference in growth on 44dap in Radish varieties demonstration trial at Wildwood Alberta.



Picture 4. – Radish variety demonstration trial at Wildwood Alberta at 60DAP (TR), and (PS) show full bloom, (UF) had yet to bloom



Picture 5. –Difference between in leaf and bloom production between (UF), (TR) and (PS) at 81DAP.



Picture 6. – Picture show the differences in height and tuber size difference of the Radish varieties grown in demonstration trial at Wildwood Alberta.

Picture 7. -Tuber diameter of radish varieties A).- TillageRadish, B).- Union Forage and c).- Pickseed



A).-TillageRa
tuber size:

10"+ height

1.5" diameter



B)-Union Forage

tuber size:

10" height

3" diameter



C).-Pickseed

tuber size:

8 height

1" diameter