Interseeding Multi Species Cover Crop into Silage Corn.

By Mark Doely SCT Columbus MT. January, 20, 2020

County: Stillwater
Average Annual Precip: 13-14”
MLRA: 58AC, Sedimentary Plain Central
Dominant Soil Type: Attewan Loam 0 to 4% slopes
Acres: 83
Planting Date Corn: 5-14-20
Seeding Rate Corn: 38,000 seeds per acre
Planting Date Annual Rye Grass: 6-15-2020
Cover Crop Seeding Rate:
  OMRI-Clover-Red- 0.5lbs./acre
  P-Annual Ryegrass – 30lbs./acre
  P-Nitro Radish – 0.3lbs./acre
  Turnip-Purple Top – 0.3lbs./acre
  Impact Forage Collards – 0.4lbs./acre
Seeding Method: 3 Point broadcast spreader
Corn Height: 16”
Previous Crop and Year: Silage Corn
Herbicides: Pre: Roundup
Post:
Insecticides/Fungicides:
Fertilizer: Nitrogen
Irrigation: Center Pivot
Corn Chopped: 9-15-20 – 9-18-20
Silage Yield: 36 ton/acre
Next Crop: Silage corn 5-20-21

Fig. 1. Multi Species Cover Crop seeded 6-16-2020
Mark Doely SCT Columbus, MT.

Fig. 2. Monthly precipitation at Columbus, MT. Western Regional Climate Center, station #241938.

<table>
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<tr>
<th>Columbus</th>
<th>J</th>
<th>F</th>
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<th>N</th>
<th>D</th>
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<td>14.62</td>
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Introduction:
The cover crop was broadcasted into the corn on 6-15-2020. The corn height was 16”. The idea is to interseed the covercrop mix so it has a chance to get some growth before the corn canopies. That way when the corn is taken off it will have a good start. The field is under a center pivot irrigation system, the sprinkler applied a half inch of water immediately after planting and was followed by one inch of rain.

Results:
The first field visit was 7-6-2020 multiple species are present, annual ryegrass, clover, and turnips. Corn was 42’ tall. 7-13-2020 some of the ryegrass was 6” tall and the turnips 6 1/2” tall. The consistancy of the cover crop across the field is much better than the previous year. Silage harvest started 9-14-2020 and finished 9-18-2020. The fall had one cold spell and then turned relatively warm up to the date when we clipped the field on 11-3-2020. The sprinkler was run 2 times after silage harvest putting on a half inch per irrigation. Three clippings were done on the field and were air dried. The dry weight figured out to be 1,134lbs per acre.
The purpose of the interseeding the cover crop was to add some diversity and provide some fall grazing. This field is in a continuous corn rotation and is used for fall and winter grazing. The cover crop this year was much more even throughout the field and with the warmer fall continued to grow after the silage harvest. The cover crop this year was broadcast by the local fertilizer company using truck mounted broadcaster. Overall the producer was extremely happy with this years production.