



DEMONSTRATION OF INNOVATIVE CORN PRODUCTION TECHNOLOGIES: INTERSEEDING COVER CROPS

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PROJECT

Conducted at multiple sites between Vernon and Lumby, BC for growing seasons 2019-2022 to examine the adaptability of this practice to the interior corn growing region. Cover crops were interseeded into standing corn at V4-V6 using a variety of species and mixtures. A mixture of Italian ryegrass (8lbs/ac), berseem clover (2lbs/ac), and forage brassicas (2lbs/ac) was found to be effective for forage production and species diversity. Seeding was primarily done by broadcast application and irrigated in with good establishment when moisture allowed.



Interseeding



Interseeding Post Harvest

RESULTS

Up to 0.8t/acre of forage was produced when measured post-harvest, the forage quality was excellent (Crude Protein of 18-22% and TDN of 60-64%). While volumes were not high enough to harvest mechanically, there was great potential for grazing use or for building soil health. It was found that Italian ryegrass would over-winter at times in this region and this may lead to opportunities for spring forage use.

No negative impacts to yield or quality of the primary corn crop were found when harvested either as silage or grain. While fall soil tests levels were low overall at the

test sites, soil nitrate levels were found to be lower in the cover crop than in the non-cover crop check.

Good moisture and early timing were found to be keys to establishment, and poor establishment was experienced during periods when irrigation could not keep up and when the cover crop was seeded in corn past the V8 stage, possibly due to shading.

If used for grazing, enough forage was produced to offset the cover crop seed and seeding cost 3 out of the 4 seasons.

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