

A Silver Creek Reflection

Aerial Seeding Cover Crop on Corn and Soybean Fields

The Background

Silver Creek growers and land owners are working to improve their operations, while improving the soil and water quality runoff. The Silver Creek team worked with land owners and growers to plant three fields with cover crops in 2016 – one corn and two soybean. Originally, the corn field was going to show new interseeding technology using a three-clover seed mix, but the equipment was not available in time. With this setback, we thought we'd have to wait to plant cover crop until after harvest.

The Concern

The Silver Creek team was concerned that delaying cover crop planting would not allow the cover crops to establish prior to winter, especially if the harvest were late and weather conditions did not favor back-to-back harvesting and planting. There was also concern if there would be sufficient time to complete both activities in the busy fall season, and that cover crops would not get planted on these sensitive fields.

The Contingency Plan

The Silver Creek team talked with the owner and grower to aerial seed the corn and soybean fields. Both agreed and a rye seed mix was selected. A date was picked that could have worked for both crops: yellow leaf soybeans prior to leaf drop and about two weeks prior to the anticipated corn silage harvest. Approximately 50% more seed was used for this method in comparison to inter-seeding.



The Result

The soybean field may have been seeded a few days late because leaves had begun to fall and we think it prevented good seed-to-soil contact. Seed germination was present, but leaf litter prevented a dense growth of the cover crop. The corn field seeding was very successful; the timing was perfect.



Weed pressure in parts of the corn field seemed to shade-out the cover crop, but in areas where weeds were well controlled, that cover crop filled in beautifully, and will provide excellent soil erosion protection over the winter.

Lessons & Opportunities



Beautiful stand of winter rye cover crop in a corn field!

Aerial seeding corn and soybeans can work successfully. The cover crop did not impact crop yield and it will provide cover over the winter and soil erosion protection in the spring.



Slow germination and growth on soybean field due to late aerial seeding and leaf litter preventing good seed-to-soil contact.

When timing aerial seeding application on soybean fields, seeding earlier rather than later, prior to significant soybean leaf drop, will help ensure good seed-to-soil contact for germination.

| Corn Field Cost Analysis: | Inter-Seeding | | Aerial Seeding | |
|---------------------------|---------------|-----------|----------------|-----------|
| | 3-clover Seed | Equipment | Rye Seed | Equipment |
| Cost (\$/acre) | \$30 | \$15 | \$21 | \$22 |
| Total (\$/acre) | | \$45 | | \$43 |

Ask your Silver Creek team how this experience could benefit you.

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