

The following is an overview of the cover crops we use on Abundant Acres Farm.

Spring:

Oats and field peas can be planted as soon as the ground can be worked through mid-summer. The oats come up quickly, competing with weeds and providing a support for the peas. With good fertility, this mixture can grow 4-5 feet high. If you let it grow that long, you need to have a good mower and tillage equipment to work all of that residue back into the soil.

Summer:

Buckwheat is a great summer cover for many reasons. It sprouts quickly and will grow up and over almost any weed, helping to clean up the field for the following crop. Since buckwheat is not a grass, it is not a preferred feed for wire worms. Research at UPEI has shown that a double crop of buckwheat greatly reduced wire worm damage in following potato crops.

To do a double crop, the buckwheat is planted in early June, grown until seed is setting (usually about six weeks) and then lightly disked or mowed. It is then allowed to re-grow until it sets seed again, then plowed in.



Buckwheat cover crop being mowed

Fall:

This is the most important time of the year for cover cropping because these covers will hold the soil over the coming winter. Its also the most complicated since the farmer has to take the following year's plans into consideration.

When cover cropping land that will be planted to early crops in the spring, it is best to use a crop that will winter-kill. Oats are what we use. If planted by mid-September, the oats will put on a nice thick growth before succumbing to the cold. By spring, all that will be left is a thin crust of brittle straw that is easy to work into the soil.

Oil seed radish and tillage radish are also valuable winter-killed cover crops. This year we will be adding tillage radish into almost all of our fall cover crops mixes. These mustard family plants have vigorous taproots that break up soil compaction and are very effective nutrient scavengers.

The only downside to these crops is that being in the mustard family, they might not be a good choice to plant before crops that are related to them such as cabbage, broccoli or mustard greens like arugula.

For years I avoided planting these valuable covers because I grew so many mustard family greens in my salad mixes. We will be experimenting this year to see if tillage radish really makes flea beetles worse in our greens the following year.

For land that will not be worked early the following year, I always plant fall rye, either alone or with red clover.

If the rye will be worked in before mid-June the following year, I plant it alone. If it will be allowed to grow into the summer, I'll add the red clover.

The clover will not grow much in the fall but will put on very strong growth after mowing to release is from the rye the following spring. The clover and rye can be incorporated towards the end of June through mid-July the following year. This will provide a great fertility boost for heavy feeding late crops and will do wonders for soil structure. The rye and clover is also a wonderful full season cover crop.

No matter what fall cover is used, I always wait until the beginning of September to plant since this will prevent summer annual weeds from setting seed. I have not experimented with planting clovers any later than September 15. Rye can be planted late into October, but will not put on a very thick growth until the following spring unless there is unusually warm weather.