



ONTARIO COVER CROPS

There are many factors to consider when deciding on a cover crop strategy, including function, site parameters, species, termination, and management practices*. Working with a Certified Crop Adviser can increase your chances of success by tailoring plans to specific fields and goals.

GRASSES

Function

Challenges

Oats

- Rapid growth and erosion control
- Suppresses weeds
- Adds organic matter

- No frost tolerance, minimal winter erosion protection
- May tie up nitrogen and reduce availability for next crop

Fall Rye/ Cereal Rye

- Nitrogen scavenger, preventing leaching
- Overwinters in Ontario
- Suppresses spring weeds

- Fast growth in spring can be an issue if termination is delayed, tying up soil moisture and sheltering pests

BRASSICAS/BROADLEAF

Radish

- Deep taproot can alleviate compaction
- Scavenges residual nitrogen

- Cannot overwinter, leaving bare soil in the spring
- Sulfurous odor with decomposition

Buckwheat

- Quick emergences shades weeds
- Attracts pollinators/beneficials
- Solubilizes phosphorus

- No frost tolerance, minimal winter erosion protection
- Can become a weed if left to seed

LEGUMES

Red Clover

- Fixes nitrogen
- Supports microbes
- Improves soil structure

- Underseeded stands can fail if wheat canopy is too dense
- Aggressive spring growth

Hairy Vetch

- High nitrogen fixation
- Dense winter cover to suppress weeds and control erosion

- Seeds can persist in soil
- Climbing nature can choke companion species

Peas

- Fixes nitrogen
- Boosts nitrogen in forage production

- Inconsistent nitrogen
- Can host plant-parasitic nematodes

*Note: to access cost-share funding through the On-Farm Climate Action Fund (OFCAF) program, cover crops must over-winter.

Oats + Radish Mix Mid-August to early-September planting
Best for after winter wheat, before corn or soybeans

Fall Rye + Hairy Vetch Mix September to mid-October planting
Best for after early-harvested corn silage, before soybeans

Scan for more resources



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