

	Sorghum Sudangrass	Forage Pearl Millet	Brown Mustard	Buckwheat	Oilseed Radish	Annual Ryegrass
<b>Seeding Rate</b>	25-30 lbs/ac	20-25 lb/ac	8-10 lb/ac	30-55 lbs/ac	10-15 lbs/ac	20-30 lbs/ac
<b>Earliest Planting Date</b>	mid-June	mid-June	late May	mid-June	early May	late April
<b>Latest Planting Date</b>	late-August	late-August	early September	early September	early September	early September
<b>Annual/Perennial</b>	Annual	Annual	Annual	Short-Season Annual	Annual	Annual
<b>Winter Survival</b>	Never	Never	Never	Never	Never	Seldom
<b>Can it be mowed?</b>	Yes (> 6 inches) Increases root mass	Yes (>6 inches) Increases root mass	Yes	No	Yes	Yes (>3 inches)
<b>Termination</b>	Freeze, Tillage, Herbicide, Mowing close to ground	Freeze, Tillage, Herbicide, Mowing close to ground	Freeze, Tillage, Herbicide, Mowing close to ground	Freeze, Tillage, Herbicide, Mowing	Freeze, Tillage, Herbicide	Tillage, Herbicide
<b>Soil OM Builder</b>	Very Good	Very Good	Good	Good	Good	Excellent
<b>Compaction Fighter</b>	Very Good	Good	Good	Fair	Very Good	Fair
<b>Weed Suppression</b>	Very Good	Very Good	Excellent	Excellent	Excellent	Fair
<b>Quick Growth</b>	Very Good	Very Good	Excellent	Excellent	Excellent	Fair
<b>Effect on RL Nematodes</b>	Inconclusive	Reduces Numbers	Very Good if incorpo- rated. Host if not	Moderate Host	Moderate Host	Moderate Host
<b>Effect on Verticillium</b>	Trap Crop	Non-Host	Very Good (biofumigant)	Beneficial (Green Manure)	Inconclusive	Non-Host
<b>Wireworm Fighter</b>	No	No	Yes (biofumigant)	Yes	Inconclusive	No
<b>Effect on Common Scab</b>	Unknown	Possible Suppression	Possible Suppression (Green Manure)	Possible Suppression (Green Manure)	Possible Suppression (Green Manure)	Unknown
<b>Forage Harvest</b>	Good (before frost)	Good	Poor	Poor	Poor	Very Good
<b>Preferred Soil pH</b>	5.5 - 7.0	5.5 - 7.5	5.5 - 8.5	5.0 - 7.0	6.0 - 7.5	5.5 - 7.0
<b>Drought Tolerance</b>	Excellent	Excellent	Good	Good	Good	Good
<b>Additional Effects:</b>	- Non-host for cyst nematodes - Best to mow before plants be- come woody (3-4 ft) to avoid N tie-up	- Best to mow before plants become woody (3-4 ft) to avoid N tie-up	- risk for white mold - incorporate in pres- ence of adequate soil moisture - do not go to seed	- P scavenger - Pollinator crop - Wireworm control when actively growing - do not go to seed - risk for white mold	- risk for white mold - N scavenger - establishes in colder soil than mustard	- can be used as underseed with grain crops - perennial ryegrass more winter hardy

	Alfalfa	Red Clover	Hairy Vetch	- 50% Oats/50% Peas	Chickling Vetch	Winter Rye
<b>Seeding Rate</b>	10-15 lb/ac	8-12 lb/ac	15-25 lbs/ac	18-45 lb/ac (Peas) 25-50 lb/ac (Oats)	35-45 lbs/ac	60-100 lbs/ac +10-20% for broadcast
<b>Earliest Planting Date</b>	early May	early May	early May	early May	early May	early May
<b>Latest Planting Date</b>	late August	late August	early September	late August	late August	early/mid October
<b>Annual/Perennial</b>	Perennial	Perennial	Annual	Annual	Annual	Annual
<b>Winter Survival</b>	Yes	Yes	Almost always	Never	Never	Always
<b>Can it be mowed?</b>	Yes	Yes	Yes	Yes (early stages)	No	Yes (early stages)
<b>Termination</b>	Tillage, Herbicide	Tillage, Herbicide	Tillage, Herbicide, Close mowing	Freeze, Tillage, Herbicide	Freeze, Tillage, Mow, Herbicide	Herbicide (preferred), Tillage
<b>Soil OM Builder</b>	Excellent	Excellent	Very Good	Good	Good	Excellent
<b>Compaction Fighter</b>	Very Good	Very Good	Good	Fair	Fair	Good
<b>Weed Suppression</b>	Fair	Good	Fair	Good	Fair	Excellent
<b>Quick Growth</b>	Fair	Fair	Fair	Very Good	Good	Very Good
<b>Effect on RL Nematodes</b>	Host crop	Preferred Host	Host crop	Host Crop	Host Crop	Host Crop
<b>Effect on Verticillium</b>	Host crop	Preferred Host	Host crop	Peas are Host Crop	Host Crop	Non-Host
<b>Wireworm Fighter</b>	No	No	No	No	No	No
<b>Effect on Common Scab</b>	Non-Host	Can worsen	Unknown	Unknown	Unknown	Unknown
<b>Forage Harvest</b>	Excellent	Very Good	Poor	Good	Poor	Very Good
<b>Preferred Soil pH</b>	6.0-8.0	5.5-8.0	6.0-7.0	6.0-7.0	6.0-7.0	5.0-7.0
<b>Drought Tolerance</b>	Excellent	Very Good	Very Good	Good	Good	Very Good
<b>Additional Effects:</b>	- N fixer - mixes well with grasses - can underseed - better for multiple year establishment	- N fixer - mixes well with grasses - can underseed - can be frost seeded	- N fixer - mixes well with grasses - plant early for winter hardiness	- Peas are N fixer - has shown disease suppression as green manure - tolerates cold temps and poor fertility	- N fixer - mowing can be dif- ficult (tangled vines) - usually used in mix with other species	- best late fall cover crop - tolerant of cold and low fertility - erosion fighter - triazine resistance

Source: <http://decision-tool.incovercrops.ca/> and additional academic sources for disease/pest control effects

Compiled by Ryan Barrett, AIM, PEI Potato Board