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A green manure cover crop, or plowdown crop, is any crop that is turned into the soil to add organic matter, nitrogen or other nutrients. They can also protect the soil from erosion, improve soil structure, stimulate biological activity, build up poor soils, and control weeds and diseases.

How to choose a green manure ?

	Annual Ryegrass	Rye	Radish	Mustard	White Clover	Red Clover	Common Vetch	Hairy Vetch	Austrian Winter Peas	Buckwheat
Organic Matter (t/acre/year)	1.1 – 4.5	1.5 – 5	2 – 3.6	1.5 – 4.5	1.1 – 3.1	1.1 – 2.5	2 – 4	1.1 – 2.5	2 – 2.5	1 – 2.5
Optimal pH	6.0 – 7.0	5.0 – 7.0	6.0 – 7.5	5.5 – 7.5	6.0 – 7.0	6.2 – 7.0	6.0 – 8.0	5.5 – 7.5	6.0 – 7.0	5.0 – 7.0
Germination temperature (°C)	4	1	7	4	4	5		16	5	10
Seeding depth (inch)	0 – ½	¾ - 2	¼ - ½	¼ - ½	¼ - ½	¼ - ½	½ - 1	1 – ½	1 ½ - 3	½ - 1 ½
Seeding rate (lb/acre)	10 – 20	60 – 118	7 – 12	4 – 11	2 – 9	8 – 10	10 – 30	15 – 20	50 – 80	50 – 70
Nitrogen Source										
N total (lb/acre)			50 – 200	30 – 120	80 – 200	70 – 145	98 – 250	60 - 120	90 – 150	
Nitrogen storage										
Soil conditioner										
Improve top soil										
Erosion control										

GREEN MANURE – COVER CROP

	Annual Ryegrass	Rye	Radish	Mustard	White Clover	Red Clover	Common Vetch	Hairy Vetch	Austrian Winter Peas	Buckwheat
Weed control										
Stifle the weeds										
Pasture field										
Quick growth										
Persistence mulch										
Drought tolerance										
Flood tolerance										
Reduce Compaction										
Allelopathic effect										
Support equipment										

http://www.agrireseau.qc.ca/agriculturebiologique/documents/Cultures%20de%20couverture_2011.pdf



Excellent



Very good



Good



Medium



Poor