

Chart 2 PERFORMANCE AND ROLES

Species	Legume N Source	Total N (lb./A) ¹	Dry Matter (lb./A/yr.)	N Scavenger ²	Soil Builder ³	Erosion Fighter ⁴	Weed Fighter	Good Grazing ⁵	Quick Growth
NON LEGUMES	Annual ryegrass <i>p. 74</i>		2,000–9,000	●	●	●	●	●	●
	Barley <i>p. 77</i>		2,000–10,000	●	●	●	●	●	●
	Oats <i>p. 93</i>		2,000–10,000	●	●	●	●	●	●
	Rye <i>p. 98</i>		3,000–10,000	●	●	●	●	●	●
	Wheat <i>p. 111</i>		3,000–8,000	●	●	●	●	●	●
	Buckwheat <i>p. 90</i>		2,000–4,000	○	●	●	●	○	●
	Sorghum-sudan. <i>p. 106</i>		8,000–10,000	●	●	●	●	●	●
BRASSICAS	Mustards <i>p.81</i>	30–120	3,000–9,000	●	●	●	●	●	●
	Radish <i>p. 81</i>	50–200	4,000–7,000	●	●	●	●	●	●
	Rapeseed <i>p. 81</i>	40–160	2,000–5,000	●	●	●	●	●	●
LEGUMES	Berseem clover <i>p. 118</i>	75–220	6,000–10,000	●	●	●	●	●	●
	Cowpeas <i>p. 125</i>	100–150	2,500–4,500	●	●	●	●	●	●
	Crimson clover <i>p. 130</i>	70–130	3,500–5,500	●	●	●	●	●	●
	Field peas <i>p. 135</i>	90–150	4,000–5,000	●	●	●	●	●	●
	Hairy vetch <i>p. 142</i>	90–200	2,300–5,000	●	●	●	●	●	●
	Medics <i>p. 152</i>	50–120	1,500–4,000	●	●	●	●	●	●
	Red clover <i>p. 159</i>	70–150	2,000–5,000	●	●	●	●	●	●
	Subterranean clovers <i>p. 164</i>	75–200	3,000–8,500	●	●	●	●	●	●
	Sweetclovers <i>p. 171</i>	90–170	3,000–5,000	●	●	●	●	●	●
	White clover <i>p. 179</i>	80–200	2,000–6,000	●	●	●	●	●	●
	Woollypod vetch <i>p. 185</i>	100–250	4,000–8,000	●	●	●	●	●	●

¹Total N—Total N from all plant. Grasses not considered N source. ²N Scavenger—Ability to take up/store excess nitrogen.

³Soil Builder—Organic matter yield and soil structure improvement. ⁴Erosion Fighter—Soil-holding ability of roots and total plant.

⁵Good Grazing—Production, nutritional quality and palatability. Feeding pure legumes can cause bloat.

○=Poor; ◐=Fair; ◑=Good; ◒=Very Good; ◓=Excellent

Chart 2 PERFORMANCE AND ROLES continued

Species	Lasting Residue ¹	Duration ²	Harvest Value ³		Cash Crop Interseed ⁴	Comments
			F*	S*		
Annual ryegrass	●	●	●	●	●	Heavy N and H ₂ O user; cutting boosts dry matter significantly.
Barley	●	●	●	●	●	Tolerates moderately alkaline conditions but does poorly in acid soil < pH 6.0.
Oats	●	●	●	●	●	Prone to lodging in N-rich soil.
Rye	●	●	●	●	●	Tolerates triazine herbicides.
Wheat	●	●	●	●	●	Heavy N and H ₂ O user in spring.
Buckwheat	○	●	○	●	●	Summer smother crop; breaks down quickly.
Sorghum-sudangrass	●	●	●	○	○	Mid-season cutting increases yield & root penetration.
Mustards	●	●	○	●	○	Suppresses nematodes and weeds.
Radish	●	●	●	●	●	Good N scavenging and weed control; N released rapidly.
Rapeseed	●	●	●	●	○	Suppresses <i>Rhizoctonia</i> .
Berseem clover	●	●	●	●	●	Very flexible cover crop, green manure, forage.
Cowpeas	●	●	●	●	●	Season length, habit vary by cultivar.
Crimson clover	●	●	●	●	●	Established easily, grows quickly if planted early in fall; matures early in spring.
Field peas	●	●	●	●	●	Biomass breaks down quickly.
Hairy vetch	●	●	●	●	●	Bi-culture with small grain expands seasonal adaptability.
Medics	●	●	●	●	●	Use annual medics for interseeding.
Red clover	●	●	●	●	●	Excellent forage, easily established; widely adapted.
Subterranean clover	●	●	●	○	●	Strong seedlings, quick to nodulate.
Sweetclovers	●	●	●	●	●	Tall stalks, deep roots in second year.
White clover	●	●	●	●	●	Persistent after first year.
Woollypod vetch	●	●	●	●	●	Reseeds poorly if mowed within 2 months of seeddrop; overgrazing can be toxic.

¹Lasting Residue—Rates how long the killed residue remains on the surface. ²Duration—Length of vegetative stage.

³Harvest Value—Economic value as a forage (F) or as seed (S) or grain. ⁴Cash Crop Interseed—Rates how well the cover crop will perform with an appropriate companion crop.

○ = Poor; ● = Fair; ● = Good; ● = Very Good; ● = Excellent