

Cover Crops and Green Manures

Cover Crops/ Green Manures	When to Plant	Rate of Application (wt. of seeds per 100 sq. ft.)	Characteristics
Hairy vetch (<i>Vicia villosa</i>)	Late summer, early fall	1 lb.	Does well in cold temperatures (Zone 4 or warmer); fast-growing
Cowpeas (<i>Vigna unguiculata</i>)	Fall	4 oz.	Shade-tolerant, frost-tender, good summer crop
Winter rye (<i>Sacale cereale</i>)	Fall	4 oz.	Very hardy; planted with other cover crops to help insulate them from the cold
Oats (<i>Avena sativa</i>)	Fall in mild Zones (7 or warmer)	1.25 oz.	Good for clay soil types; provides a lot of organic matter and high nutrients
Alfalfa (<i>Medicago sativa</i>)	Late summer, early fall	0.1 oz.	Withstands frost; hardy to Zone 5; deep roots
Fava bean (<i>Vicia faba</i>)	Fall	11 oz.	Great to eat; frost-resistant to 10 degrees
Winter wheat (<i>Triticum aestivum</i>)	Fall	2.5 oz.	Strong root system; winter-hardy nearly everywhere; makes a lot of organic matter in the form of straw
Millet (<i>Panicum miliaceum</i>)	Spring/summer	1.6 oz.	Best in the South and Southwest
Crimson clover (<i>Trifolium incarnatum</i>)	Fall	0.6 oz.	Fast-growing; hardy to Zone 6; beautiful red flowers attract bees and butterflies; breaks up compacted soil
Soybeans (<i>Glycine max</i>)	Fall	4 oz.	Drought-resistant, frost-tender; good nitrogen fixer
Agricultural mustard (<i>Synapis alba</i>)	Anytime	0.055 oz.	Long roots draw deep nutrients to the surface; prefers cool weather
Agricultural lupine (<i>Lupinus perennis</i>)	Sept.-Nov. in northern regions	Plant seeds 3 inches apart	Beautiful blue flowers; hardy to Zone 4; fixes a lot of nitrogen in soil; long roots bring nutrients to the surface