

Table 5. Pre-plant cover-crop seeding dates and rates.

Cover Crop	Recommended Seeding Dates	Seeding Rate
Alfalfa	Early April to late May or Late July to mid August	14 - 20 lbs/A
Buckwheat	Late May to early June or Late July to early August	60 - 75 lbs/A
Clovers (Alsike, Ladino, White)	Early April to late May or Late July to mid August	4 lbs/A (alsike and white) 2 lbs/A (ladino)
Red Clover	Early April to late May or Late July to mid August	8 - 10 lbs/A
Sweet Clover	Early April to mid May or Early August	12 - 20 lbs/A
Hairy Vetch	August to early Sept.	30 - 40 lbs/A
Annual Field Brome	July and August	20 lbs/A
Japanese Millet	Late May to mid July	20 lbs/A
Spring Oats	Early to mid April or Mid August	100 lbs/A
Annual Ryegrass	Early April to early June or Early August to early Sept.	30 lbs/A
Perennial Ryegrass	August to mid Sept.	25 lbs/A
Winter Rye	August to mid Sept.	80-100 lbs/A
Sudan Grass	Late May to Early June	80 lbs/A
Sorghum-Sudan Grass Hybrids	Late May to Early June	35-50 lbs/A

require good fertility and moisture to perform well. Under such conditions, their tall, rank growth provides excellent weed suppression. Such heavy growth can be difficult to cut and incorporate. Due to its growth habit, sudan grass should be cut back when growth exceeds 20-25 inches or plowed down if a second growth is not desired.

Buckwheat is a fast-growing summer annual that can be used to protect the soil and suppress weeds for a month or two between spring and fall cash crops. It grows fairly well on acid and low phosphorus soils. It decomposes rapidly, so is easy to incorporate, but does not contribute a lot of organic matter to the soil. Mow or incorporate at flowering, prior to setting seed so it does not become a weed in subsequent crops. Grows well in low soil pH. To smother weedy fields, some growers plant two successive crops of buckwheat followed by winter rye. Do not allow buckwheat to go to seed prior to plow-down.

Annual Field Brome: Winter annual grass. Establishes rapidly and has extensive fibrous root system contributing organic matter to soil. Plow down in spring. Seed not readily available so plan ahead.

Japanese Millet: Summer annual grass. Fast growing and competes well with weeds. Establishes faster than sudan grass on cool soils. Can be cut back and allowed to regrow after reaches 20 inches. Can reach 4 ft. in 7-8 weeks. Do not allow to mature and drop seed.

LEGUMES

Sown when “free” nitrogen is desired for a subsequent cash crop with a high nitrogen demand. Legumes generally require good drainage and fertility. Most grow slowly at first so they do not compete much with weeds until well established. Drill seed for best stands. Mix seed with proper inoculant to insure nodulation. Often sown with a nurse crop such as oats, or in mixes with perennial grasses. When legumes are mowed, tarnished plant bugs may be driven into adjacent crops, such as strawberries or raspberries increasing the likelihood of damage.

Red Clover is a short-lived perennial that is somewhat tolerant of acid or poorly drained soils. Mammoth red clover produces more biomass for plow-down than medium red clover, but does not regrow as well after mowing. Mammoth will often establish better than medium in dry or acid soils. Sow in early spring or late summer.

White Clover is a low-growing perennial, tolerant of shade and slightly acid soil. Ladino types are taller than the Dutch or wild types. White clover is a poor competitor with weeds unless mowed. Suitable for use in walkways or alleys. Expensive seed.

Sweetclover is a biennial (except for annual types like Hubam) that is deep-rooted and adapted to a wide range of soils. It is a good soil-improving crop with a strong taproot that opens up subsoil. Yellow sweetclover is earlier maturing and somewhat less productive than white sweetclover. Sow in