



Questions? Contact: Billy Synk (916)287-3035
Or visit ProjectApism.org/seeds-for-bees



Source: Kamprath Seed, Inc

PAM Soil Builder Mix

30 % Triticale, *xTriticosecale*
35% Bell Beans, *Vicia faba*
28% Peas, *Pisum sativum* or *P. arvense*
1% Canola, *Brassica rapa*
1% Common Yellow Mustard, *Sinapis alba*
5% Diakon Radish, *Raphanus sativus*

Seed Rate:

75 lbs/acre

Ground Preparation: Ideal conditions for germination is seed planted at a depth no greater than 1/4 inch in continually moist soil. The best method for planting is direct seeding with drill equipment. Most soil conditions are conducive for drill planting without ground prep. Very heavy/clay soils may need to be worked up if drill is struggling to penetrate the soil surface. If broadcast seeding is the only option then a fine seed bed is desirable since most of the seeds are very small (like alfalfa). If broadcasting into loose/sandy soil skipping ground prep may be acceptable. If working with heavy/clay soils first use a shallow (3-5 inches) disk or spring-tooth harrow to work up the soil, then plant seed with a broadcaster, then cultipack with a ring roller, which covers the seed by pushing it into the ground. Dragging a piece of chain-link fence behind an ATV or tractor can also be sufficient. The seed should be covered so it can remain moist.

Planting Methods: Use a grain drill or no till drill to evenly distribute the seed in or around your orchard or vineyard. No fertilizer is needed. If able to irrigate, ensure the root zone has available water until the roots reach 6" depth.

Timing: Planting Sept. 10 through Nov. 10, while soil is still warm (above 55°) is an appropriate time to plant any cover crop in California. However, to ensure the canola, mustard, and radish will bloom before almonds it must be sown and germinated before November 1. To accomplish this plant and irrigate in early October. Plant between tree rows, fence lines, fallow areas, where trees are being taken out of production, and in orchard margins or borders.

Emergence/Visible: 6 – 8 days

Bloom: January - May, Canola will be the first to bloom

Management: Ideally it should be mowed or disked after the stand stops blooming. If reseeding is desired leaving plants intact until June may be necessary. This date will vary depending on planting date and local climate.