Growers' Goal

Help build strong, 8-frame+ honey bee colonies by February 1st to meet your almond pollination needs.



Almond growers are a part of the largest pollination event in the world!

About 1.6 million honey bee colonies are placed in 800,000 almond acres for pollination. Prior to and after almond bloom, supplemental forage can provide necessary nutrition to build healthy and vigorous colonies to pollinate your crop.

Suggested Areas to Plant Bee Forage

- Cover crop between rows
- Orchard margins or borders
- Along roads or fence lines
- Along waterways
- In between young, non-bearing trees
- Fallow or unused land

Cover Crop Guide

Prep, Planting, and Timing

Choose the Proper Seed

Plant early blooming *PAm Mustard Mix* to increase water infiltration and organic matter. Plant by **October 5th** to take advantage of the fall precipitation. Plant later blooming *PAm Clover Mix or Vetch* to increase nitrogen and reduce erosion. Plant by November 15th. All seed mixes are appropriate in mature orchards as well as newly established blocks.

Ground Preparation

The best method for planting is direct seeding with drill equipment. If broadcast seeding is the only option then a good, fine seed bed is desirable since most of the seeds are very small. Ideally the soil should be disked, cultipacked with a ring roller, planted and rolled a second time. Caution: 'Grass killing' herbicides will cause phytotoxicity in the PAm Mustard mix.

Planting Methods

Use a grain drill, no-till drill, or broadcaster. We recommend a Schmeiser compact drill specifically designed for orchards. Planting depth should be 1/8 to 1/4 inch.

Establishment Timing

In order to provide early winter bloom for honey bees, plant as early as possible, ideally before the 1st rain. All seeds, weeds or cover crop will germinate during the first rain event. Start growing your cover crop at the same time the weeds do to reduce competition.

Cover Crop Guide

Weed Control and Management

Weed Control

The PAm Mustard Mix grows very fast and will outcompete most weeds in almond orchards. The Pam Clover Mix has a slower rate of growth and might benefit from an herbicide application prior to planting. Any broadleaf, grass specific, or broad spectrum herbicide will work. If weeds are an issue in a particular orchard block or location using herbicide, burning, or solarization before planting will only help the health of the stand. Caution: 'grass killing' herbicides will cause phytotoxicity in the PAm Mustard mix.

Management

Ideally cover crops should be mowed or disked after it 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.



Grower Benefits

In addition to providing needed food resources for honey bees, you may also profit from cover crop planting. There are a large number of benefits to planting forage for pollinators. Planting a bee forage cover crop will:

- Improve soil fertility
- Increase organic material
- Fix nitrogen
- Improve water infiltration
- Suppress noxious weeds
- Conserve soil moisture
- · Increase beneficial insects
- Increase pollinator diversity, attract native pollinators
- Reduce soil erosion
- Assist with decomposition of mummy nuts
- Create visual appeal

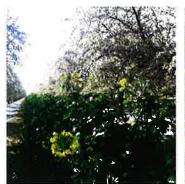
Be part of the solution!

To enroll in the Seeds for Bees project, contact us at Billy@ProjectApism.org

Visit us! www.ProjectApism.org

Seed Mix Options

PAm Mustard Mix





PAm Clover Mix





Vetch

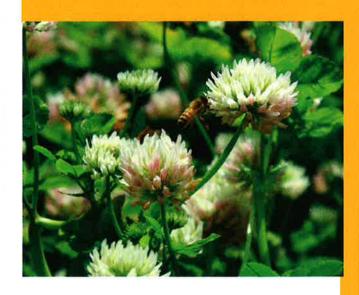






Seeds for Bees

Growers Guide for Planting Cover Crops



PAm is committed to enhancing the health of honey bees while improving crop production.