# 2020-2021 Seeds for Bees Impact Report

Seeds for Bees encourages the use of cover crops to increase the density, diversity, and duration of bee forage in California orchards, farms, and vineyards, while improving soil health. The seed mixes available through Seeds for Bees are designed to bloom at critical times of the year when natural forage is scarce but managed and native bees are active. Seeds for Bees serves the needs of beekeepers and growers while increasing sustainability and biodiversity.



"This is a win-win relationship for the bees and our farming operations." -Martin Hein, Hein Ranch Company



## Bee Health: Tipping Point Indicator for Pollinator and Food Sustainability

Our food supply is inextricably linked to the work and health of industrious insects – pollinators. Yet beekeepers are experiencing historic colony losses at the same time demand to pollinate crops and produce honey is growing. Our native bees are also in decline.

California grows ~80% of the worlds' almonds and ~17% of the produce grown in the US. Most farming has adopted mono-crop practices to increase yield and profitability. This practice has the side effect of creating 'food deserts' for pollinators and has led to diminished soil fertility, less moisture capacity, increased soil compaction, fewer beneficial insects, and increased erosion.

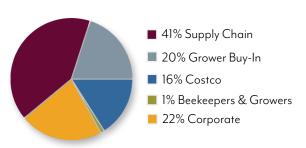
Cover crops are an elegant solution to increase diversity and sustainability in monoculture systems.

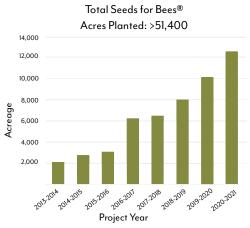
#### 2020-2021 Seeds for Bees Metrics:

- © 201 California growers planted over 12,580 acres of cover crop.
- 5 Seed mixes: PAm Mustard Mix, PAm Soil Builder Mix, PAm Clover Mix, Vetch-Grain, and PAm Wildflower Mix.
- 32 CA Counties were represented by enrollees.
- More than 86% of participants increased their engagement in honey bee Best Management Practices like improved pesticide application practices and better communication with beekeepers.
- Top benefits reported by participants include:
  - · organic matter content
  - improved bee health
  - water infiltration

- · increased nitrogen
- dust control
- · weed supression
- Over 90% will include cover crops in future management plans as a result of their participation in Seeds for Bees.

## 2020-2021 Seeds for Bees Funding Sources





"Cover Cropping with PAm is a no-brainer. Your soil health will improve, with increased organic matter content. Soil erosion will decrease substantially and water infiltration will increase dramatically. The final bonus is you are helping care for the bees and we all know without them there would be not be any almonds."

- Brian Paddock, Capay Hills Orchard

#### **PARTNERING FOR POLLINATORS** IN CALIFORNIA ALMOND ORCHARDS

### Project Apis m.

#### **NONPROFIT PARTNERS** geeds for bees PROVIDES SEEDS FOR GROWERS TO PLANT COVER CROPS THAT PROVIDE ESSENTIAL **NUTRITION** FOR POLLINATORS AND INCREASE **SUSTAINABILITY** OF AGRICULTURE Project Apis m WATER QUALITY **HELPS GROWERS QUALIFY FOR** SOIL HEALTH BEE FRIENDLY FARMING CERTIFICATION ·BIODIVERSITY **BEE FRIENDLY FARMING** CERTIFICATION PROVIDES VISIBILITY AND **VERIFIES** THAT POLLINATOR-FRIENDLY PRACTICES ARE BEING IMPLEMENTED

#### **INDUSTRY PARTNERS** CASP (CALIFORNIA ALMOND SUSTAINABILITY PROGRAM) BEE+ SCHOLARSHIP INCENTIVES TO PLANT SEEDS FOR BEES® AND BECOME BEE FRIENDLY FARMING CERTIFIED **BEST MANAGEMENT**

# aimonds **PRACTICES**

FOR HONEY BEES POLLINATING ALMONDS & FOR PLANTING COVER CROPS IN ALMONDS





WATER FOR BEES 800+ CLEAN WATER BUCKETS FOR BEES DISTRIBUTED TO BLUE DIAMOND GROWERS

#### SUSTAINABILITY INCENTIVE **PROGRAM** 82 BLUE DIAMOND GROWERS HAVE

PLANTED OVER 4,600 ACRES OF SEEDS FOR BEES COVER CROPS



#### **SUPPLY CHAIN PARTNERS**

SUSTAINABILITY & POLLINATION

**SECURITY** 

FNVIRONMENTAL ·SOCIAL

•ECONOMIC

**SOURCING ALMONDS** FROM BEE FREINDLY FARMING CERTIFIED ORCHARDS

FOODS **RE-INVESTING** IN COVER CROPS AND HABITAT THROUGH SEEDS FOR BEES

> **COMITTED** TO A MORE SUSTAINABLE SUPPLY CHAIN



# Strategic Program Advances in 2020-2021

- Increased partnership with industry stakeholders including Costco, the Almond Board of California, Pollinator Partnership and Blue Diamond Growers.
- ▶ Planted 30 acres of permanent monarch habitat in partnership with Monarch Joint Venture.
- ► Growers purchased more than \$120K of seed - 71% more seed than last year, increasing program impact.
- Working increasingly with supply chains to make a bigger impact on bee health in agriculture.
- Improved resources for growers: (www.projectapism.org/seeds-for-bees)

#### Contact Us

Billy Synk Director of Pollination Programs Billy@ProjectApism.org 916-216-2227





