

# Planting for Pollinators

#### **ON THE HAWAIIAN ISLANDS**

It is important to provide a food source for pollinators in your outdoor space. Some common ornamentals, although attractive to us, do not provide food for bees such as: bird of paradise, plumeria, ginger and bougainvillea. There is no reason to remove these flowers from your garden, but we hope you consider adding a few bee-friendly plants as well. Try your best to use native plants too! Below are a few native and non-native plants that bees as well as other pollinators enjoy.

#### Keep in Mind When Planting

- Use a variety of plants to ensure there is always something in bloom and that you're providing food for a variety of pollinators.
- Plant the same species in clumps. The larger the display, the more attractive the patch is to pollinators.
- Avoid planting hybrids which tend to have less pollen and nectar.
- Reduce pesticide and herbicide use or use organic sprays.
- If you must use pesticides, read labels carefully and apply in the evening when most pollinators are not active.
- Leave dead branches on the ground. Solitary bees use these areas as nesting sites.

#### Hawaiian Plants & Trees





OHIA LEHUA tree can be found in almost every native, Hawaiian ecosystem.



ILIMA is a ground cover found on the coast of all the Hawaiian Islands. Often found growing near the shoreline.



NONI is an evergreen tree that grows along Hawaii's beaches and forested areas up to 1,300 feet.



PUA KALA (NATIVE POPPY) can be found on the parched coastal plains and dry leeward mountain slopes.



NAUPAKA can be planted in practically every form of landscape and requires low maintenance.



WILIWILI is found on coastal-lowland dry forests on all the main islands.

### Non-native Trees & Vines



There are many non-native plants that provide an excellent source of food for pollinators and are also non-invasive. Fruit trees, especially, offer an exceptionally large source of food. Although not all fruit trees depend on insects for pollination, in most cases the fruit yield increases about 20% when insects are present to assist in pollination.



COFFEE TREES grow at a variety of elevations and have a short bloom season. Coffee does not rely on bees for pollination but can produce more fruit if bees are present.



AVOCADO TREES are an excellent source of food for bees and dependant on bees and other insects for pollination. They can grow in a variety of elevations in Hawaii.



MACADAMIA NUT TREES have a fairly long bloom season. They primarily self-pollinate but produce more nuts when pollinated by bees.



PALM TREES are a great source of food for a variety of pollinators. Although they do not depend on insects for pollination, it does increase their yield.



HELIOTROPE TREE does not bear fruit. It is often found in the coastal areas and provides nectar for the endangered Hawaiian yellow-faced bee.



PASSION FRUIT is a fast growing vine that requires bees for pollination. It does best with lots of water and full sun.



CITRUS TREES are an excellent food source for bees. Although most species like lemons, limes and grapefruits do not depend on bees for pollination, there is a growing number of citrus varieties which require pollinators because they are self-incompatible such as the Pummelo and Mandarin.



MANGO TREES are not pollinated by honeybees, but smaller insects like flies and ants. They do well in hot, dry leeward areas that receive less than 60 inches of rainfall annually.

#### Herbs, Fruits & Vegetables



The following crops must be pollinated by bees to produce fruit or seed: cucumbers, pumpkin, squash, watermelon, and berries. Additionally, these vegetables provide a food source for pollinators (although they do not require bees for pollination): beans, cabbage, cauliflowers, eggplant, kale, lettuce, sweet potato, and peppers. Please keep in mind that there are a number of hybrids that are 'parthinocarpic'. These varieties do not need to be pollinated and will not produce a viable seed. They are good for growing in areas where the availability of pollinators is limited such as greenhouses.

Many herbs are a great source of food for bees including: mint, lavender, parsley, dill, sage, rosemary, basil, oregano, and thyme. Herbs do well in containers or window boxes making them a great option for people who do not have much outdoor space.

## Invasive Species



Be aware that some exotic plants that are loved by pollinators may be invasive species and can spread to native ecosystems. Lantana, False heather (also known as Hawaiian Heather) and wedelia (a popular ground cover) are considered invasive.