

## **DETERMINATION OF THE POLLINATION ACTIVITY OF HONEYBEES (*Apis mellifera*) IN THE AVOCADO TREE POLLINATION IN THE CENTRAL ZONE IN CHILE**

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Most growers have implemented the use of bees to their orchard management in order to get a high avocado production in Chile. By reason of high demand of pollinating bees, some requirements have been established for hives, such as numbers of bees and activity of the foragers. The avocados flowers are visited by a great diversity of insect species; 39 species have been identified in La Ligua and 30 in Quillota, being the majority Hymenoptera, Diptera and Coleoptera. In accordance with a model that considers number of bees on the flowers and frequency of visits, the honeybee (*Apis mellifera*) was considered to be the responsible of 88% of avocado pollination in Quillota and 82% in La Ligua. In another trial, it was established that honey bees forage a low amount of pollen in their pollen baskets, reaching up to 6% of the total. This means that bees that have active activity in avocado pollination collect nectar but not pollen. Avocado flowers are attractive for bees and sometimes it is possible to harvest avocado honey. The effect of the distance from hives on the bees found on the avocado flowers was evaluated, detecting no differences between the number of bees that visit those flowers near the hives up to a distance of 300 meters.