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Title of presentation: Honey bee behavior and how they forage in avocados

Abstract: In areas where avocados are grown commercially and native pollinators are absent, honey bees (HB) are used successfully and almost exclusively for its pollination. However, inadequate pollination is still common in avocado, even when bee hives are placed in an orchard, and this is certainly related to the HB's preference for flower species other than avocado. A major cause for the low attractiveness of avocado flowers is nectar composition and especially the high potassium level in it. Our results show that there is a genetic background for HB preference to avocado flowering and that we can select and breed HB lines with better preference for avocado flowering. Another major limitation in avocado pollination is its dependence on cross-pollination, the change in the way growers combine pollinizers in the Israeli avocado industry to improve HB mobility between cultivars will be discussed as well.

Bio: Arnon is a Senior Scientist in the Institute of Plant Sciences, The Volcani Institute. For the last 30 years, Arnon have been working continuously on plant-pollinator interaction. His research focus examines both the pollination demands of horticultural crops and on the nutritional demands of pollinators. Arnon teaches an academic course in Bar Ilan University on pollination ecology. He also chairs sessions on crop pollination in international symposiums and has published more than 200 papers in local and refereed journals, related to pollination and other relevant horticultural topics.

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