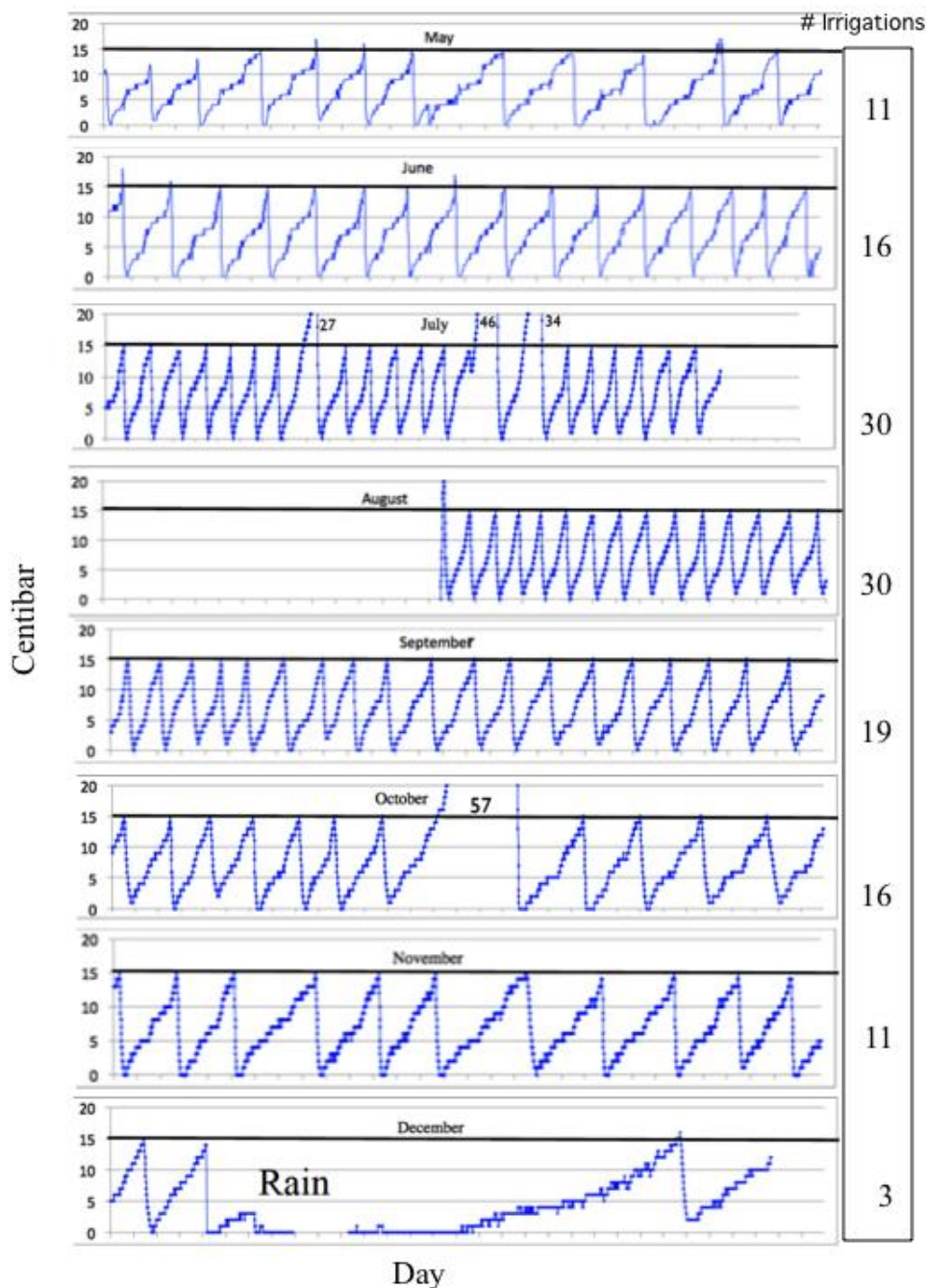


Autonomous Irrigation of Banana with the Tevatronic irrigation controller

Dr. Isaac Klein

May 2013 – December 2013

A TevaSens irrigation controller was installed in May 2013 in a banana orchard in the Bet Oren ranch, at the coastal plain of Israel, near Haifa. The controller was set to irrigate at a threshold of 15 centibar to a depth of 15 cm. The irrigation in the banana ranch was irregular until the end of July (the drip system was rearranged), nevertheless the tension was maintained steady until the end of December, except in 3 cases in July and once in October:



The number of irrigations increased as temperature and evapotranspiration rose gradually until mid-summer in July-August. Thereafter the number of irrigations decreased gradually. Irrigation stopped autonomously when it rained in December, until water in the soil was depleted.

After the irrigation became steady, during July, the TevaSens irrigated 26% less as compared to the commercial irrigation:

