

## SUMMARY

### **Estimation of the degree days on phenological stages of three varieties of habanero chile (*Capsicum chinense* Jacq.) at Ejido el Tarachi, Alvarado, Veracruz**

Habanero chile is among the seven most cultivated vegetables in the world. This crop is one of the most profitable vegetables produced in appropriate environments and with good agronomic management. The state of Veracruz presents optimal conditions for its production. However, it must be known exactly how these conditions intervene in the development of the crop to spread its production. With the objective of determining the phenological stages of three varieties of habanero chile by means of the estimation of the degree days of development. The present work was carried out in Ejido el Tarachi, municipality of Alvarado Veracruz. Three varieties of habanero chile (Mayan Ba'alche, Mayan Kisin y Mayan Chac) were evaluated under an experimental design of five randomly selected blocks with five replications where the treatments were the varieties, the experimental unit was 30 x 25 m and consisted of 30 plants per experimental block and three plants per block. The measured variables were: emergency days, plant height, plant ramifications, days at flowering, days at maturity, days at harvest, yield per plant and yield per surface. The results showed the phenological stages that were defined as germination, transplantation, flowering, production and harvesting. With this data, heat units for each one of the varieties was calculated. The Mayan Kisin variety required 1487 GDD to complete its productive cycle, equivalent to 109 days; this indicates that it is the earliest variety for this area under open field conditions. This variety was followed by the Mayan Chac and finally the Mayan Ba'alche variety. Although, the Mayan Chac variety and the Mayan Ba'alche variety showed higher yield. This information will allow planification of phytosanitary controls, harvest dates or prediction of important data as expected performance, among others.

Key words: Phenological stages, varieties, degree days of development, heat units