

Meeting September 9 - 10, USDA-ARS Sub-Tropical Horticulture Research Station, Miami, Florida

Those present at the meeting; Peter Toivonen (Canada), Ricardo Goenaga (USA), Jorge Osuna-García (Mexico), Priscila Henriquez (Executive Secretary, PROCINORTE).

A review of the activities for 2019 was conducted.

The work with development of a robust model for predicting dry matter in Hass avocado has culminated in a publication that was submitted to the journal *Fruits* in September 2019. Training workshops were held in Mexico to familiarize the industry with the use of the spectrometer for predicting dry matter in the field and packinghouse. The work was undertaken by both Dr. Samuel Salazar-García and Dr. Jorge Osuna-García in cooperation. The Mexican marketing group APEAM is currently comparing and evaluating the spectrometer method against the existing standard method. Felix Inc., the manufacturer of the spectrometer used in this study, has been providing webinar training on the use of the instrument for dry matter prediction in Hass avocado.

Development of the models for predicting maturity in Mexican mangoes has culminated in the development of a draft publication for submission to *HortTechnology* and this will be submitted to the journal before the end of this year. Felix Instruments Inc. has been hosting webinars on the use of the spectrometer for determination of dry matter in mangoes, some of which includes the work of the Task Force as performed under Dr. Osuna-García's supervision.

The upcoming plan for Dr. Toivonen (Canada) to retire was discussed. The impact of this was discussed but no final conclusion was decided. After the meeting, in October, ongoing discussions between all task force members (Drs. Toivonen, Goenaga, Salazar and Osuna-García) resulted in an understanding that because of the limitations imposed to the taskforce which prevents members from conducting additional research to benefit end-users, it was time to close the Task Force by the end of 2019.

Priscila Henriquez brought the task force up to date with PROCINORTE and IICA activities. She indicated that the Tree Fruit Task Force had achieved excellent results and was developing promotional materials to highlight the success of PROCINORTE through the achievements of this group.

On the second day of the meeting a field trip was taken to Brooks Tropicals, Homestead, FL. This company is a large marketer of West Indian or Caribbean type of avocados. A Felix F751 spectrometer (lower cost unit designed to be used by industry) was loaned by the Felix Instruments. The Task Force engaged executives of the company and an University of Florida faculty member discussing the activities and progress of the Task Force in developing a predictive model for dry matter in Hass avocado. The company presented samples of their West Indian avocados to have their dry matter determined using the Hass model that was loaded into the instrument. The values obtained by the instrument reinforced the interpretations that the technical personnel of the company has made in regards to the maturity of their avocados. The Florida industry does not use dry matter in their quality evaluation at this time, they generally use size and weight to make decisions, yet the dry matter predictions aligned with their current interpretation of maturity. The final conclusion from the company was that this instrument could be of great use in market planning because the data could be uploaded to FruitMaps (a free interactive harvest mapping program provided by Felix Instruments on their website) in order to

monitor the progress of maturity in their different varieties and orchards. The main question was whether the values generated by the predictive model were accurate for their varieties – more work required to be done to validate the model or to develop a model for West Indian avocados.

The meeting was concluded at 5:30 pm on September 10, 2019.