Online Avocado Decision Support Tools Available

he online California Avocado Decision Support Tools System (DST) is once again available. The system is designed to help California avocado growers make decisions concerning fertilization and irrigation to help them maximize yield.

The DSTs can be accessed through CaliforniaAvocadoGrowers.com or CaliforniaAvocadoGrowersDST.com. Growers will need their CAC grower ID number to create an account. You can find your grower ID number on official California Avocado Commission (CAC) mailings or may contact CAC at 949-341-1955 for assistance. If you created an account while the system was active last summer, your login credentials are still valid.

The DST site houses the California Avocado Grower System (CAGS), which currently has two tools available for use:

Yield Potential Calculator. Developed based on years of plant tissue sampling research conducted by the University of California, this tool will generate a report indicating how much reduction from maximum yield a nutrient deficiency or excess is causing and a report ranking how critical each nutrient deficiency or excess is.

Irrigation Calculator. Using California Irrigation Management Information System (CIMIS) data and specific grove information, this program generates irrigation system-specific run times by week.

To set up your account, you will need to enter grove identification information. Because you will enter leaf analysis information for each grove, you should define your groves as whatever unit from which you collect your leaf samples. For example, if you collect samples from blocks within your grove, each block should be defined as an individual grove.

Yield Potential Calculator

To utilize this tool, select the grove you would like to run the calculator on and complete the following information under the Inputs tab:

- Grove yield lbs/acre
- Off or on yield for the grove
- Scion and rootstock varieties

Next, enter the leaf tissue analysis results, including the date of the sample. If the results do not have a value for one of the nutrients, just leave it blank — do not enter a 'O' as this will lead to an error. Finally, click on the Reports tab to see the yield impact potential results and a ranking of the nutrients based on how critical they are to deficiency or excess of yield.



Irrigation Calculator

To start this process, select a grove from your profile and then choose which weather data you would like to use. You can choose California Irrigation Management Information System (CIMIS) data from a nearby station or use spatial CIMIS data for your specific location. If you choose the spatial option, you will need to enter your grove's latitude and longitude.

Next, enter the age of your grove and its tree spacing. Finally, enter your irrigation system information, including types of emitters, typical irrigation set run times, number of emitters per tree, emitter output and the system's distribution uniformity.

When you click the Weekly Inputs tab, you will see the calculated run times for that week and the calculated available soil moisture. The Reports tab will provide you with a cumulative seasonal irrigation summary.

Reports for both tools can be downloaded as PDF or Excel files. For more complete information about the DSTs, read "Avocado Decision Support Tools Now Available" in the Summer 2018 issue of From the Grove.