



CCROP Tools

CCROP tools utilize the plant growth simulation model CCROP (Container Crop Resource Optimization Program) to evaluate how selected container production practices would likely effect crop production including plant growth, demand for irrigation water and plant nutrients, and volume and nutrient content of runoff. Check out [model concepts](#) for more information about CCROP.

- There are **4** types of CCROP tools:

1. **GROWER TOOL** This tool is streamlined for evaluating practices which have a major impact on profitability and resource conservation. The GROWER tool runs a simulation based on one set of input conditions. The output is detailed and includes daily time-plots as well as summary plots and tables.

2. **COMPARISON TOOLS** This set of tools allows the user to run 'what-if' experiments to evaluate two or more levels of a given factor or practice. For example, the user can evaluate the effect of four different fertilizer rates or the effect of three different irrigation schedules. For these comparisons, all other production practices selected by the user are held constant. The output includes summary plots and tables (no daily time-plots).

3. **TECHNICAL TOOL** For technical users who might want to change any input parameter in the CCROP model. Output is in metric units.

4. **REAL-TIME TOOL** Tracks the day-to-day progress of a crop providing the user with a recommended amount of irrigation water to apply each day.

- To use these tools, the user selects critical management practices and submits these inputs to be run by CCROP. Graphs of daily output help the user see how plant growth and nutrient and water requirements change during a production cycle. Bar charts and tables which summarize season totals are also provided to help the user evaluate cumulative effects over the production cycle e.g. total irrigation, total runoff, total runoff N and P, etc.

- Users set up an account to manage simulation runs. Simulation runs can be named and saved. Default input values can be kept and preferences related to screen resolution, font colors, etc. can be selected.