

CropManage, Web-Based Software for Irrigation and Nitrogen Management in Lettuce



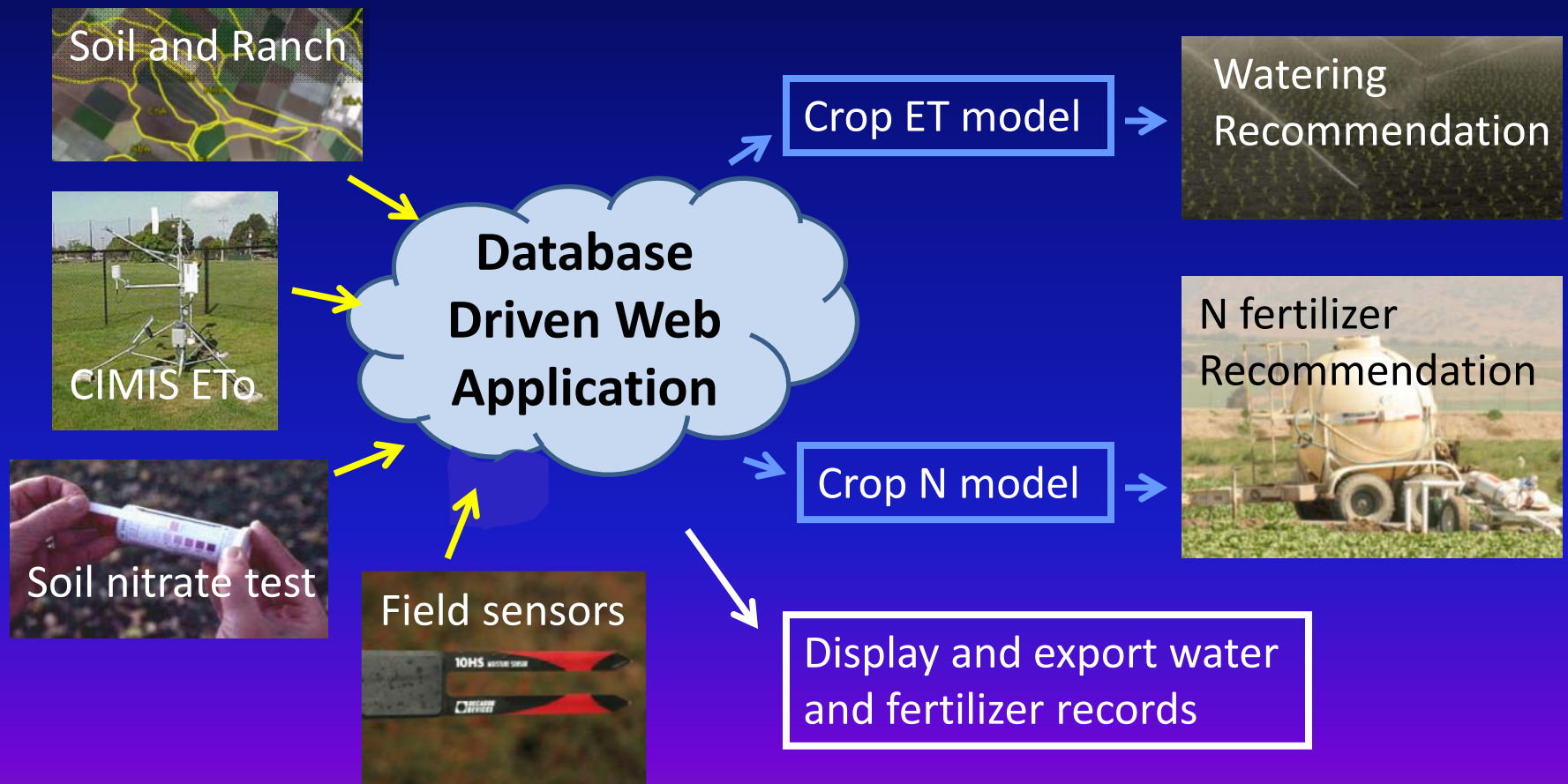
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CropManage:

Assist growers in making decisions on irrigation and nitrogen fertilizer management

- ✓ Accessible from smart phone, tablet computer, desktop computer
- ✓ Guide irrigation schedules using CIMIS weather data.
- ✓ Guide nitrogen fertilization decisions using field-specific information.
- ✓ Maintain and share irrigation, fertilizer, and soil test records for multiple fields and farms.

Integrate information from multiple sources



Decision support using crop models

<https://ucanr.edu/cropmanage>

CropManage

About CropManage

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To login enter your e-mail and password below.

E-mail Address

mdcahn@ucdavis.edu



Password

Password

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Ranch Summary

CropManage

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Ranch/Field: USDA-ARS Spence

Plantings

Showing ALL Plantings

Planting	Wet Date	Harvest Date	Lot	Action
CSUMB broccoli trt1	7/27/2012	10/26/2012	4N	View View Details Edit
CSUMB broccoli trt2	7/27/2012	10/26/2012	4N	View View Details Edit
CSUMB broccoli trt3	7/27/2012	10/26/2012	4N	View View Details Edit
CSUMB trt1	5/4/2012	7/10/2012	4N	View View Details Edit
CSUMB trt2	5/4/2012	7/10/2012	4N	View View Details Edit
CSUMB trt3	5/4/2012	7/10/2012	4N	View View Details Edit
mOasis Head Lettuce	8/3/2012	10/17/2012	4N	View View Details Edit
Michelmore 130%ET High N	6/22/2012	8/25/2012	5N	View View Details Edit
Michelmore 50%ET High N	6/22/2012	8/25/2012	5N	View View Details Edit

How is a N fertilizer recommendation generated?

Recommended
fertilizer N =

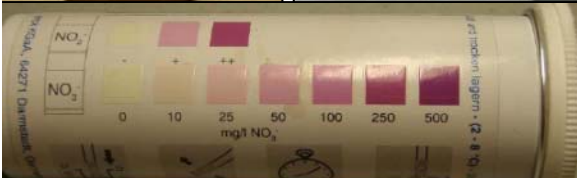
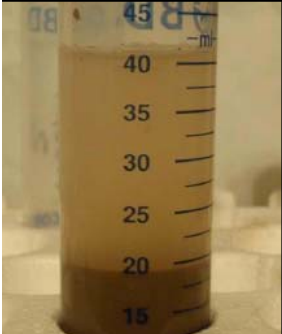
Future Crop N uptake

- (residual $\text{NO}_3\text{-N}$ - threshold $\text{NO}_3\text{-N}$)

- Soil N mineralization potential

- Irrigation water $\text{NO}_3\text{-N}$

Soil $\text{NO}_3\text{-N}$ by 'quick test' or lab analysis



Fertilizer Summary

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Fertilizer Date	Soil NO ₃ -N (ppm)	Crop Stage	Fertilizer N Recommended (lb N/acre)	Cumulative N Uptake	Fertilizer	Applied N (lb N/acre)	Applied Fertilizer
7/1/12	12.50	Planting	0.0	0.23	3.5-12-14	15.0	36.9 gal/acre
7/24/12	15.00	1st drip fertigation	31.2	4.32	28-0-0-5	24.8	8.0 gal/acre
8/10/12	15.00	2nd drip fertigation	55.8	31.90	UAN28	56.7	19.0 gal/acre
Totals			86.9			96.5	

[New Fertilizing](#)[First](#) [Previous](#) **1** [Next](#) [Last](#)Show [▾](#) Rows[Show / Hide Table](#) [▲](#)

We have much development work to do ...

