

Online Fertilization Guidelines for Major Crops in California

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Background

Numerous research projects have investigated different aspects of fertilizer management for crops grown in California. However, a comprehensive, research-based overview of fertilizer management in California is missing for many crops.

In collaboration with CDFA-FREP we are synthesizing peer reviewed journal articles and research reports. The resulting fertilization guidelines are available online in a user-friendly interface.

The guidelines include information about:

- Fertilization (rate, time, placement, and material)
- Deficiency symptoms
- Soil testing
- Plant tissue analyses

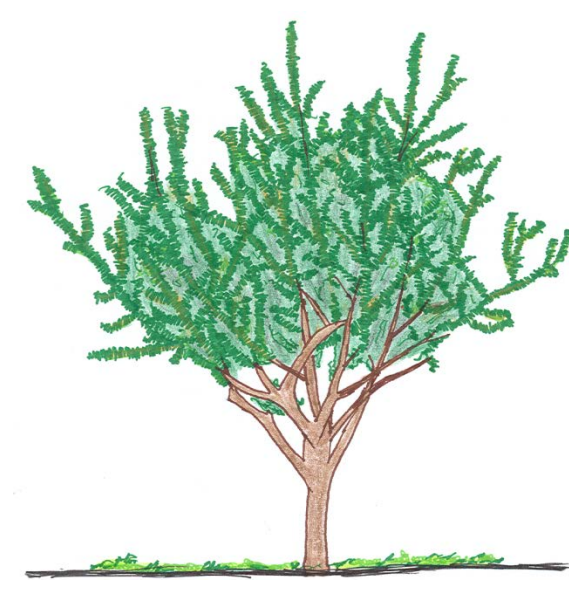
The guidelines provide a basis for in-depth discussions with local farm advisors or fertilization experts about site-specific adjustments.

Crops Currently Available

Cotton



Almonds



Walnuts



Wheat



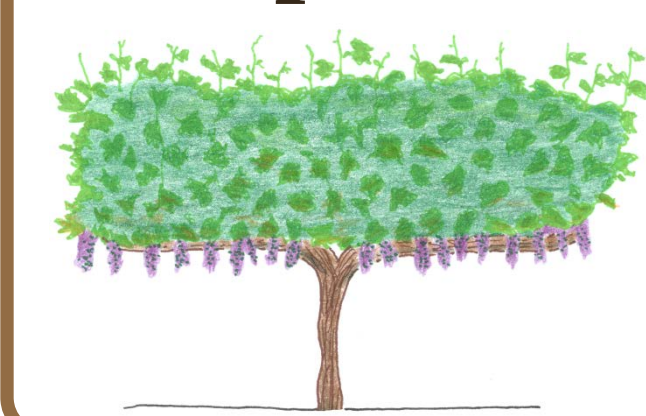
Corn



Broccoli



Grapevines



Lettuce



Rice



Tomatoes

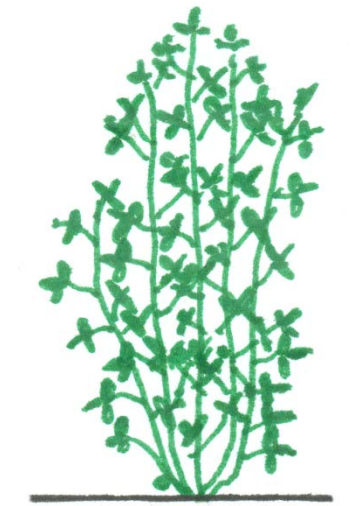


Strawberries



Coming soon

Alfalfa



Coming soon

Additional crops will be added on a flow basis

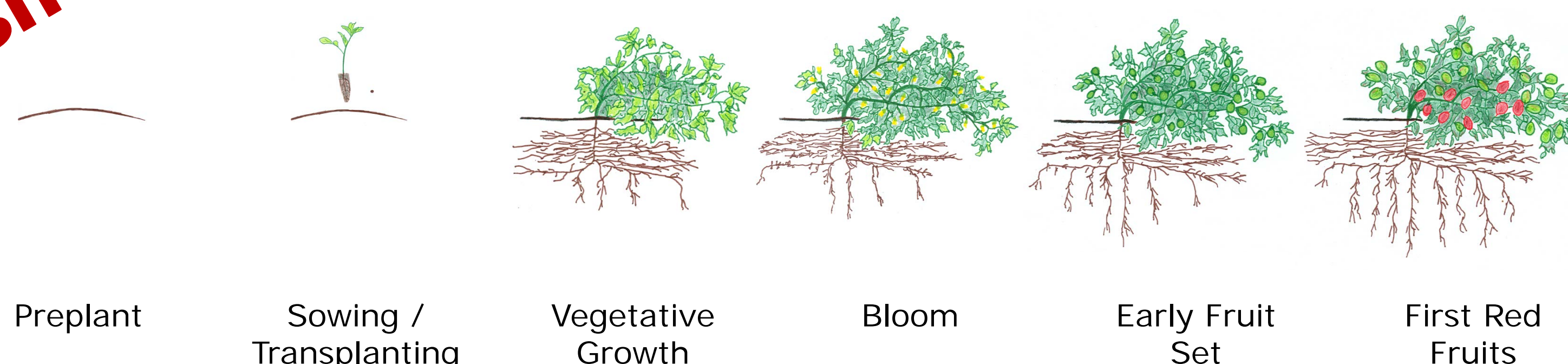
<http://apps.cdfa.ca.gov/frep/docs/guidelines.html>

Processing Tomatoes Fertilization Guidelines

Funding provided by:



Screenshot



Nitrogen
(N)

Soil Test

Leaf Analysis

Preplant N

Starter N

Soil Applied N / Foliar N

Phosphorus
(P₂O₅)

Soil Test

Soil Applied N / Foliar N

Application Rate

Mode of Application

Fertilizer Type

Time of Application

Potassium
(K₂O)

Acknowledgements

For drip-irrigated processing tomatoes, Hartz and Bottoms^[N4] found that a seasonal rate of approximately 175 lbs N/acre is adequate to maximize fruit yields in most soils. Contact your local [farm advisor](#) for more information.

Krusekopf and coworkers^[N10] carried out a study in the Central Valley in ten furrow irrigated fields. A response to N fertilization was observed in only four fields. In the responsive fields, no significant yield increase with sidedress N application rates above 100 lbs/acre was observed. The total available N in these fields, which included the pre-sidedress nitrate-N in the top 2 feet of the profile and the sidedress N, averaged 170 lbs/acre ^[N10]. Based on this and other studies, the recommended seasonal N application rate for furrow irrigated tomatoes is 100-150 lbs N/acre ^[N8].

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