

Scouting Notes:

Zinc (Zn) and Boron (B) are Essential for Almond Production

With spring fast approaching and almonds trees leafing out it is time to start preparing for foliar application of zinc and boron on almonds.

Zinc is essential to many processes such as cell division, protein synthesis and auxin synthesis in growing points (flowers and shoots), and bloom is the time of the most growing points in a tree. Boron is essential for cell wall synthesis and division. Boron fertilization improves fruit or nut set compared to deficient plants in many crops, but only if applied in time to get B into buds at bloom. Both Zn and B can be absorbed into leaves and translocated within almond trees.

Zinc deficiency produces "little leaf" symptoms, with trees showing summer leaf levels of 15 ppm Zn or less considered deficient. Trees with hull B levels below 80 ppm B at harvest are thought to be deficient, but almond yield may benefit from B application if hull levels are below 120 ppm B. **Boron deficiency is often expressed as reduced nut set.**

Foliar applications of both Zinc and Boron prior to bloom during pink bud stage are highly effective in improving almond pollination and nut set. Additional applications of zinc post-bloom during leaf-out will help establish a healthy canopy.

On spring foliage, **BRANDT[®] Manni-Plex[®] Zn** applied at a rate of 1-2 quarts/acre and **BRANDT Smart B** at a rate of 1 pint/acre are very effective and supplying zinc and boron.



Zn Deficiency (David Doll)



B Deficiency (sacvalley orchards.com)