MINERAL-NUTRIENT DEFICIENCY SYMPTOMS IN PISTACHIO

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Nitrogen

Delayed bud break; short, thin and reddish bark shoots; small, scanty, normal-shaped leaves; pale-green leaves with reddish veins and petiole; leaves becoming reddish to yellow with time; early senescence.

Phosphorous

Delayed bud break; dull-green foliage color; light-brown necrotic spots (leaf-burn) close to the margins of lower leaves on the shoots, enlarging later in the season to cover most of the leaflets; later, these leaves dehydrate and shed.

Potassium

"Leaf-scorch"; pale-green leaves with marginal fading and interveinal chlorotic spots; later, margin becomes scorched; pale-green to whitish petioles.

Calcium

Severely reduced shoot growth; leaves are few, small and roundish; leaves cupped with marginal chlorosis; dehydration and shedding of basal leaves; shoot dieback.

Magnesium

Sparse foliage; pale-green leaves; marginal chlorosis becoming necrotic and light-brown in color; small, dark-brown spots appear in the blade as scorching advances; basal defoliation.

Boron

"Crinkle-leaf"; delayed bud break; short internodes, "rosetting", bushy type appearance; twisted, cupped, wrinkled, brittle, distorted, irregular-shaped leaves; death of apical buds and severe shoot-dieback.

Zinc

"Little-leaf"; delayed bud break; short internodes; tufted appearance; wavy leaf margin; reddish petioles, leaves and shoot bark.