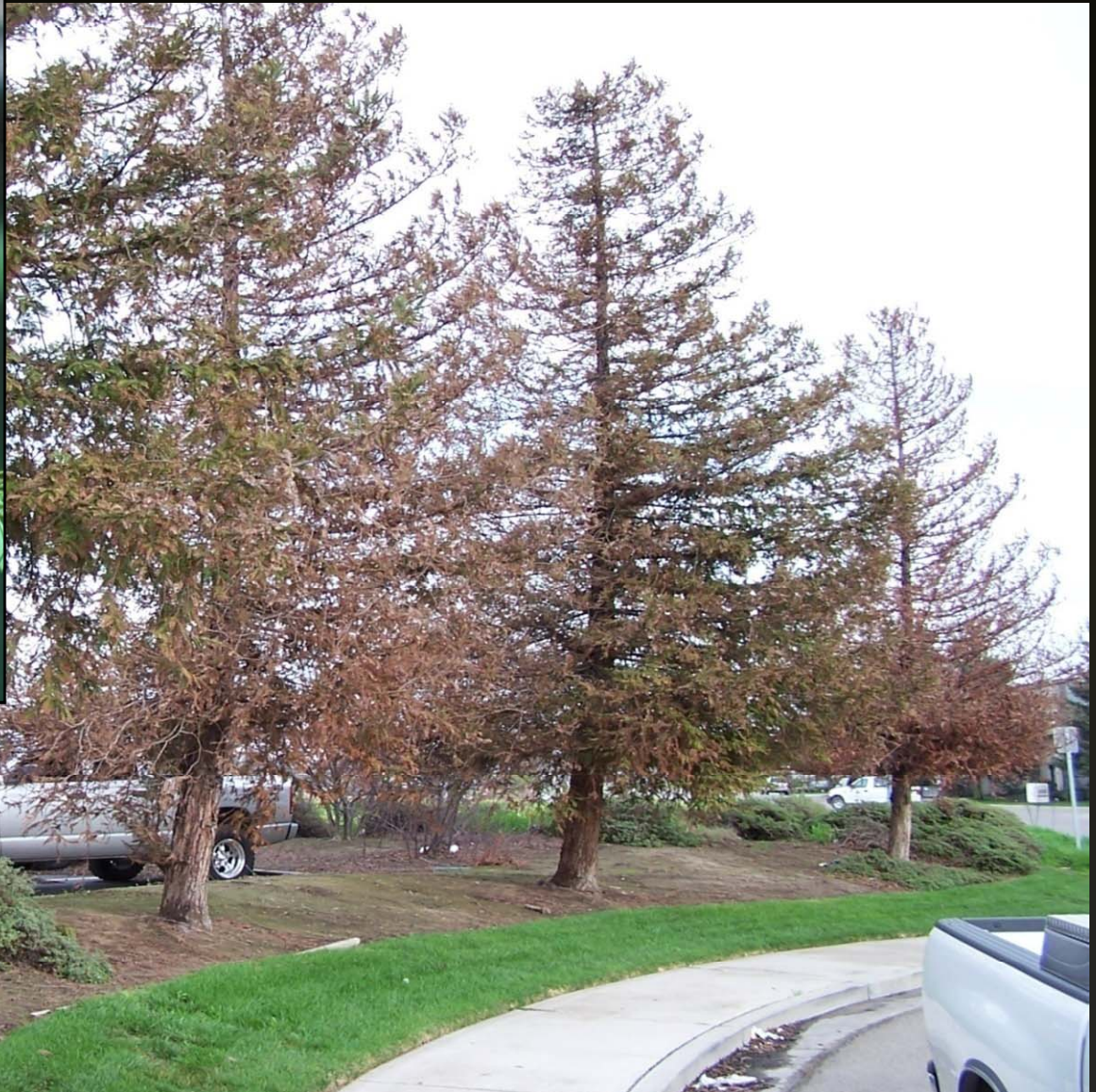


Agents of Disease – Abiotic Disorders

Deficient Moisture



Agents of Disease – Abiotic Disorders

Lack or Excessive Light



Damage done to avocado due to lack of light (yellow fruit)



Excessive Light - Rhododendron

Agents of Disease – Abiotic Disorders

Extremes in Temperature



Frost Damage on Azalea



Frost Damage on Zucchini



Heat Canker on Ash



Agents of Disease – Abiotic Disorders

Wind Damage



Tulip trees and damage from
wind-blown salt



Monterrey Pine

Agents of Disease – Abiotic Disorders

Mineral Deficiencies/Toxicities



Iron Chlorosis - Deficiency



Potassium Deficiency



Salt Burn - Toxicity

Symptoms produced by deficiencies are dependent upon the function of the element in the plant

Accumulations of minerals in a plant can lead to cell death and plant growth abnormalities

Agents of Disease – Abiotic Disorders

Air Pollution



Ozone Pollution Damage

Note: damage scattered around leaf



Sulfur Dioxide Pollution Damage

Note: damage on outside, moving in

Accumulation of pollutants and their absorption into plants cause plant damage

The toxic accumulation of pollutants causes cell death and disruption – leading to symptoms

Stressed plants are more susceptible to other diseases, and pests

Agents of Disease – Abiotic Disorders

Chemical Injury



2,4-D Damage on Almond

Herbicides do some weird things to plants
– if the plant looks abnormal – think
virus/herbicide



Simazine Damage on Almond



2,4-D Damage on Almond

Agents of Disease – Abiotic Disorders

Mechanical Damage



Bradford Pear



Agents of Disease – Abiotic Disorders

Mechanical Damage



Self-girdling or
“J-Root” caused
by improper
planting techniques

Agents of Disease – Abiotic Disorders

“Act of God” Damage



Lightning Damage



Hail Damage to leaves



Cherry splitting caused by rain

Lightning, hail, heavy rain, etc.