CHLORIDE AN ESSENTIAL NUTRIENT

17
Cl
CHLORIDE
35.45

Chloride (Cl) is a micronutrient essential for plant development. It is required in small quantities by all crops.

Cl IN SOILS

- Cl salts are soluble, and are found in water held in the soil.
- Cl is mobile. It does not bind to organic matter or clay and it can easily be washed out of the soil by rainfall or irrigation.

92% of world potassium fertilizer consumption in agriculture is in the form of potassium chloride (KCl).

DEFICIENCY SYMPTOMS

- Wilting of leaf tips
- Curling of leaflets
- Motting, bronzing and chlorosis of leaves

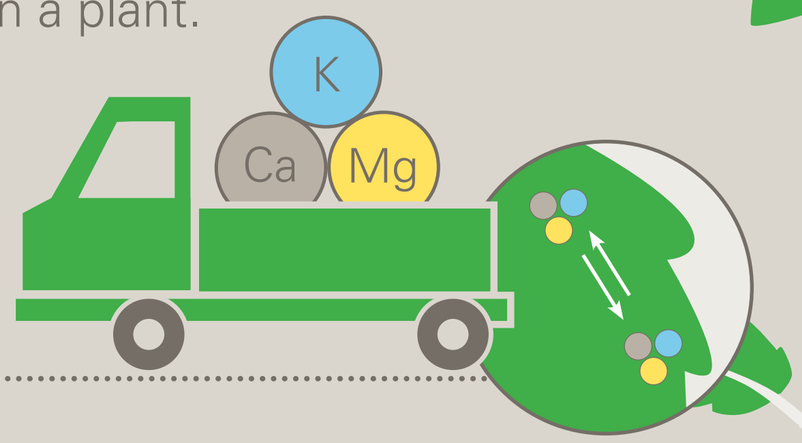
Chloride deficiency symptoms in wheat by Dr R. Engel, MSU, USA

Cl IN PLANTS

- Cl concentration in plant tissue is 0.9-10 mg/g dry matter.
- Cl additions are an important part of nutrient management in COCONUT & OIL PALM.

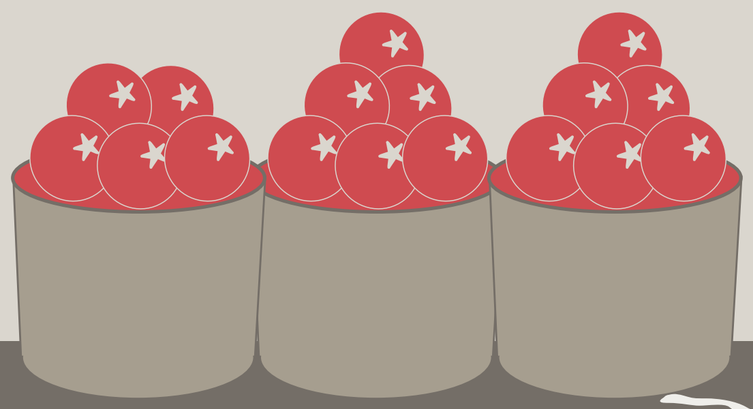
TRANSPORT OF NUTRIENTS

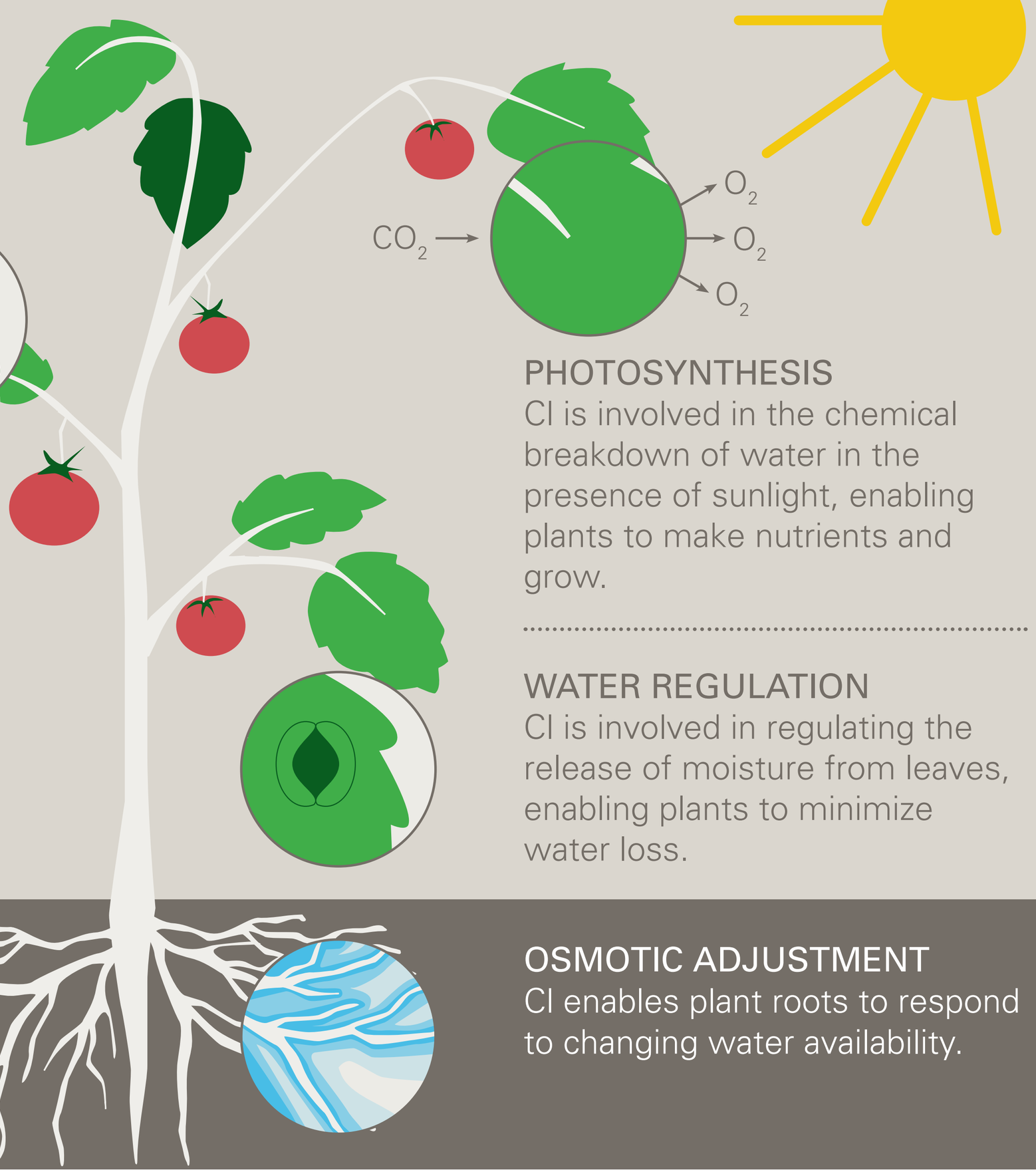
Cl supports the transport of nutrients such as calcium, magnesium and potassium within a plant.



QUALITY

Cl improves quality and taste, and helps to increase shelf life and resistance to pests and diseases.





PHOTOSYNTHESIS

Cl is involved in the chemical breakdown of water in the presence of sunlight, enabling plants to make nutrients and grow.

WATER REGULATION

Cl is involved in regulating the release of moisture from leaves, enabling plants to minimize water loss.

OSMOTIC ADJUSTMENT

Cl enables plant roots to respond to changing water availability.

INTERNATIONAL POTASH INSTITUTE

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