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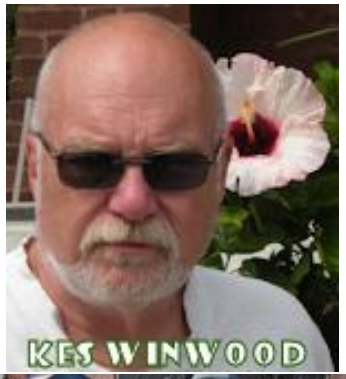
L Clay McGee



Vocal Coach

Clay McGee
January 25th, 1947 ~ January 16th, 2013
~ his spirit lives on in all the lives he touched so deeply

~ Article by Shyamala Madappa

It is so cruel to lose someone so dear. Time may dull the pain, but we will never ever forget our dear Clay.

No farewell words were spoken, no time to say goodbye, he was gone before we knew it, and only God knows how and why. Those we love can never be more than a thought apart. For as long there is memory, they will continue to live in our hearts. When someone you love becomes a memory, the memory becomes a treasure. We are going to treasure his memory with us throughout.

As a proverb goes; Good men must die, but death cannot kill their names.

By his own admission Clay was a very spiritual person, but not religious. He followed Vedanta and Buddhism in his daily life. He studied religion extensively for about 45 years. He used to see so much of God in nature and in the people around him. He was hoping to achieve Moksha in his lifetime, which I am sure he has achieved. He used to follow the teachings of Paramahansa Yogananda and used his Kriya meditation methods.

It is Clay's belief and experience that there is only one light, shining through all of us, so he knows that he, his sisters and brothers are in the human race. He used to feel the same for the animals around him.

SPECIAL POINTS OF INTEREST:

"Clay became very good friends with many through his love of plants and flowers, dogs and the life-energy we share. He was so generous with everything he had, always giving to and thinking of others. He taught us so much about plants, relationships with others and relationships with ourselves, spirituality and life in general. Clay was such an intelligent person and so very wise, truly wise beyond his years and perhaps even beyond his lifetime. He was a very, very special person and we all loved him greatly."

Clay lived his life by what he believed and it is the true purpose and reason for our being "here". He lived to care deeply about others and to let them know that he cared for them. He hybridized day lilies and named one after all of his family members when his mother and father were still living. Clay used to write; I am lucky having my friend Pushpa living so close to us and helping each other also sharing love for plants and flowers especially Hibiscus.

Close relationships; We will miss him more than words can say. He has been an important part of all our lives, especially for us. Your time was so brief it was our fortune to be so blessed. What I feel right now is so hard to put into words. Gone yet not forgotten. I know he is with his mother and his dad and they are so very happy to be together again in heaven.

Memory*; every* goodbye is the birth of a memory.

EDITORS NOTE

Our society, our board of directors and the hibiscus community lost a co-worker but more importantly a friend. Our board of directors and our lives will never be quite the same. As you read the tribute to him, I think you will notice what I did as I struggled to honour his memory ~ in every single picture of Clay the smile on his face and the light shining from his eyes never changed through all the years.

It was when I realized this I knew just how unique an individual he was. Those of us who knew have been truly blessed. To use some lyrics from an Andrew Lloyd Weber musical (Clay would get a chuckle from this, I'm sure) - "there is one more angel in heaven, there's one more star in the sky, ……there's one less place at our table, there's one more tear in our eye". But as the song says, the things that he stood for ~ love and truth ~ will never die.

I REMEMBER CLAY

L. Clay McGee (1947 - 2013)

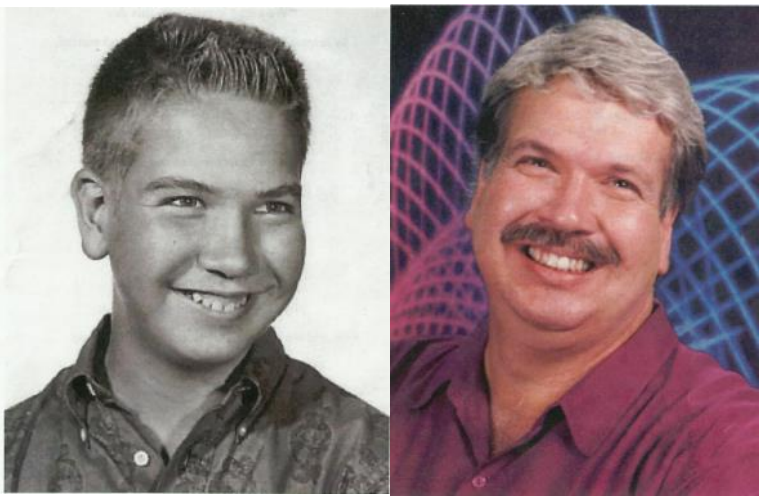
L. Clay McGee was born in Okmulgee, OK on Jan. 25, 1947 to Oleta & Clay McGee. He grew up in Muskogee, OK and graduated magma cum laude from Oklahoma Baptist University with a double major in voice and organ performance. He then graduated from NTSU with a Masters of Music Pedagogy. He had a rich bass-baritone voice & spent the rest of his life performing, teaching, & listening to opera. He was a singing waiter back in the day at Caruso's Italian Restaurant, Minister of Music at Unity Church of Dallas for over 20 years, retired music teacher from Country Place Elementary School in Carrollton, & he always had a private voice studio full of students. He loved to hybridize daylilies and hibiscus and name them after his family and friends. He had an amazing zest for life and his wit would make you laugh until you begged him to stop. Clay was taken from us tragically on Jan. 16, 2013 when his home exploded and burned to the ground with him and his two dogs inside. But knowing Clay, he's still singing! He is survived by his sister, Pat Aytes, brother, David McGee, niece, Laurie Pettit, and great niece, Leta, all of OK. plus a host of friends. There will be a celebration of his life on Saturday, Feb. 23 @ 2 PM @ Unity Church of Dallas, 6525 Forest Ln, Dallas 75230 with Rev. Wanda Bedinghaus, M.D. officiating. In lieu of flowers, please make a donation to the SPCA or a charity of your choice ."

L Clay McGee

Hybridized by
Pushpa Suresh

Vocal Coach

Hybridized by
Shyamala Madappa



I was in a repurposing/antique store last week and saw for the second time a matched pair of mourning angels that are candle holders and are carved out of Dark Wood. They are very old and quite beautiful. They stand about 18 inches tall and both have their wings folded and their heads are bowed. I returned to the store and purchased them today. They are going to stand watch, on either side of Clay's cremains, which will rest in a brass urn, on my remembrance table. These will rest next to my favorite picture of Mother and her candle of light and hope, where I attempt to always keep fresh flowers. I just wanted to share.....David McGee

Clay was very proud of his Cherokee heritage and spoke of it often. I think we all know which wolf he fed his whole life. He was definitely everything that was good in a person.

Clay was a bright star in the hibiscus community. Kind, friendly, caring to everyone in every situation. Our whole community is shocked and saddened, and there is definitely a hole in our world. We miss you, Clay, and know that now you're in a place where you're surrounded by love, health, and beauty.—Charles & Cindy Black

Beautiful man, beautiful spirit...he simply radiated with joy when he sang.

Clay, you were so sweet, so smart, so talented & most of all you had such a big heart. Just know that you are now surrounded by beautiful flowers, lots of animals & you are singing for everyone with your big, beautiful voice. I was blessed to have known you & have you for my friend. Will love you & keep your memory alive until we meet again.

.....spending time with him was like spending time with an encyclopedia with a great sense of humor..... David McGee

Seedling of the Year 2012

Tahitian Dearest Vero

~ hybridized by Richard Johnson

Runners Up 2012

2nd Place

Josi Alves by Ed Saba

3rd Place

Shiva by Pushpa Suresh

4th Place

Indian Bride by PushpaSuresh

5th Place

Mr Poof by PushpaSuresh

The following article(s) on nutrient deficiency was compiled from a number of different internet sources. All information is copyrighted by the original authors.

Nutrient Deficiency Symptoms

Monitor plants closely for symptoms of nutrient deficiency. These symptoms can provide a valuable forewarning of serious problems within the growing system. Be aware that there are many factors that cause nutrient deficiency symptoms in a plant. The nutrient itself is usually not the cause.

Deficiency symptoms (see Chart 15.20) are grouped into several categories:

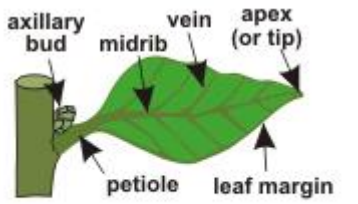


Fig 15.2 Simplified illustration of external leaf structure.

1. Stunting of growth: As all "essential" nutrients are simultaneously required for healthy growth, this symptom can be attributed to a deficiency in any one or more of them.

2. Chlorosis & interveinal chlorosis: Chlorosis can result in the whole plant or leaf turning light green or yellow. It can also be more localized. For example, yellowing of the veins themselves or between the veins ("interveinal chlorosis"). Chlorosis occurs due to plants being deficient in elements required for photosynthesis or chlorophyll production.

3. Purple / red discoloration: This often occurs on stems or along leaf petioles, veins or margins. It occurs due to abnormal levels of anthocyanin that accumulates when plants are stressed. These symptoms can also be caused by physical stresses such as cold, drought and disease.

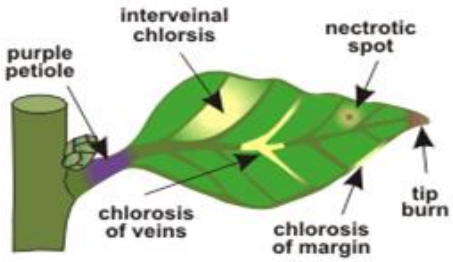


Fig 15.1 Some common leaf abnormalities resulting from nutrient deficiencies.

4. Necrosis: Generally happens in the later stages of deficiency where the affected plant part becomes stressed to the point that it becomes brown and dies.

5. Other: Further symptoms include:

- Poor quality (or few) buds, flowers or fruit.
- Poor root development.
- Distorted leaves i.e. cupped or twisted.

Old or young growth

A key indicator for identifying nutrient deficiency is whether the symptoms are occurring in older growth, younger growth, or both.

Mobile elements are able to move out of older leaves and into younger plant parts when a deficiency is present. Hence the symptoms usually occur first in the older (usually lower) leaves. Mobile elements include N, P, K and Mg (Chart 15.20).

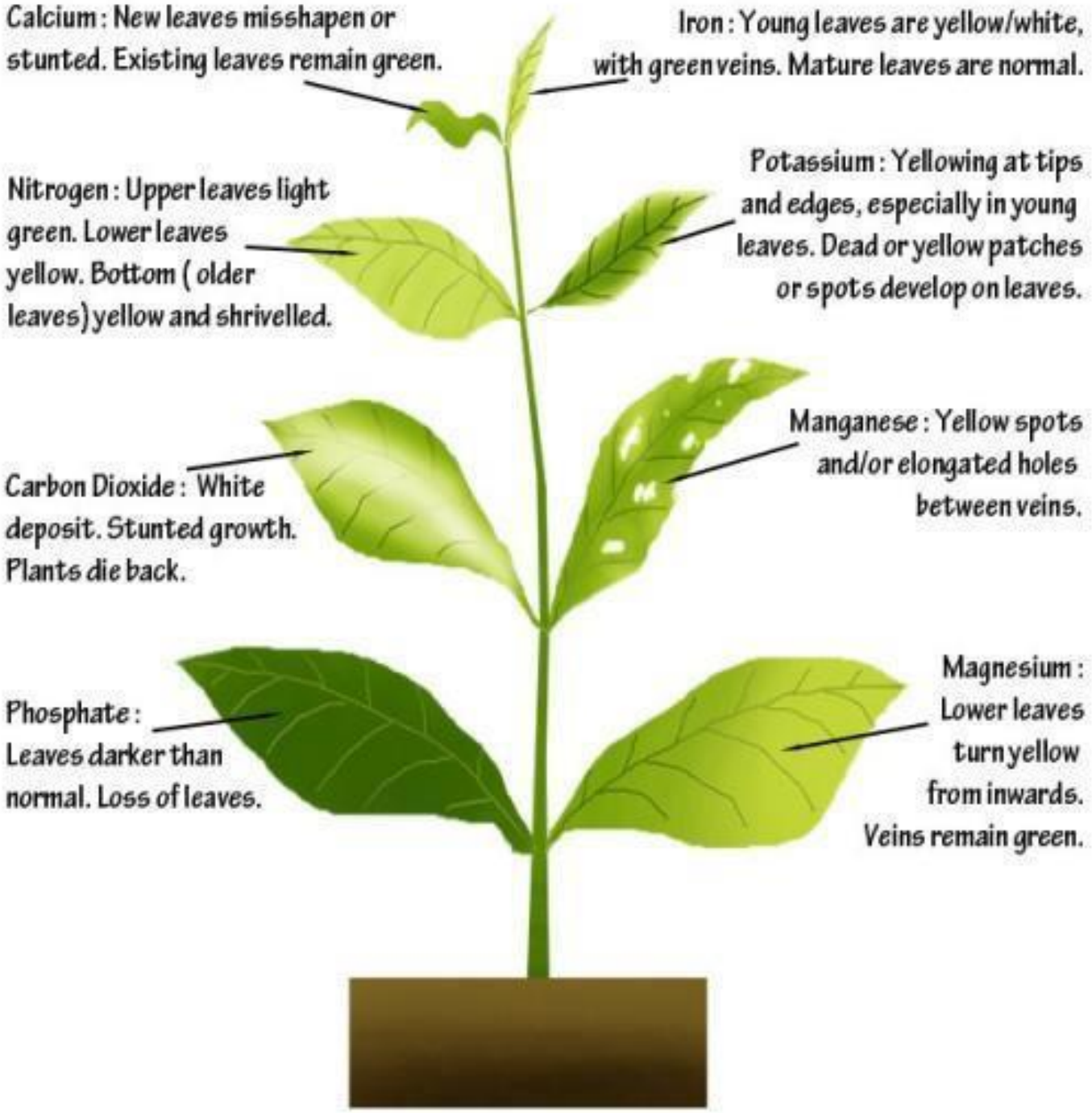
In contrast, immobile nutrients are not able to move quickly from one plant part to another. Therefore, deficiency symptoms are initially most obvious in younger growth (usually higher up the plant). Immobile nutrients include Ca, S, Fe, Cu, Mn, Zn and B (Chart 15.20).

What causes deficiency symptoms

The appearance of foliar deficiency symptoms often causes inexperienced growers to conclude that the nutrient solution is deficient in a particular element. Check the following before settling on this conclusion:

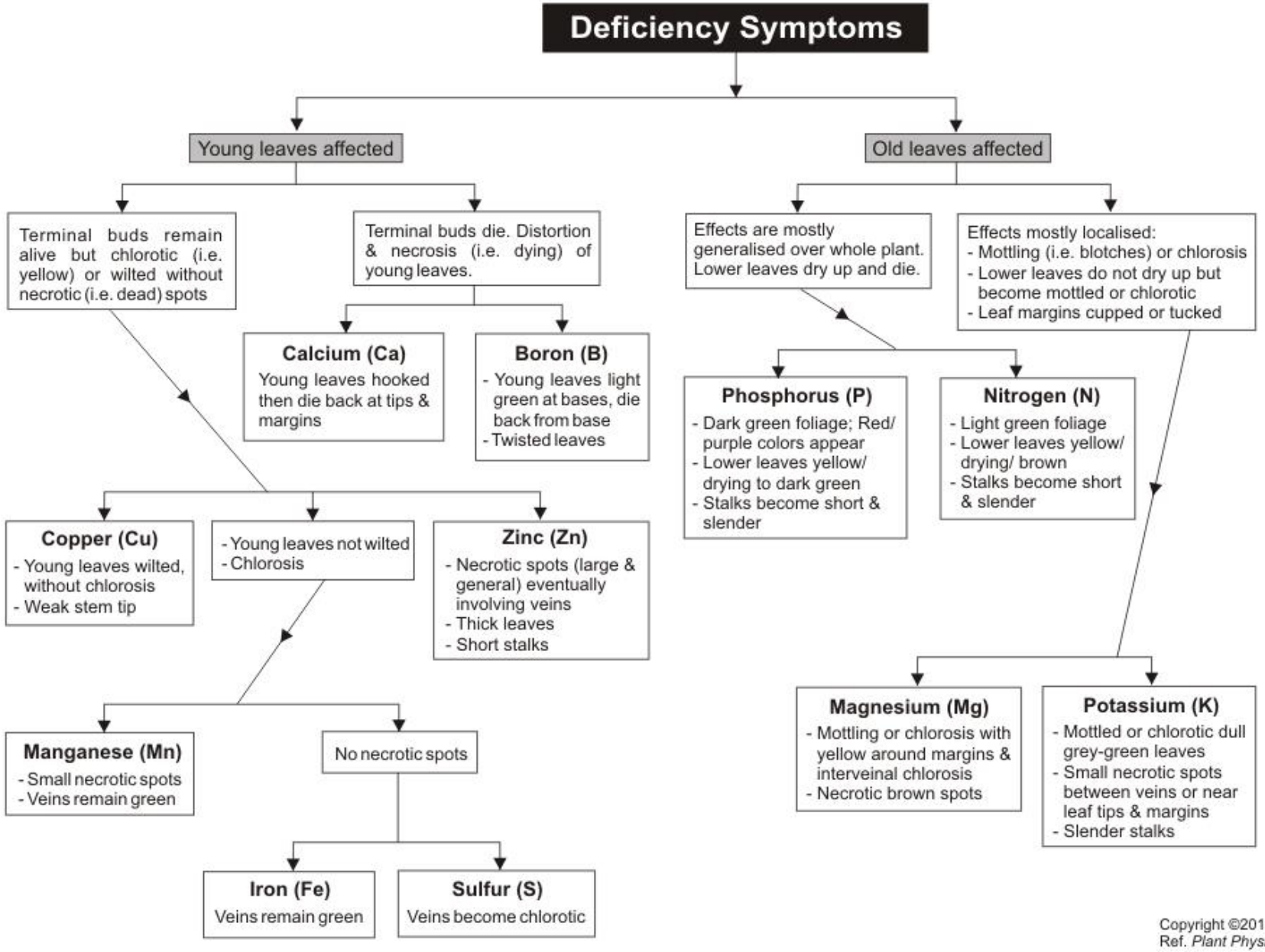
- Insufficient feed frequency.
- Inappropriate nutrient pH: Causes certain nutrient elements to become unavailable for uptake.
- Excessive humidity: Hinders the distribution of nutrient throughout the plant.

- Signs of pests or diseases: Their presence can produce symptoms that are similar in appearance to nutrient deficiency symptoms.



Signs Of Nutrient Deficiency

CHART 15.20: DIAGNOSTIC FLOW-CHART FOR COMMON NUTRIENT DEFICIENCY SYMPTOMS



NOTES

Deficiency symptoms observed under field conditions, often appear different than ideal text book examples. Diagnosis is often difficult for even the most experienced eyes. Some elements produce similar symptoms and several deficiencies can occur at the same time. Symptoms can also be easily confused with those caused by pests, diseases, under-watering and genetic abnormalities.

Early detection is important because deficiency symptoms are often more unique and easier to distinguish in the early stages. Yield loss can also be potentially avoided. Early detection also prompts the grower to check for other possible causes such as excessive humidity and poor EC and pH control.

Ref. *Plant Physiology*, Bidwell RGS 1979, 2nd Ed.

Plant Components

A basic understanding of some major plant components will help you understand the causes behind specific growth problems, and what precautions can be taken to solve them.

Vascular system

The vascular system is the 'plumbing' system in a plant. It carries or "translocates" substances throughout the plant. It is broken into 2 distinct sections.

1) 'Phloem': This is responsible for:

- Translocating sugars to specific areas in the plant to be either stored or used in the process of respiration (see below).
- Translocating starches that were stored in roots and stems during dormancy.
- Translocating growth regulators and systemic agents.

2) 'Xylem': This is used to translocate water, nutrients and oxygen from the roots to the rest of the plant.

Leaves

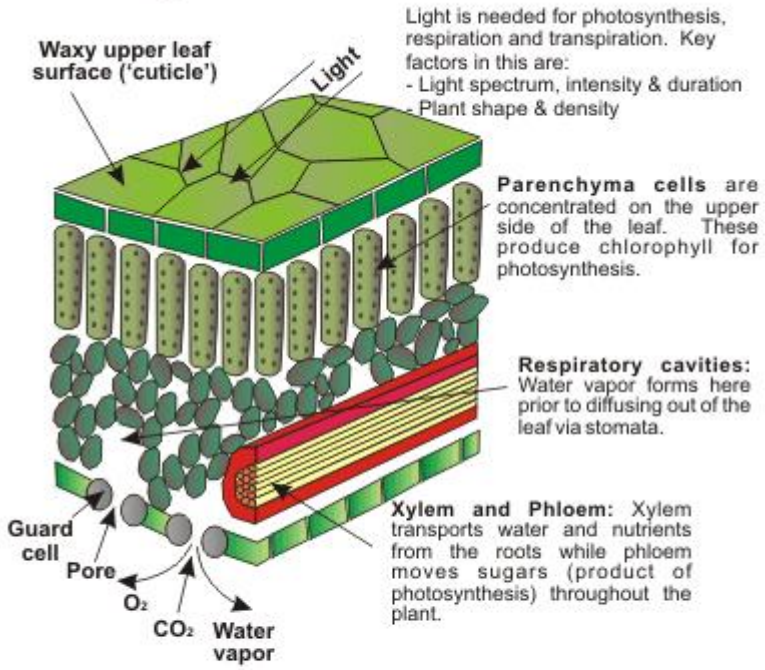
(See Fig 18.1) 'Parenchyma' cells are cells that photosynthesise. These are concentrated on the upper surface of the leaf.

'Stomata' are valves concentrated on the underside of the leaf. These allow entry or exit of the following:

- Carbon dioxide, water and oxygen (during photosynthesis and respiration).
- Foliar sprays such as fertilizers and systemic fungicides.

Xylem and phloem are located within the leaf for translocating water and nutrients to the leaf cells and for the removal of sugars.

Fig 18.1 Cross section of a leaf



'Stomata' are comprised of a 'guard cell' and 'pore': When the 'pore' is open the leaf can absorb CO2 (for photosynthesis) and foliar sprays, and release O2 (by-product of photosynthesis) and water vapor (from transpiration). Insufficient water uptake at the roots and/or excessive humidity will cause the pores to shut which stops photosynthesis and transpiration.

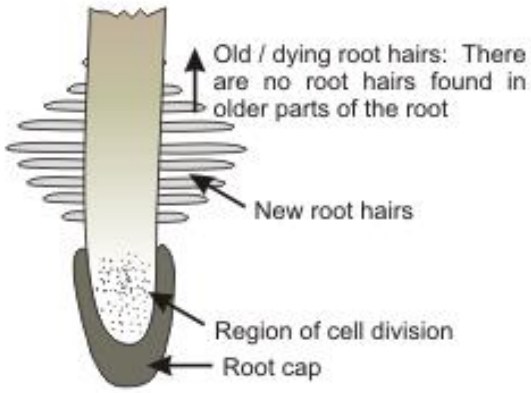


Fig 18.2 New root growth is critical for the uptake of water, oxygen and nutrients.

Roots

Roots facilitate the uptake of water, oxygen and nutrients.

Root 'hairs' are located close to the growing tip of each root and are responsible for the majority of the uptake of oxygen, water and nutrients. They are alive for just a few days and cover about 10mm of a roots overall length at any given time. The uptake will be greatly affected if the growth of root hairs is restricted.

Plant Processes

A basic understanding of some major plant processes will help you understand the causes behind specific growth problems, and what precautions can be taken to solve them.

Photosynthesis

Photosynthesis is the process by which sugars are manufactured in a plant:

carbon dioxide (from leaf stomata) + **water** (from roots) + **light energy** (from sun) → **sugars** (carbohydrates) + **oxygen**

Importantly, if carbon dioxide, water or light energy are in limited supply, then photosynthesis will be restricted. The end result is a reduction in growth due to insufficient sugars being available for respiration.

Hence the following factors will have a negative impact on photosynthesis:

1. Restricted carbon dioxide supply due to poor ventilation.
2. Restricted light supply due to inadequate lighting or overcrowded foliage.
3. Insufficient water supply due to poor system design or nutrient management.

Respiration

Respiration is the process of converting sugars that are produced during photosynthesis, into adenosine triphosphate (ATP). ATP is the energy source that is used by plants for the following processes:

1. Growth in buds, shoots, root hairs and root tips.
2. Nutrient uptake.
3. Movement of sugars into the phloem for distribution to other areas of the plant.

Respiration occurs in 'mitochondria', a component of all plant cells. These are very concentrated in the areas of the most active growth.

Respiration occurs as follows:

Simple sugars (produced by photosynthesis) + **oxygen** (from roots) → **ATP (energy)** + **carbon dioxide** + **water** + **heat**

The above equation shows that respiration rates decrease if oxygen availability is limited. Oxygen availability can be hindered by several factors:

1. Insufficient new root growth. See section on 'roots'.
2. Insufficient oxygen in the nutrient solution due to inadequate aeration.

Photorespiration:

This occurs when plants are subjected to excessive heat and light - specifically when the temperature exceeds ~35^{O}C (95^{O}F). In this process plants burn sugars without converting them into ATP. Depending upon how much sugar is wasted, this causes plant growth to slow or even cease.

Transpiration

Transpiration is the process of water evaporating from a plant. This loss of water effectively draws water, nutrients and oxygen from the growing medium and distributes them throughout the plant. These ingredients are essential for photosynthesis and respiration.

Transpiration mostly occurs through the leaves. As the leaf warms during the day, water is converted into vapour which then diffuses into the atmosphere via the leaf's stomata. Most of the energy absorbed from sunlight is used to warm up the leaf for transpiration – less than 5% is used for photosynthesis.

Most of the water absorbed by plants is transpired. The remainder is used as a reagent in photosynthesis, in keeping cells turgid (or hydrated), and in enabling various chemical reactions to occur.

Inadequate transpiration will cause poor distribution of nutrients. In cucumbers and tomatoes this results in symptoms such as 'blossom-end rot' which is due to a calcium deficiency at the plant's extremities. Factors restricting transpiration are:

1. High humidity.
2. Low air temperature.
3. Inadequate lighting.

Causes of excessive rates of transpiration are very bright light, high temperatures and strong winds.

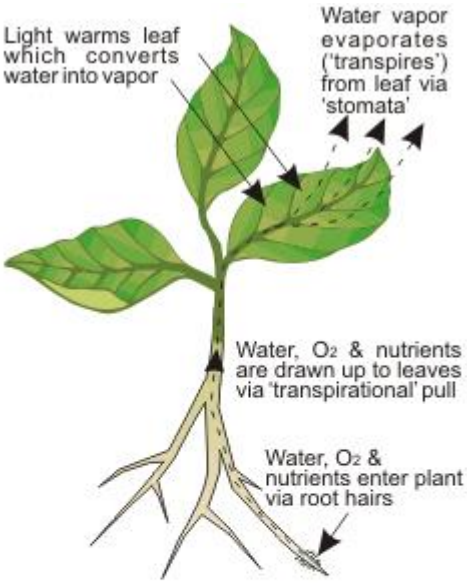


Fig 18.3 'Transpiration' is necessary for distributing water, nutrients and O2 throughout the plant. These ingredients are essential for photosynthesis and respiration.

Key factors for transpiration are:
- Humidity
- Feed frequency & volume
- EC & pH of nutrient
- Container/ pot size
- Oxygenation of nutrient