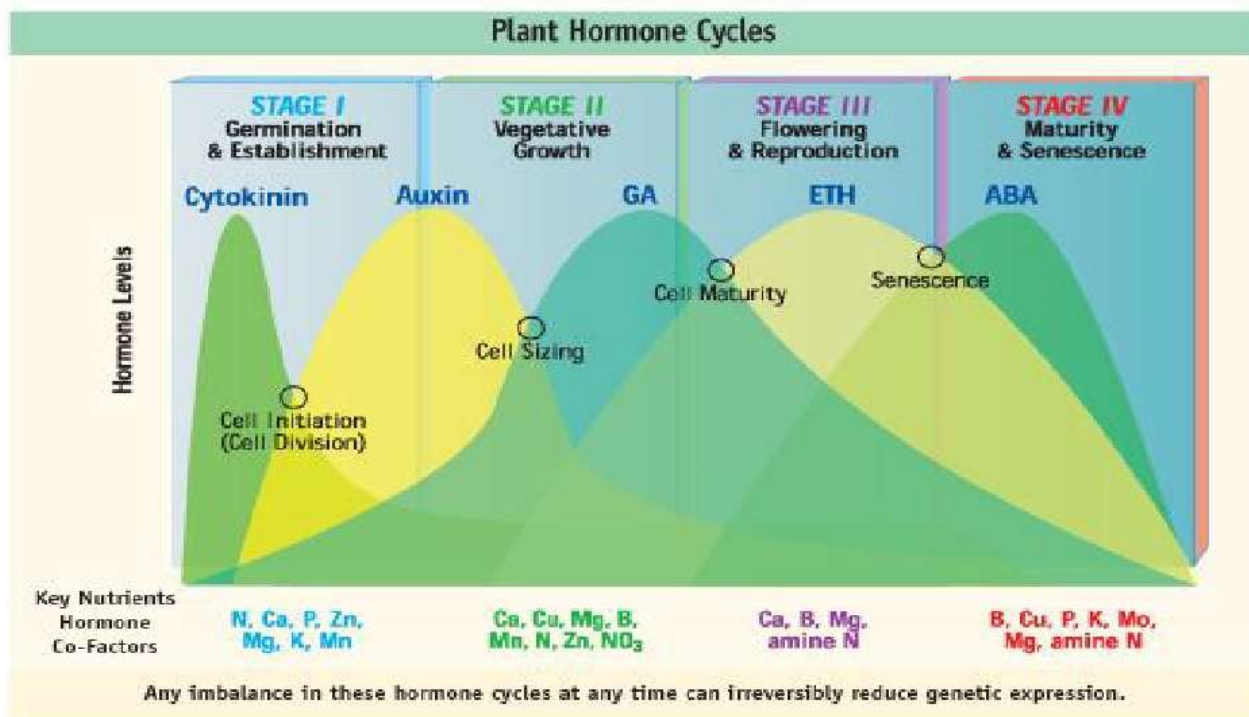


# MODULE 1. – Essential Knowledge

## 1. Managing Plant Nutrition and General Care

Good plant nutrition is based on really understanding plants. The complete needs of plants do not come in bags and drums, but rely on a grower knowing what, when, how and why he needs to give nutrients to his plants – and when he can leave them alone because they are OK and any more might create a problem! The needs of plants change at different stages of development which must be monitored and responded to appropriately.

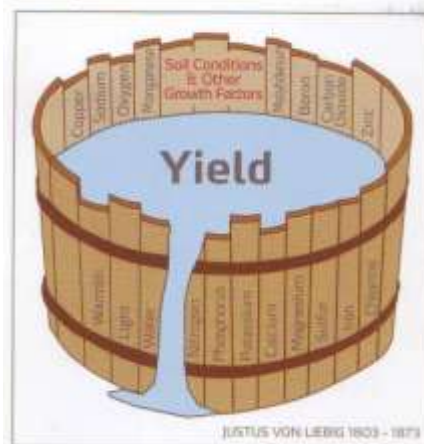
The diagram below gives some idea of the stages of development in a plant and how their trace element needs change over time.



Changing nutrient needs over time – used by permission Domenic Cavallaro, Stoller Australia

The [Plant Nutrition Basics](#) fact sheet is taken from a comprehensive presentation covering plant nutrition and its relationship to plant health. It includes information on plant uptake including calcium as an important aspect of managing salinity. (Information created by Domenic Cavallaro - used by permission from Stoller Australia).

A Deficiency of any Single Nutrient is Enough to Limit Yield



Managing plant needs in an actual greenhouse capsicum crop is covered in some detail as part of Phuong's practice in [Module 3](#).

There is a range of information in the [Resource List](#) covering the following topics:

- Nutrient assessment is achieved by assessing soil, leaf tissue and plant conditions at the required points in the crop cycle. The following fact sheets will assist in carrying this out:
  1. [Example soil test sampling instructions](#)
  2. [Example leaf test sampling instructions](#)
  3. [Understanding a soil report](#)
  4. [Capsicum nutrient deficiencies – poster with photos of leaf symptoms](#)
  5. [A summary for the testing and management of capsicum nutrients fact sheet](#)
- A [Comprehensive table of key nutrients and their importance](#) show how trace elements interact with each other either blocking or assisting the availability in the soil
- [Nutrient deficiency and its impacts](#) fact sheet summarises deficiency symptoms and conditions leading to deficiency.
- Managing soil conditions that can affect nutrient uptake including soil health, irrigation and salinity are covered as separate topics in [Module 1](#).



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