

# PHENOLOGY AND SEASONAL TREE GROWTH- HOW TO LINK BOTH?

Egbert Beuker

Capacity adaptation: Through evolution plants aim to make the most optimal use of the growing season.

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- o Early flushing
- o Late cessation (leaf-drop)

Survival adaptation: Avoiding damage by unfavourable environmental conditions such as frost (late spring frost or early autumn frost) or drought.

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- o Late flushing
- o Early cessation.



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# Is seasonal growth correlated to the length of the growing period?



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# GROWTH

- Height growth

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- Diameter growth (wood volume or mass)

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- Height growth
- Diameter growth (wood volume or mass)
- Foliar production
- Fruit production
- Root growth

## Starting of growth in spring:

- Height growth and foliar production start when the trees are flushing
- The start of the diameter growth can be assessed with the use of girthbands.

## End of growth in autumn:

- End of height growth different to assess (predetermined)
- Loss of foliar can be assessed by phenology and litterfall
- The end of the diameter growth can be assessed with the use of girthbands.

Litterfall can be used to quantify the annual foliar and fruit production.

Root growth cannot be estimated through the present assessments.

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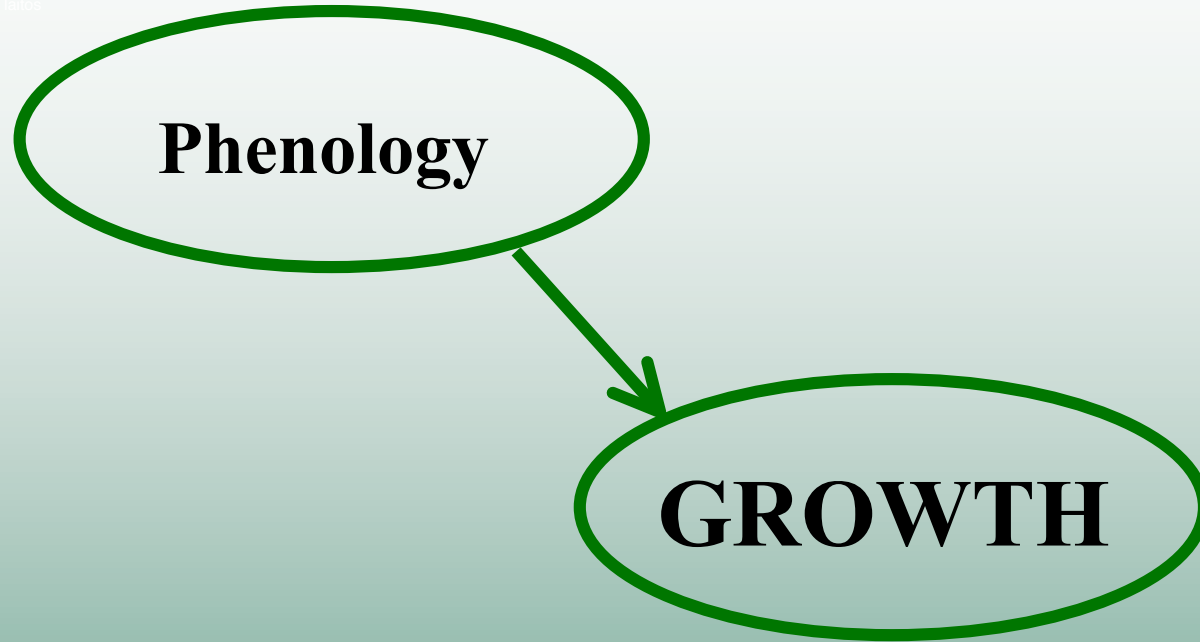
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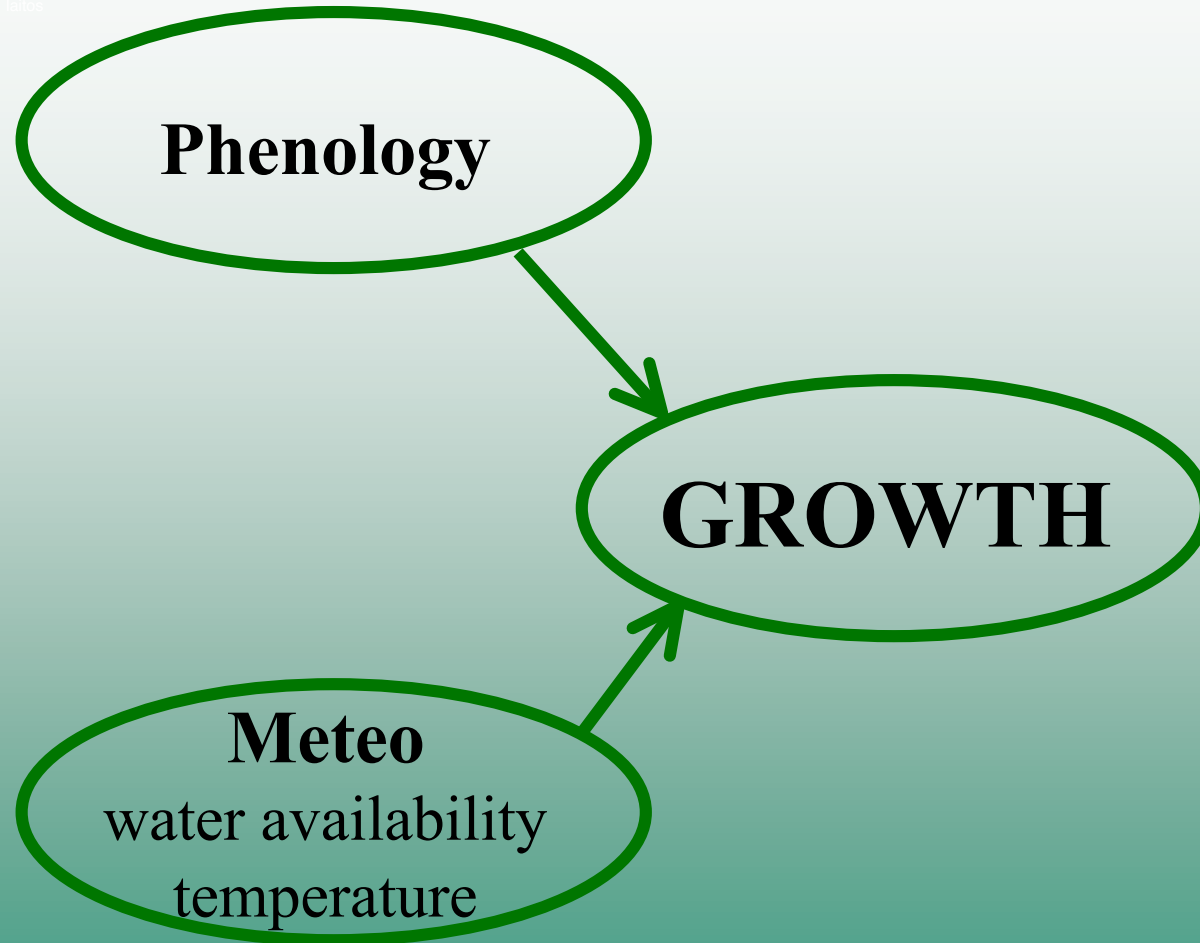
The relative effect of a prolonged diameter growth may be different for volume and weight.



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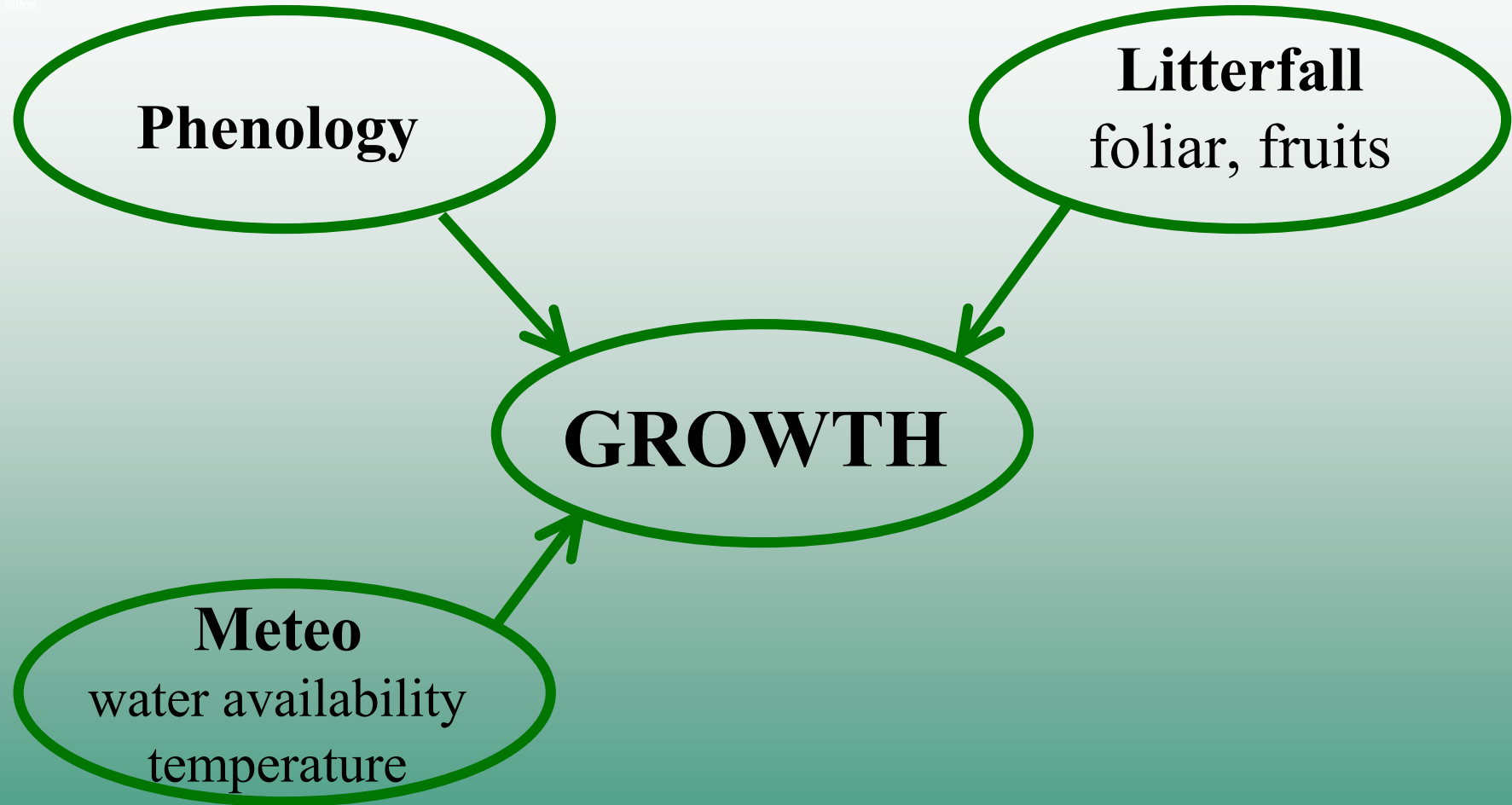
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