<table>
<thead>
<tr>
<th>Hormone Type</th>
<th>Source</th>
<th>Transport direction</th>
<th>Biochemical</th>
<th>Response dimension</th>
</tr>
</thead>
</table>
| Auxin        | Apical Bud | Basipetal/Polar | o Nucleic acid activity  
               |         |                     | o Increase in cell wall permeability  
               |         |                     | o Formation of ATP  
               |         |                     | o Cell wall plasticity  
               |         |                     | o Protoplasmic viscosity  
               |         |                     | o Shoot/root ratio  
               |         |                     | o Apical dominance  
               |         |                     | o Cell elongation  
               |         |                     | o Cell division  
               |         |                     | o Tropism  
| Gibberellin  | Young leaves  
               | All direction, no polarity | De novo synthesis of the above stated enzymes  
               |         |                     | o Stem elongation  
               |         |                     | o Apical dominance  
| Cytokinin    | Root tip  
               | Acropetally | o Nucleic acid metabolism  
               |         |                     | o Protein synthesis  
               |         |                     | o Incorporation of RNA  
| Abscissic Acid | Matured leaves  
               | Acropetally | o Induction of hydrolase  
               |         |                     | o Growth inhibitor  
|              | All plants  
               |                     | o Shoot/root ratio  
               |         |                     | o Apical dominance  
               |         |                     | o Cell elongation  
               |         |                     | o Cell division  
               |         |                     | o Tropism  
|              |                     | o Stem elongation  
               |         |                     | o Apical dominance  
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|              |                     | o Induction of hydrolase  
               |         |                     | o Growth inhibitor  
|              |                     | o Shoot/root ratio  
               |         |                     | o Apical dominance  
|              |                     | o Cell wall permeability  
               |         |                     | o Formation of ATP  
|              |                     | o Cell wall plasticity  
               |         |                     | o Protoplasmic viscosity  
|              |                     | o Shoot/root ratio  
               |         |                     | o Apical dominance  
|              |                     | o Cell elongation  
               |         |                     | o Cell division  
|              |                     | o Tropism  

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<tr>
<th>Ethylene</th>
<th>All parts of plant</th>
<th>Diffusion</th>
<th>o Climacteric raise</th>
<th>o Activity of malic and pyruvate decarboxylase</th>
<th>o Degreening of citrus</th>
<th>o Activity of chlorophyllase</th>
<th>o Growth inhibitor</th>
<th>Fruit ripening</th>
<th>Abscission senescence</th>
<th>Senescence</th>
<th>And released of ethylene</th>
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<td></td>
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<td>o Induction of α amylase activity</td>
<td>o Stomatal physiology</td>
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**Ethylene**

- All parts of plant
- Diffusion
  - Climacteric raise
  - Activity of malic and pyruvate decarboxylase
  - Degreening of citrus
  - Activity of chlorophyllase
  - Growth inhibitor

**Fruit Ripening**

**Abscission Senescence**

**Ethylene And Released of Ethylene**

**Senescence**