

**Tab.3 Hormone types, characteristics and their plant physiological response to their actions**

Hormone Type	Source	Transport direction	Biochemical	Response dimension				
				Physiological				
				Growth	Flower initiation	Flower dev.	Seed And fruit prod.	Maturity Abscission Senescence
<b>Auxin</b>	Apical Bud	Basipetal/Polar	<ul style="list-style-type: none"> <li>○ Nucleic acid activity</li> <li>○ Amylase activity</li> <li>○ Increase in cell wall permeability</li> <li>○ Formation of ATP</li> <li>○ Cell wall plasticity</li> <li>○ Protoplasmic viscosity</li> </ul>	<ul style="list-style-type: none"> <li>○ Shoot/root ratio</li> <li>○ Apical dominance</li> <li>○ Cell elongation</li> <li>○ Cell division</li> <li>○ Tropism</li> </ul>	✓	✓		Delayed abscission
<b>Gibberellin</b>	<ul style="list-style-type: none"> <li>○ Young leaves</li> <li>○ Root Tips</li> <li>○ Embryo</li> </ul>	All direction, no polarity	De novo synthesis of the above stated enzymes	<ul style="list-style-type: none"> <li>○ Stem elongation</li> <li>○ Apical dominance</li> </ul>	✓	✓	✓	
<b>Cytokinin</b>	<ul style="list-style-type: none"> <li>○ Root tip</li> <li>○ Developing seed</li> <li>○ Cambial tissue</li> </ul>	Acropetally	<ul style="list-style-type: none"> <li>○ Nucleic acid metabolism</li> <li>○ Protein synthesis</li> <li>○ Incorporation of RNA</li> </ul>	<ul style="list-style-type: none"> <li>○ Cell division</li> <li>○ Lateral bud formation</li> </ul>		Increased florigen activity	Breaking of dormancy Morphogenesis	Delay of senescence
<b>Abscissic Acid</b>	<ul style="list-style-type: none"> <li>○ Matured leaves</li> <li>○ All plants</li> </ul>	Acropetally	<ul style="list-style-type: none"> <li>○ Induction of hydrolase</li> </ul>	<ul style="list-style-type: none"> <li>○ Growth inhibitor</li> </ul>			Bud dormancy	Induction of Abscission,

	parts		<ul style="list-style-type: none"> <li>○ Induction of <math>\alpha</math> amylase activity</li> </ul>	<ul style="list-style-type: none"> <li>○ Stomatal physiology</li> </ul>				senescence And released of ethylene
<b>Ethylene</b>	All parts of plant	Diffusion	<ul style="list-style-type: none"> <li>○ Climacteric raise</li> <li>○ Activity of malic and pyruvate decarboxylase</li> <li>○ Degreening of citrus</li> <li>○ Activity of chlorophyllase</li> </ul>	<ul style="list-style-type: none"> <li>○ Growth inhibitor</li> </ul>			Fruit ripening	Abscission senescence