

Table 16.2. Difference Between Aerobic and Anaerobic Respiration.

<i>Aerobic respiration</i>	<i>Anaerobic respiration</i>
<ol style="list-style-type: none"> 1. It is common to all plants. 2. It goes on throughout the life. 3. Energy is liberated in larger quantity. In total, 38 ATP molecules/glucose molecule are formed. 4. The process is not toxic to plants. 5. Oxygen is utilized during the process. 6. The carbohydrates are oxidised completely and are broken down into CO₂ and water. 7. The end-products are carbon dioxide and water. 8. The process takes place partly (<i>glycolysis</i>) in the cytosol and partly (<i>Krebs cycle</i>) inside the mitochondria. 	<ol style="list-style-type: none"> 1. It is of rare occurrence. 2. It occurs for a temporary phase of life. 3. Energy is liberated in lesser quantity. Only 2 ATP molecules are formed. 4. It is toxic to plants. 5. It occurs in absence of oxygen. 6. The carbohydrates are oxidised incompletely and ethyl alcohol and carbon dioxide are formed. 7. The end-products are ethyl alcohol and carbon dioxide. 8. The process occurs only in the cytosol.