The Process Of Photosynthesis In Plants: Personal Response

A crucial biological cycle for everyone is photosynthesis. Carbon dioxide and water gain nutrients to make sugar and oxygen using sunlight in the process of photosynthesis. Lastly, photosynthesis consists of two main light reactions, a process where plants go through light-dependent, and light-independent reactions, both making energy storage molecules.

Carbon dioxide and water gain nutrients to make sugar and oxygen using sunlight in the process of photosynthesis. Ultraviolet rays help plants get the energy that transforms itself to sugar; we call this process photosynthesis. Photosynthesis utilises the energy from the ultraviolet rays to convert carbon dioxide and water molecules into sugar molecules and oxygen (Learning and instruction. 2001). The energy in the sugar molecule uses plant evolution, flower development, and fruit growth. Oxygen externally is released from the plant leaves.

One of the first stages of photosynthesis is the light-dependent reaction, also known as a light reaction. The first process requires hydrogen water and ultraviolet rays known as photons. Photons are a vital part of the light-dependent reaction to proceed. Once the plant has received photons, it then requires water to undergo the internal and external of light-dependent reactions to make molecules of oxygen, hydrogen, and electrons (Pertanika j soc. 2015). then the light-dependent reaction goes on to produce energy storage molecules called ATP and NADPH. ATP is a molecule of energy which consists of different metabolic processes, and NADPH is a molecular energy process which fuels the reactions in the process of photosynthesis (Pertanika j soc. 2020). ATP creates itself by electrons progressing throughout the structure in chloroplasts and by chemiosmosis to form ATP. NADPH produces when electrons are removed from the water and pass through PSII and PSI before ending up to form NADPH.

Another stage in photosynthesis is the light-independent reaction, also known as dark reactions. This process does not require ultraviolet rays known as photons. Although light-independent reaction naturally occurs when the sun is out which results in plants receiving photons, nonetheless photons are not needed, just the byproducts from the light-dependent reaction are required to make the light-independent reaction occur (Pertanika j soc. 2014). These byproducts are ATP and NADPH, which are energy storage molecules. As a result, Light independent reactions only occur in some plants that go through a cycle called the Calvin cycle (Pertanika j soc. 2020).

Overall, the explanation of carbon dioxide and water gaining nutrients to make sugar and oxygen using sunlight in the process of photosynthesis. And how two main processes of light reaction work in photosynthesis, light-independent reaction and the light-dependent. All these reactions work together to make photosynthesis.

Personal response

Before starting this report, I had to choose a topic to write about, that had a good explanation process. I had chosen a question that was narrow to explaining a specific process, and it was

too broad. I came across challenges with getting information that lead to the topic but then would easily lead its way to more depth information that would go into irrelevant detail. I had to make sure I was answering the question, so things do not get too in-depth and lead off-topic, and making sure that what I was explaining would make sense for the reader to have an idea of what was happening during the process that I was explaining. EG photons are needed for photosynthesis to occur, but then I needed to explain what photons were (ultraviolet rays), so I had to try and explain that most easily so I would not go off-topic. For my solutions, I had to ensure that I was reading and understanding the processes. To write down what I was answering, in an ideal way where things were flowing as I was writing by not adding too much complicated in-depth when discussing the process of photosynthesis of plants. Overall I chose a wrong topic, but did not know because it was my first report, but managed to explain it by doing my best.

Reference

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