

Algae and Oxygen

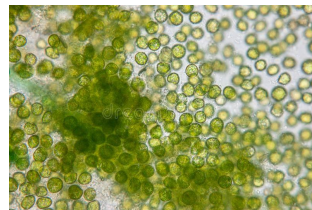
Algae are very small plants that live in water. Just like other plants, algae are alive and need nutrients and oxygen to grow. Algae look green and slimy.

Dr. Euglena is an expert on algae growth in ponds. She took samples of pond water from Orange and Blue ponds. Her report concluded that both ponds had the same types of algae: Spirogyra and Chlorella algae. These are non-toxic algae (not poisonous) and both ponds have about 60% Spirogyra and 40% Chlorella

Spirogyra



Chlorella



Dr. Euglena wanted to find out how much dissolved oxygen the algae breathe from the water:

- She took a sample of water, with both types of algae, from Orange pond and put it in the jar labeled “2”.
- For comparison she took some water with no algae and put it in the jar labeled “0”.
- Dr. Euglena measured the amount of oxygen in each jar. She then measured the amount of oxygen again after 5 hours.

She found that in jar “2” (with algae) the amount of dissolved oxygen was reduced to half the original amount after 5 hours. The amount of dissolved oxygen remained the same in jar “0” (with no algae) and was higher than the amount of oxygen in jar “2”.



***Update: Dr. Euglena repeated the experiment with water samples from Blue pond. The results were the same as the results from Orange pond.