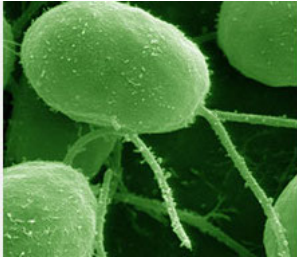


Chlamydomonas reinhardtii



By Louisa Howard, Dartmouth College

Scientific name: *Chlamydomonas reinhardtii*

Common name(s): Green algae

Name as shown in Phylogenies: *C. reinhardtii*

Ploidy: Haploid

Description:

Chlamydomonas reinhardtii is a haploid unicellular green algae found in a wide variety of environments all over the world including freshwater lakes, soil and snow. The single celled organism has one chloroplast and moves via an anterior flagella. It is a member of the Chlorophyta; there are over 500 species of Chlamydomonas.

The most commonly used experimental species, *C. reinhardtii*, can be grown in the dark when supplied with acetate as a carbon source. It is used as a model system for studying a wide range of processes such as photosynthesis, flagella assembly and movement, phototaxis, and mating.

Reference(s):

1. Merchant SS, et al. The Chlamydomonas genome reveals the evolution of key animal and plant functions. Science. 2007 Oct 12;318(5848):245-50. doi: [10.1126/science.1143609](https://doi.org/10.1126/science.1143609)

Genome Database(s):

[ChlamyCyc 8.0](#)

[Chlamydomonas genome - Phytozome](#)