

Using algae as a feedstock for biofuels has several advantages, according to the U.S. Department of Energy's National Algal Biofuels Technology Roadmap. One of those advantages is that algal production offers high yields per acre of cultivation compared to other feedstocks. Originating from several different sources of data, an estimated oil content of different algal species is shown below.

Section: FEEDSTOCKS Oil Content in Selected Algal Species

Species	Oil Content (% dry weight)	Reference (cited after Carissone et al., 2007)
Ankistrodesmus TR-87	28-40	Ben-Amotz and Tornabene (1985)
Botryococcus braunii	29-75	Sheehan et al. (1998); Banerjee et al. (2002); Metzger & Largeau (2005)
Chlorella sp.	29	Sheehan et al. (1998)
Chlorella protothecoides (autotrophic/heterothrophic)	15-55	Xu et al. (2006)
Cyclotella DI-35	42	Sheehan et al. (1998)
Dunaliella tertiolecta	36-42	Kishimoto et al. (1994); Tsukahara & Sawayama (2005)
Hantzschia DI-160	66	Sheehan et al. (1998)
Isochrysis sp.	7-33	Sheehan et al. (1998); Valenzuela-Espinoza et al. (2002)
Nannochloris	31 (6-63)	Ben-Amotz & Tornabene (1985); Negoro et al. (1991); Sheehan et al. (1998)
Nannochloropsis	46 (31-68)	Sheehan et al. (1998); Hu et al. (2006)
Nitzschia TR-114	28-50	Kyle DJ, Gladue RM (1991) Patent Application, PCT WO 91/1447, 3 Oct 1991
Phaeodactylum tricornutum	31	Sheehan et al. (1998)
Scenedesmus TR-84	45	Sheehan et al. (1998)
Stichococcus	33 (9-59)	Sheehan et al. (1998)
Tetraselmis suecica	15-32	Sheehan et al. (1998); Zittelli et al. (2006); Christi (2007)
Thalassiosira pseudonana	(21-31)	Brown et al. (1996)
Crpythecodium cohnii	20	www.oilgae.com
Neochloris oleoabundans	35-54	www.oilgae.com
Schisochytrium	50-77	www.oilgae.com

Source:

Oak Ridge National Laboratory, Reality of Algal Fuels, presentation by Tanya Kuritz, September 1, 2011.
http://www.ornl.gov/sci/ees/cbes/forums/Tanya%20Kuritz%20slides_Sep_1_11.pdf