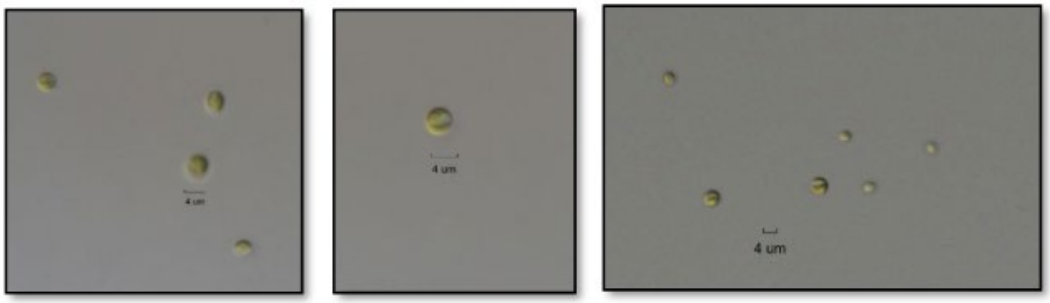


Figure S1. Microscopic pictures of isolate S2

a)

>Gene 18 rRNA:

GCCATGCATGTCTAAGTATAAACTGCTTTATACTGTGAAACTGCGAATGGCTCATTAAATCAGTTATAGTTTATTTGATGGTACTTACTAC
TCGGATACCCGTAGTAAATCTAGAGCTAATACGTGCGTAAATCCCGACTTCTGGAAGGGACGTATTTATTAGATAAAAGGCCGACCGGG
CTTCTGCCCGACTCGCGGTGAATCATGATAACTTCACGAATCGCATGGCCTTGTGCCGGCGATGTTTCATTCAAATTTCTGCCCTATCAAC
TTTTGATGGTAGGATAGAGGCCTACCATGGTGGTAACGGGTGACGGAGGATTAGGGTTCGATTCCGGAGAGGGAGCCTGAGAAACGG
CTACCACATCCAAGGAAGGCAGCAGGCGCGCAAATTACCCAATCCTGACACAGGGAGGTAGTGACAATAAATAACAATACTGGGCCTTT
TCAGGTCTGGTAATTGGAATGAGTACAATCTAAACCCCTTAACGAGGATCAATTGGAGGGCAAGTCTGGTGCCAGCAGCCGCGGTAATT
CCAGCTCCAATAGCGTATATTTAAGTTGCTGCAGTTAAAAAGCTCGTAGTTGGATTTCGGGTGGGACCTGCCGGTCCGCCGTTTCGGTGT
GCACTGGCAGGGCTCACCTTGTTGCCGGGGACGGGCTCCTGGGCTTCACTGTCCGGGACTCGGAGTCGGCGCTGTTACTTTGAGTAAAT
TAGAGTGTTCAAAGCAGGCCTACGCTCTGAATACATTAGCATGGAATAACACGATAGGACTCTGGCCTATCCTGTTGGTCTGTAGGACC
GGAGTAATGATTAAGAGGGACAGTCGGGGGCATTCGTATTTCATTGTCAGAGGTGAAATTCTTGGATTTATGAAAGACGAACTACTGCG
AAAGCATTTGCCAAGGATGTTTTCATTAATCAAGAACGAAAGTTGGGGGCTCGAAGACGATTAGATACCGTCCTAGTCTCAACCATAAA
CGATGCCGACTAGGGATCGGCGGATGTTTCTTCGATGACTCCGCCGGCACCTTATGAGAAATCAAAGTTTTTGGGTTCCGGGGGGAGTA
TGGTCGCAAGGCTGAAACTTAAAGGAATTGACGGAAGGGCACCACCAGGCGTGGAGCCTGCGGCTTAATTTGACTCAACACGGGAAAA
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GGTTGCCTTGTCAGGTTGATTCCGGTAACGAACGAGACCTCAGCCTGCTAAATAGTCACGGTTGGTTCGCCAGCCGGCGGACTTCTTAG
AGGGACTATTGGCGACTAGCCAATGGAAGCATGAGGCAATAACAGGTCTGTGATGCCCTTAGATGTTCTGGGCCGCACGCGCGCTACA
CTGATGCATTCAACGAGCCTAGCCTTGGCCGAGAGGCCCGGGTAATCTTCGAAACTGCATCGTGATGGGGATAGATTATTGCAATTATT
AATCTTCAACGAGGAATGCCTAGTAAGCGCAAGTCATCAGCTTGCGTTGATTACGTCCCTGCCCTTTGTACACACCGCCCGTCGCTCCTAC
CGATTGGGTGTGCTGGTGAAGTG TTCGGATTGGCGACCTGGGG

b)

Description	Scientific Name	Max Score	Total Score	Query Cover	E value	Per. Ident	Acc. Len	Accession
Chlorella vulgaris strain CCAP 211/21B small subunit ribosomal RNA gene, partial sequence; internal transcribed ...	Chlorella vulgaris	3046	3046	100%	0.0	100.00%	2496	MN248530.1
Chlorella vulgaris strain CCAP 211/21A small subunit ribosomal RNA gene, partial sequence; internal transcribed ...	Chlorella vulgaris	3046	3046	100%	0.0	100.00%	2496	MN248529.1
Chlorella vulgaris strain CCAP 211/19 small subunit ribosomal RNA gene, partial sequence; internal transcribed s...	Chlorella vulgaris	3046	3046	100%	0.0	100.00%	2350	MK541792.1
Chlorella vulgaris isolate CCAP 211/52 small subunit ribosomal RNA gene, partial sequence	Chlorella vulgaris	3046	3046	100%	0.0	100.00%	1752	MG022722.1
Chlorella vulgaris isolate CCAP 211/11B small subunit ribosomal RNA gene, partial sequence	Chlorella vulgaris	3046	3046	100%	0.0	100.00%	1754	MG022720.1
Chlorella vulgaris strain KNUA027 18S ribosomal RNA gene, partial sequence	Chlorella vulgaris	3046	3046	100%	0.0	100.00%	1771	KU306723.1
Chlorella vulgaris isolate LH10HG6052 18S ribosomal RNA gene, partial sequence	Chlorella vulgaris	3046	3046	100%	0.0	100.00%	1735	KX094756.1
Chlorella vulgaris strain S3 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1 and ...	Chlorella vulgaris	3046	3046	100%	0.0	100.00%	2456	OM472013.1
Chlorella vulgaris strain Ab5 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1 an...	Chlorella vulgaris	3046	3046	100%	0.0	100.00%	2455	OM472012.1
Chlorella vulgaris strain ChloN4 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer ...	Chlorella vulgaris	3046	3046	100%	0.0	100.00%	2456	OM472011.1

Figure S2. Isolate S2 a) sequence of 18S rRNA; b) BLAST results (NCBI database http://www.ncbi.nlm.nih.gov/)

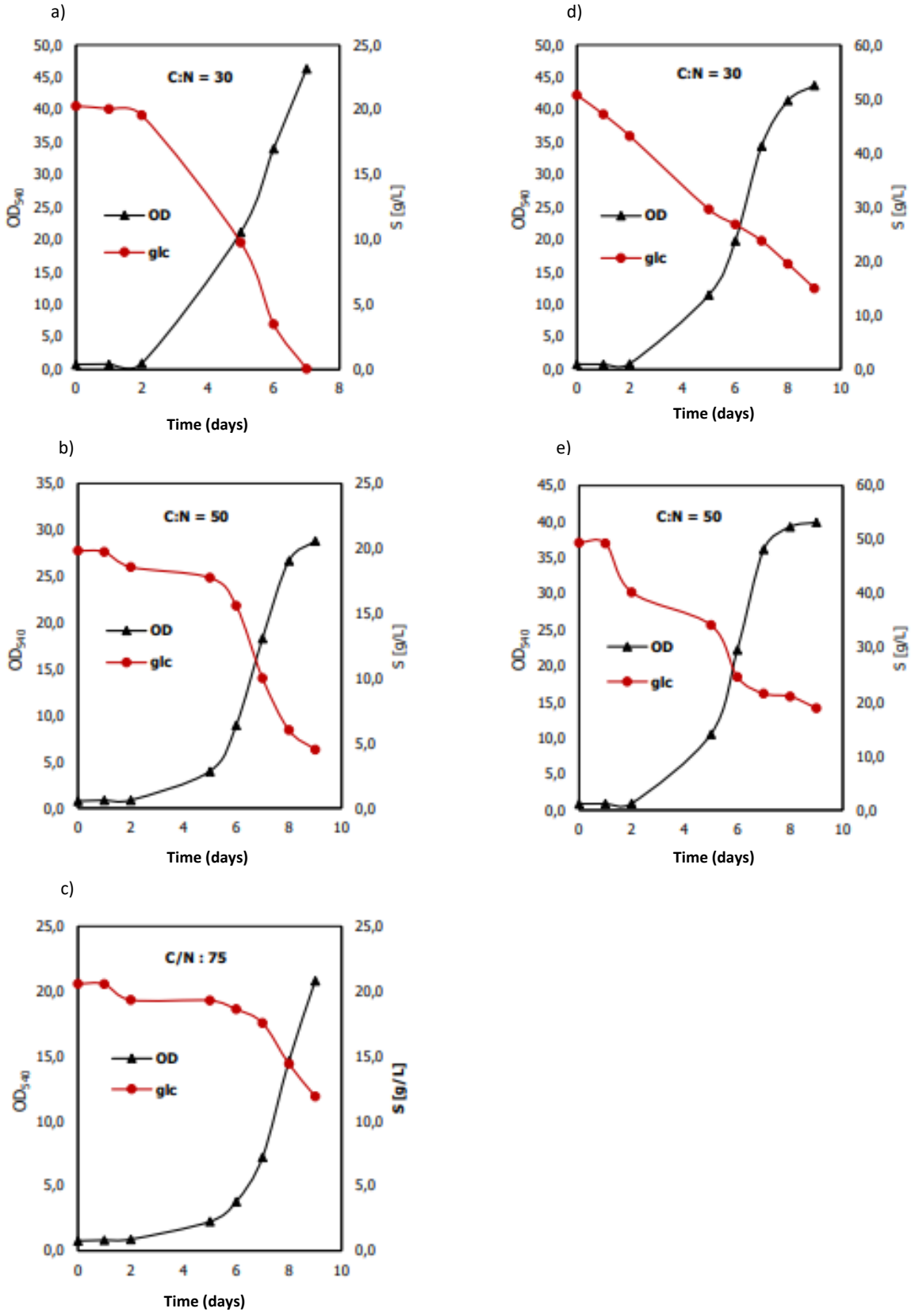


Figure S3. Effect of C:N ratio and initial glucose concentration on growth and substrate consumption: a) 20 gL^{-1} of glucose and C:N= 30 mol mol^{-1}; b) 20 gL^{-1} of glucose and C:N= 50 mol mol^{-1}; c) 20 gL^{-1} of glucose and C:N= 75 mol mol^{-1}; d) 50 gL^{-1} of glucose and C:N= 30 mol mol^{-1}; e) 50 gL^{-1} of glucose and C:N= 75 mol mol^{-1}.