

Table 4. Composition of biomass during cultivations of *Kluyveromyces marxianus* ATCC 26548[†]

Yeast strain	Cultivation mode	Culture (h ⁻¹)	Protein	Carbo-hydrate	Lipid	RNA	DNA	Ash	Total	Reference
<i>K. marxianus</i> ATCC 26548 (= CBS 6556)	Batch*	$\mu_{\max} = 0.56 \pm 0.02$	54.6 ± 1.5	26.5 ± 0.8	5.2 ± 0.2	10.7 ± 0.1	0.7 ± 0.1	3.0 ± 0.2	100.7	This work [†]
	Continuous* [‡]	$D = 0.1$	35.9 ± 1.3	51.1 ± 1.0	7.2 ± 0.1	5.1 ± 0.2	0.3 ± 0.1	1.2 ± 0.5	100.8	
	Continuous*	$D = 0.1$	37.0 ± 1.5	49.5 ± 1.1	5.1 ± 0	4.9 ± 0.3	0.2 ± 0.1	2.6 ± 0.1	99.3	
	Continuous*	$D = 0.25$	52.9 ± 1.0	31.3 ± 0.9	5.1 ± 0	7.8 ± 0.3	0.5 ± 0	2.3 ± 0.2	99.9	
	Continuous*	$D = 0.5$	71.9 ± 2.7	9.6 ± 0.8	5.1 ± 0	10.6 ± 0.1	0.6 ± 0.1	2.6 ± 0.1	100.4	
<i>K. marxianus</i> FII 510700	Batch	–	56	26	–	10	2.7	–	–	Lukondeh <i>et al.</i> (2003)
<i>K. marxianus</i> LG	Batch	–	54	–	–	–	–	–	–	Guiraud <i>et al.</i> (1981)
<i>S. cerevisiae</i> (in general)	Batch [§]	$\mu_{\max} = 0.37$	51	27	7	11	–	4	100	Gombert <i>et al.</i> (2001)
	Continuous [§]	$D = 0.1$	42	39	7	7	–	4	100	
<i>S. cerevisiae</i> LBGH-1022	Continuous [¶]	$D = 0.2$	40	50	8	6.5	0.3	–	–	Furukawa <i>et al.</i> (1983)
	Continuous [¶]	$D = 0.25$	43	42	6.5	7.5	0.3	–	–	
	Continuous [¶]	$D = 0.3$	48	44	3.2	8.5	0.3	–	–	
<i>S. cerevisiae</i> CBS 8066	Continuous	$D = 0.1$	45	40.7	2.9	6.3	0.4	5	101.4	Nissen <i>et al.</i> (1997)
	Continuous	$D = 0.2$	50	32.7	3	8.2	0.4	5	100.6	
	Continuous	$D = 0.3$	55.5	25.2	3.8	10.1	0.5	5	101.2	
	Continuous	$D = 0.4$	60.1	17	3.4	12.1	0.6	5	100.2	

*Average and SD calculated from two independent cultivations, two samples taken from each cultivation (batches). For the chemostats, average and SD were calculated from two analyses carried out on the last of the five samples withdrawn during steady state. In all samples, carbohydrates were analysed in triplicate.

[†]Data are given in percent (w/w).

[‡]This cultivation was carried out under the same conditions as the other experiments in this work (30 °C, pH 5.0, glucose 10 g L⁻¹), except for aeration, which was 2.5 v.v.m., instead of 1 v.v.m.

[§]Compendium of data from diverse authors.

[¶]Dissolved oxygen > 1 mg L⁻¹.

^{||}Anaerobic growth; total also includes free amino acids (%).

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