

Erratum

The effect of low oxygen uptake rate on the fatty acid profile of the oleaginous yeast *Apiotrichum curvatum*

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The oxygen uptake rate equation quoted in the above article is incorrect. The correct equation is:

$$OUR = \frac{60,000 \times \text{airflow}}{22.4 \times V \times 100} \times \left[20.95 - \%O_{2, \text{out}} \left(\frac{78.9}{100 - \%O_{2, \text{out}} - \%CO_{2, \text{out}}} \right) \right]$$

The corrected values for OUR are not dissimilar to those reported in the paper and our conclusions still remain the same.

Corrected values for OUR are included as follows in Tables 1, 2 and 3.

Table 1. Effect of varying oxygen uptake rate (OUR) on the growth and lipid production of *Apiotrichum curvatum* ATCC 20509 in a 20-l fermentor

Run no.	Air-flow rate (SLPM)		Time after inoculation when air decreased (h)	Fermentation time (h)	OUR (mmol/l/h)	Oil coefficient	Lactose (g/l)		Biomass yield g dry cells/g lactose utilised	Lipid content % (w/w)
	Growth phase	Oil accumulation phase					Initial	Final		
1	14.0	4.0	25	120	2.2	0.15	39.9	0.6	0.33	41.4
2	12.5	5.0	18	41	2.4	0.12	37.8	17.5	0.28	29.8
3	17.0	5.0	20.5	47	4.8	0.14	36.1	1.0	0.28	40.7
4	17.0	4.5	18.0	66.5	6.2	0.21	25.3	1.1	0.58	30.3
5	14.0	6.0	17.0	41	6.5	0.17	26.4	3.8	0.31	42.4
6	16.0	9.0	21.0	67	7.1	0.19	29.7	0.3	0.47	37.6
7	16.0	16.0	—	40	Varying 8–10	0.21	30.4	0.1	0.54	39.0

SLPM = Standard litres per minute

Table 2. Effect of OUR on the lipid composition of *A. curvatum* in a 20-l air-lift fermentor

Run no.	OUR (mmol/l/h)	Fatty acid in oil (%)										Saturated fatty acids in oil (%)		
		C14:0	C16:0	C16:1	C18:0	C18:1	C18:2	C18:3	C20:0	C22:0	C24:0		C24:1	
1	2.2	2.7	22.7	0.2	23.3	42.0	3.2	1.2	0.6	0.6	3.5	0.0	0.0	53.4
2	2.4	1.2	24.2	0.4	24.1	40.9	3.6	0.4	0.9	0.8	3.5	0.0	0.0	54.7
3	4.8	0.7	17.5	0.2	25.4	44.8	5.5	0.6	0.9	0.9	3.5	0.0	0.0	48.9
4	6.2	0.6	18.9	0.2	24.8	45.7	4.6	0.5	1.1	0.8	2.6	0.2	0.2	48.8
5	6.5	0.4	11.4	0.2	21.3	52.3	7.4	0.5	1.7	1.2	3.6	0.0	0.0	39.6
6	7.1	0.7	15.6	0.4	17.2	54.9	5.2	0.5	1.1	0.8	3.3	0.3	0.3	38.7
7	Varying 8-10	0.3	13.9	0.2	15.8	55.0	9.6	0.9	1.0	0.7	2.6	0.0	0.0	34.3

Table 3. Effect of OUR on *A. curvatum* in a 500-l bubble column fermentor

Airflow rate SLPM	Growth phase	Oil accumulation phase	Time after inoculation when air phase decreased (h)	Fermentation time (h)	OUR (mmol/kg/h)	Oil coefficient (g oil/g lactose utilised)	Lactose concentration g/l	Biomass yield (g dry cells/g lactose utilised)	Lipid content (% w/w)	Fatty acid in oil (%)							Saturated fatty acids (%)				
										C14:0	C16:0	C16:1	C18:0	C18:1	C18:2	C18:3		C20:0	C22:0	C24:0	C24:1
50	Variable	17	62.5	7.0-10.5	0.18	46.1	1.0	0.44	38.6	0.4	12.4	0.0	20.7	56.0	5.2	0.4	1.5	0.9	1.9	0.6	37.8
100	Variable	20	76	3.6	0.17	37.5	0.5	0.43	39.2	0.4	18.2	0.3	24.1	48.4	3.4	0.4	1.4	0.8	2.2	0.4	47.1