

Supplementary Material

Table S1: Preprogrammed values of the fermentation parameters used in the exponential feed rate calculation.

Parameters	Units	Set-point values
μ	h^{-1}	0.11
		0.14
		0.17
$Y_{X/S}$	g/g	0.134*
S_F	g/L	60.0
S	g/L	0.0
X_0	g/L	0.983*
V_0	L	0.097

*Mean values of the three conditions investigated in batch fermentation

μ = specific cell growth rate; $Y_{X/S}$ = dry cell weight/glucose yield; S_F = glucose feed concentration; S = residual glucose concentration; X_0 = initial dry cell weight; and V_0 = initial culture volume.

Table S2: Glucose exponential feed rate for 2,3-BDO production by *P. peoriae* NRRL BD-62.

Inoculation time (h)	Feed rate (10 ⁻³ L/h)*		
	μ_{set} (h ⁻¹)		
	0.11	0.14	0.17
8	1.30	1.66	2.02
9	1.46	1.91	2.39
10	1.63	2.20	2.83
11	1.81	2.53	3.36
12	2.03	2.91	3.98
13	2.26	3.34	4.72
14	2.52	3.85	5.59
15	2.82	4.42	6.63
16	3.15	5.09	7.86
17	3.51	5.85	9.31
18	3.92	6.73	11.04
19	4.37	7.74	13.08
20	4.88	8.91	15.51
21	5.45	10.25	18.38
22	6.09	11.79	21.78
23	6.79	13.56	25.82
24	7.58	15.60	30.61

μ = preprogrammed specific cell growth rate.

*Equations: $F= 1.30 \exp (0.11t)$ (1); $F= 1.66 \exp (0.14t)$ (2); $F= 2.02 \exp (0.17t)$ (3)