

TABLE 1

The maximum growth yields observed on a wide range of organic substrates for various microorganisms growing in batch and continuous culture in mineral salts medium under a variety of growth conditions  
The heats of combustion for the compounds were obtained from standard tables [5].

Substrate	Organism	Yield (g bacterial dry wt./g substrate carbon)	Heat of combusion (kcal./g substrate carbon)	Reference
Methane	<i>Methylomonas methanoxidans</i>	1.46	17.56	from [7]
	<i>Methylococcus capsulatus</i>	1.35–1.46		[5] [8]
	<i>Pseudomonas</i> sp.	135		[7]
Ethane	Job 5	1.52	15.33	[9]
Propane	Job 5	1.53	14.6	[9]
Methanol	<i>Pseudomonas</i> C.	1.44	14.8	[10]
	<i>Methylomonas methanolica</i>	1.38		[11]
	<i>Pseudomonas</i> EN (mixed culture)	1.44		[12]
Ethanol	<i>Candida utilis</i>	1.30	13.6	from [2]
Glycerol	<i>Aerobacter aerogenes</i>	1.40,	11	[13,14,15]
		1.42–1.41,		
		1.42		
Mannitol	<i>Aerobacter aerogenes</i>	1.33	10.1	[2,16]
Sorbitol	<i>Aerobacter aerogenes</i>	1.35	10.1	[23]
Glucose	<i>Escherichia coli</i>	1.32	9.3	[16,17,18,19]
	<i>Beneckeia natrigens</i>	1.32		
	<i>Saccharomyces cerevisiae</i>	1.26		
	<i>Aerobacter aerogenes</i>	1.12		
Plenylacetic acid	<i>Pseudomonas</i> sp.	1.16	9.69	From [2]
Benzoate	<i>Pseudomonas</i> sp.	1.03	9.10	
Acetate	<i>Pseudomonas</i> sp.	0.95	8.73	
Succinate	<i>Paracoccus denitrificans</i>	0.84	7.45	[2,20]
	<i>Pseudomonas</i> sp.	0.88		
Citrate	<i>Paracoccus denitrificans</i>	0.80–0.85	6.59	[2]
Malate	—	0.80	6.6	[2]
Fumaric acid		0.79	6.72	[2]
Formate	<i>Pseudomonas oxalaticus</i> OX1	0.38	5.2	[21,22]
	<i>Pseudomonas</i> sp.			
Oxalate	<i>Pseudomonas oxalaticus</i> OX1	0.15	2.5	[22]

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