

Substrates	Products	Typical species	Gram reaction	Shape	Motility*	Remark
Proteins	Amino acids, sugars	<i>Clostridium sp.</i>	+	rod	M	Brewery yeast waste treatment
		<i>Proteus vulgaris</i>	–	rod	M	Directed evolution of a lipase
		<i>Peptococcus sp.</i>	–	rod	M	Fermentation of glutamic acid
		<i>Bacteroides sp.</i>	–	rod	N	Induction of cell populations in peripheral lymph
		<i>Bacillus sp.</i>	+	rod	M	Syntrophic culture with <i>Clostridium</i>
		<i>Vibrio sp.</i>	–	rod	M	Determine the effectiveness of freshly grown <i>vibrio spp.</i> for acute toxicity
Carbohydrates	Sugars	<i>Clostridium sp.</i>	+	rod	M	Palm oil mill effluent treatment
		<i>Acetivibrio cellulolyticus</i>	–	rod	M	Degradation of cellulose to CH ₄
		<i>Staphylococcus sp.</i>	+	sphere	N	Co-metabolism in the presence of glucose
		<i>Bacteroides sp.</i>	–	rod		
Lipids	Higher fatty acids, alcohols, amino acids	<i>Clostridium sp.</i>	+	rod	M	Food waste treatment
		<i>Micrococcus sp.</i>	+	sphere	N	Isolation of bio-surfactants from <i>Micrococcus sp.</i>
	Sugars	<i>Staphylococcus sp.</i>	+	sphere	N	
RNA	Purines, pyrimidines					
DNA		<i>Bacillus sp.</i>	+	rod	M	

*M, motile; N, non-motile.