

2.6.4	pH	2-24
2.6.5	Oxygen	2-26
2.6.6	Product concentration	2-28
2.6.7	Effect of other solvents	2-29
2.6.8	Medium supplements	2-29
2.6.9	Inoculum	2-30
2.6.10	Water activity	2-30
2.7	Culture Techniques	2-31
2.8	Fed-batch Fermentation	2-32
2.9	Molasses	2-34

CHAPTER THREE

Materials and Methods

3.1	Materials	3-1
3.1.1	Strain	3-1
3.1.2	Description of Fermenter	3-2
3.2	Methods	3-4
3.2.1	Formation of Agar Slant	3-4
3.2.2	Culture medium	3-4
3.2.3	Inoculum	3-5
3.2.4	Shake Flask Study	3-6
3.2.5	Total sugar estimation	3-6
3.2.6	Biomass determination	3-7

PERPUSTAKAAN INSTITUT PENGAJIAN
SISWAZAH DAN PENYELIDIKAN
UNIVERSITI MALAYA

3.2.7 Determination of 2,3-butanediol and acetoin	3-9
---	-----

CHAPTER FOUR

4.0 Results and Discussion	
4.1 Shake Flask Study	4-1
4.2 Fermenter runs	4-5
4.3 Fed-batch Study	4-20

CHAPTER FIVE

5.0 Conclusion and Recommendation	5-1
-----------------------------------	-----

REFERENCE	R-1
------------------	------------