活性污泥能量含量對其馴化能力之影響

Le Thanh Nga、張玉明

E-mail: 9806538@mail.dyu.edu.tw

摘 要
本研究是關於活性污泥的營養條件，與污泥在馴化與分解特異性、持久性有機物質時表現的相關性。污泥培養條件包括正常哺餵(富養狀態)及長時缺食(貧養狀態)。正常哺餵情況是每天對污泥施以蔗糖和有機?； 貧養情況則是在不同的時間長度之下不供給蔗糖和?。己有證據顯示貧養者的分解能力通常比富養者較差。本研究的目的，是要測定污泥的ATP含量與污泥對持久性有機物分解能力優劣的相關性。活性污泥細胞ATP含量結果顯示，貧養的時間增長，降低了污泥的ATP含量；污泥對2, 4-D馴化時間，花費許多的ATP，因此，貧養者對2, 4-D的分解較為不利。

關鍵詞：馴化、2, 4-D、持久有機物、污泥貧養、ATP含量
3.2 Some Standard Curves of Study

3.2.1 Measurement of Activated Sludge Concentration (As Measure of SS)

3.2.2 Measurement of 2, 4-D Concentration

3.2.3 The Standard Curve of ATP

3.3 Experiment Methods

3.3.1 Experiment with Activated Sludge

3.3.2 Experiment with ATP

Chapter IV. RESULTS AND DISCUSSION

4.1 Relationship between 2, 4-D Degradation and Sludge Growing

4.2 Effect of Adding a Biogenic Substrate on 2, 4-D Biodegradability (Fasting)

4.2.1 Effects of Initial 2, 4-D Concentrations

4.2.2 Effects of Adding a Biogenic Substrate (Fasting)

4.2.3 The Effects of Adding Sucrose on the Growth of Activated Sludge

4.3 ATP Content in Feasting and Fasting Cases

Chapter V. CONCLUSIONS

5.1 2, 4-D Degradation and Growing of Sludge

5.2 ATP Content in Sludge

REFERENCES


28. Water Research Institute, Several interesting organisms present in activated sludge.