Now let's start !!
The garbage compost.

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Why is garbage made compost?

- Hygiene improvement
  Decaying・ Offensive odor・ noxious insects
- The garbage is decreased and changed to resources.
  Recycling
- The methane gas is not emitted.
  Global warming
- The compost is utilized in agriculture and green, etc..

Necessary for the compost.

- It swiftly decomposes.
- Moisture is evaporated by using the heat of the microorganism's activity (fermentation) .
- The following die out in heat of fermentation and microorganism : Pathogenic bacillus and eggs of noxious insect, etc..
- Plants can be utilized.

How should we do?-1

- The microorganism suitable for the compost
  Safe aerobic microorganism and facultative anaerobic microorganism
  The much microorganism is used.
- The air (oxygen) is put in.
  Often stirs
- Garbage is cut small.
  Kitchen knife, scissors, and machine

How should we do?-2

- The moisture control
  The good condition is 40 ~ 60%.
- When moisture is much, it becomes the oxygen-deficiency. And, when moisture is a little, microorganisms are dormant.
- The temperature should be high.
  Over 60℃ is good.
  However, the maximum temperature is 80℃.

Oxygen is required for quick decomposition.

- The decomposition using the oxygen (aerobic decomposition).

$$C_6H_{12}O_6 + O_2 + H_2O \rightarrow 6\,CO_2 + 12\,H_2O + 38\,ATP$$

- The decomposition which does not use the oxygen (anaerobic decomposition).
  The alcoholic fermentation.

$$C_6H_{12}O_6 \rightarrow 2\,C_2H_5OH + 2\,CO_2 + 2\,ATP$$

  The lactic acid fermentation.

Heat of fermentation is abounding for aerobic decomposition.

- Aerobic decomposition

  $C_6H_{12}O_6 + O_2 + H_2O \rightarrow 6\,CO_2 + 12\,H_2O +$ 38 ATP

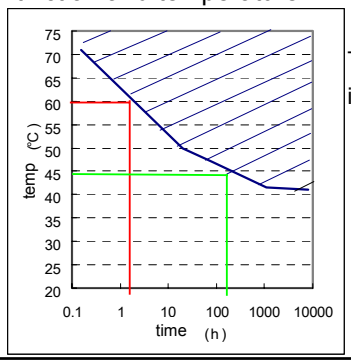
- Anaerobic decomposition

  The alcoholic fermentation.

  $C_6H_{12}O_6 \rightarrow 2\,C_2H_5OH + 2\,CO_2 +$ 2 ATP

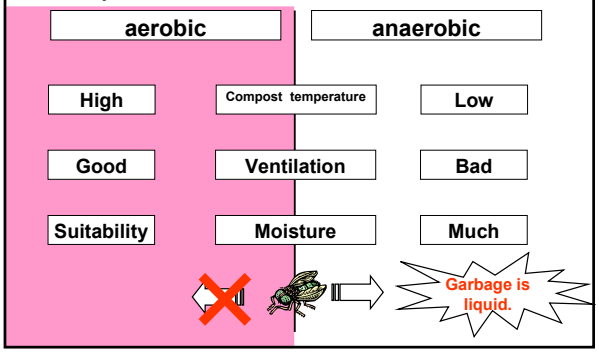
  The lactic acid fermentation.

The relationship between pathogenic fungus extinction and temperature.

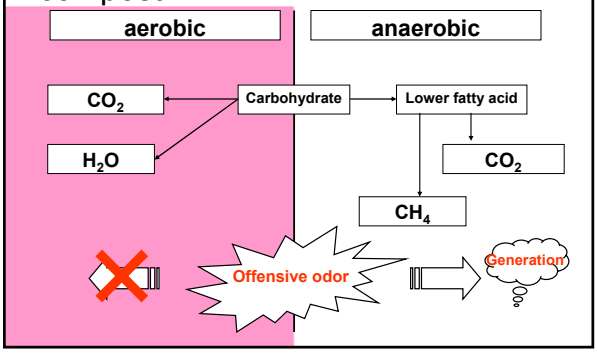


The blue line part is a safety zone.

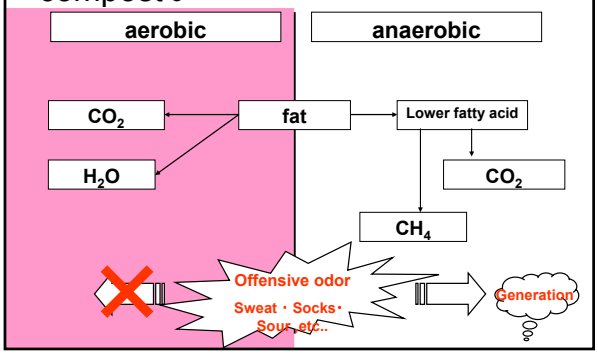
The microorganism suitable for the compost-1



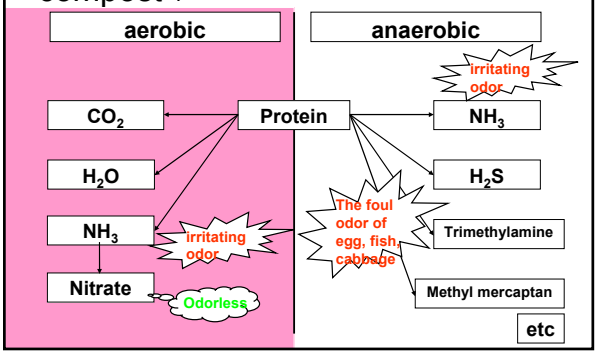
The microorganism suitable for the compost-2



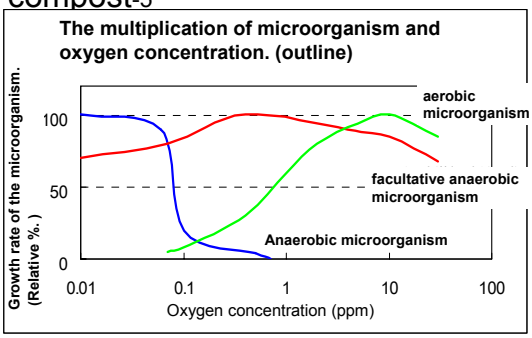
The microorganism suitable for the compost-3



The microorganism suitable for the compost-4



The microorganism suitable for the compost-5



The microorganism suitable for the compost-6

The microorganism of the region(NM)

Native Microorgnism

- Fermented foods of Bangkok
- Fruits of Bangkok
- Vegetables of Bangkok

The microorganism suitable for the compost-7

The microorganism suitable for the compost-8

Tai Pla・ Pla Rah・ Kanhom Cheen

Kao Mak・ Tua Hao・ Tao Jiew

Tao Hoo Yhee・ Phon la Mai

Dong Betagen Thua Nao など

The microorganism suitable for the compost-9

The culture of the microorganism-1

The culture of the microorganism-2

The culture of the microorganism-3

The culture of the microorganism-4

The action of the compost(Household)-1

The action of the compost (Household)-2

The action of the compost (Household)-3

The action of the compost (Household)-4

The action of the compost (Community)-1

The action of the compost (Community)-2

The action of the compost (Community)-3

The action of the compost (Community)-4

The action of the compost (Community)-5

The action of the compost (Compost Center)-1

The action of the compost (Compost Center)-2

The action of the compost (Compost Center)-3

Community changes-1

Community changes-2

City changes

Consideration changes-1

Consideration changes-1

Agricultural use for compost-1

Agricultural use for compost-2

Agricultural use for compost-3